

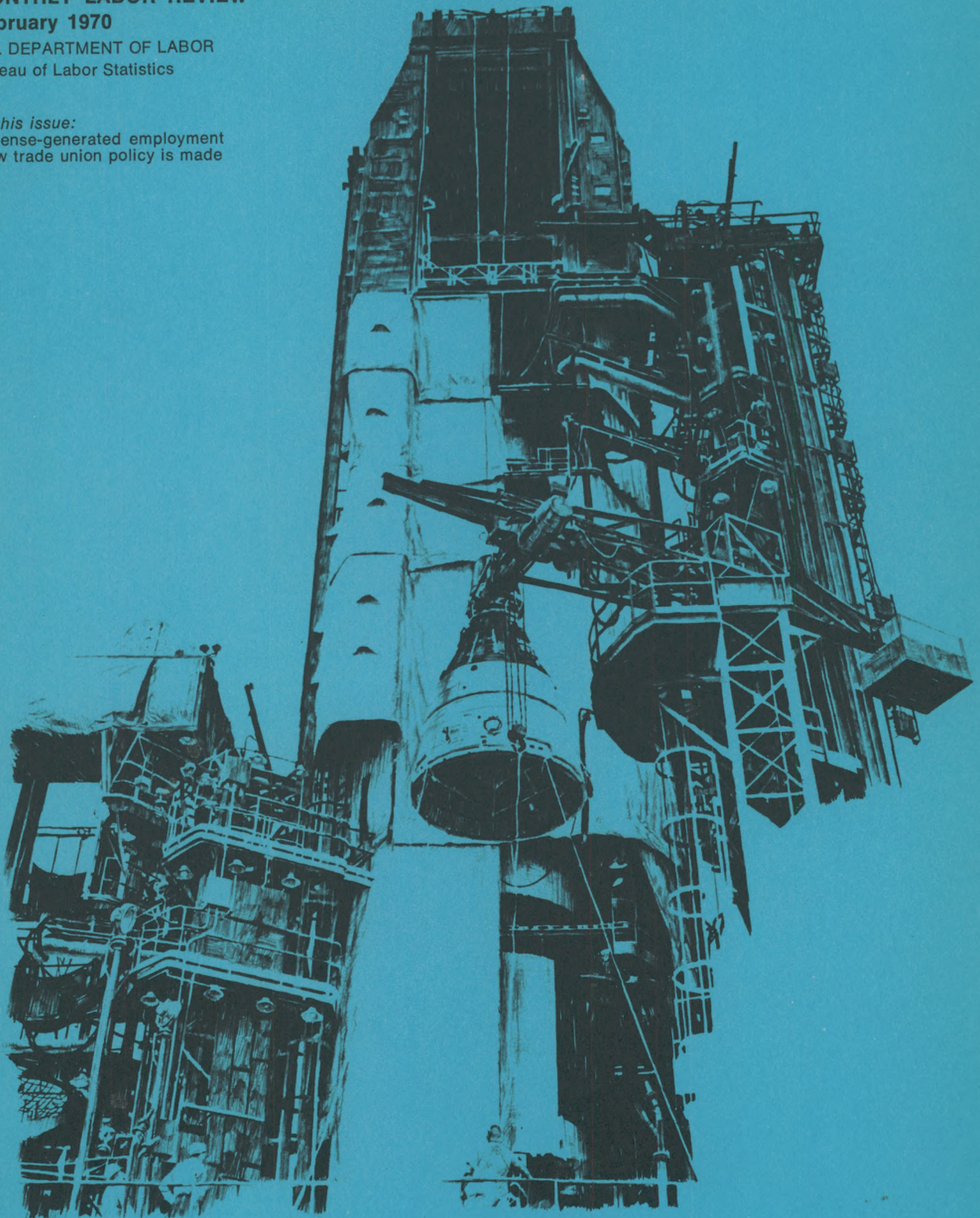


**MONTHLY LABOR REVIEW**

**February 1970**

U.S. DEPARTMENT OF LABOR  
Bureau of Labor Statistics

*In this issue:*  
Defense-generated employment  
How trade union policy is made







**U. S. DEPARTMENT OF LABOR**

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**February cover:**  
A drawing by Paul Calle from the collection of the National Aeronautics and Space Administration, Gemini I spacecraft being raised to top of gantry for mating to Titan II



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Editor-in-Chief, Herbert C. Morton  
Executive Editor, Henry Lowenstern



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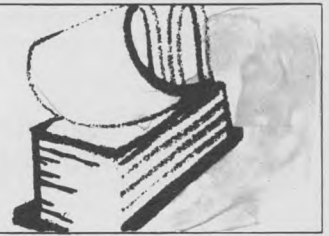
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FEBRUARY 1970     VOLUME 93, NUMBER 2



## Labor Month in Review



**Philadelphia Plan.** The Contractors Association of Eastern Pennsylvania, representing more than 80 construction firms, went to court in January to challenge the controversial Philadelphia Plan, under which the Government requires minority hiring commitments from bidders on large federally aided projects. The contractors' suit charged that minority hiring goals set by the Government amount to a racial quota system that denies other prospective employees equal protection of the Constitution. The contractors also argued that, because the plan applies only to the 5-county Philadelphia area, it discriminates against Philadelphia area workers and contractors compared with those elsewhere in the United States. In addition, the contractors contended that they might face "financial ruin" because the Comptroller General has threatened to withhold payment on contracts subject to the Philadelphia Plan's minority hiring requirements.

The U.S. Supreme Court, meanwhile, ruled on an Ohio case in which minority hiring commitments similar to those in the Philadelphia Plan were at issue. The case involved rejection by a government agency of a low bid that was not accompanied by an "affirmative action" plan assuring "minority group representation in all trades on the job and in all phases of work."

Ohio's highest court had upheld rejection of the bid. Its ruling was challenged in a taxpayer's suit which warned in the appeal to the U.S. Supreme Court that, unless the Ohio ruling is reversed, the same "unlawful" conditions "soon will be imposed upon contractors throughout the country" through the Philadelphia Plan and its extension to other cities.

In denying the appeal, the U.S. Supreme Court left the Ohio minority hiring requirement in effect.

**Operation Outreach.** Organized labor's opposition to the Philadelphia Plan was reiterated by AFL-CIO President George Meany. He charged that the

plan, limited to federally aided projects, "will make no contribution to the overall problem of increasing minority group representation" in the total labor force of an area because "a contractor can achieve compliance by transferring minority workers already in the area work force to Government projects."

Meany contrasted this with Operation Outreach, sponsored jointly by Government agencies, trade unions, and private organizations such as the Urban League to recruit minority group members into the building trades. He reported that Outreach, operating in 55 cities, has indentured more than 5,000 apprentices during the past 2½ years. Meany called Outreach "the only sound method of bringing minority representatives into the skilled construction trades."

**St. Louis Plan.** Agreements to increase the number of Negroes and other minority group members in the building trades were negotiated in Chicago and other cities. The St. Louis Plan, considered one of the best by the U.S. Labor Department's Office of Federal Contract Compliance, was devised by the Associated General Contractors of St. Louis.

Under the plan, Negroes with some construction experience can become journeymen craftsmen within 2 years. Those with no experience can become journeymen within 2½ years. Trainees without experience receive \$3 an hour and are permitted to cross craft lines for 6 months, then choose a specific trade for advanced training at higher pay. The proposal calls for 1 trainee for every 3 journeymen union members on rehabilitation projects and housing up to four stories and a 1 to 5 ratio on other projects.

The St. Louis Plan is designed to cover private as well as federally assisted construction. So far, four of the city's unions, Sheet Metal Workers, Carpenters, Operating Engineers, and Teamsters construction drivers, have incorporated the hiring plan into their regular contracts.



# Increase in defense-related employment during Viet Nam buildup

Four out of 10 new jobs were  
in ordnance, aircraft, transportation—  
industries likely  
to be affected by a pullout

RICHARD P. OLIVER

MILITARY EXPENDITURES of the Department of Defense (DOD) during the 3-year period ending with fiscal year 1968 increased by almost \$30 billion, largely as a result of our expanded involvement in the Viet Nam war. These expenditures rose from \$45.8 billion in fiscal 1965 to \$75.4 billion in fiscal 1968<sup>1</sup> and have since remained close to this level. During this time defense purchases from the private sector of the economy rose about 80 percent, affecting employment in almost every industry. Each billion dollars of defense purchases (in current dollars) from the private sector is estimated to have created about 80,000 jobs in 1965 and 74,000 in 1968.<sup>2</sup>

Defense-generated employment in the private sector rose from an estimated 2.1 million in 1965 to almost 3.6 million in 1968. Since most of the increase in defense expenditures during this period were related to the buildup in Viet Nam, this employment increase may be considered as an approximate measure of the effects of Viet Nam on jobs. Tracing the impact of this increase on industry employment should, therefore, indicate which industries were mostly affected by the Viet Nam buildup and, conversely, which are most likely to be affected by a withdrawal.

This article is the second presenting estimates of the employment generated in each industry by DOD military expenditures. It revises the estimates in the earlier report covering fiscal years 1965 and 1967,<sup>3</sup> and extends them to fiscal 1968. As before, these estimates were derived through the use of interindustry model approach designed to determine not only the directly affected defense employment, but the employment in supporting

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industries as well. The procedure involved, first, estimating military expenditures in product or service detail. These were applied to interindustry models projected to the appropriate year, to generate the total production required in each industry as a result of these expenditures. Industry output levels were next converted to industry employment levels by using employment-output factors for each industry.

## Total employment effects

The employment generated by military expenditures, including military personnel and government employment, rose steadily from 1965 through 1968, finally leveling off in 1969, as shown in the following tabulation:

	<i>DOD-generated employment (in thousands)</i>			
	1965	1967	1968	1969
Total.....	5,759	7,529	8,190	7,915
Public employment.....	3,657	4,447	4,616	4,515
Federal, military.....	2,716	3,343	3,483	3,370
Federal, civilian.....	928	1,085	1,113	1,125
State and local.....	13	19	20	20
Private employment.....	2,102	3,082	3,574	3,400

<sup>1</sup>Preliminary estimates for 1969.

As can be seen, defense-generated private employment increased the most, rising from 2.1 million in 1965 to almost 3.6 in 1968, then falling back to 3.4 million in 1969. As a proportion of total private employment, defense jobs increased from 3.9 percent in 1965 to 6.1 percent in 1968 and 5.6 percent in 1969.

**DEFENSE DEPENDENCY.** The proportion of employment attributable to military expenditures in each industry varied widely in both 1965 and 1968.<sup>4</sup> This proportion of employment, or defense dependency in each industry,<sup>5</sup> ranged from well



Table 1. Private employment<sup>1</sup> attributable to Department of Defense expenditures in fiscal years 1965, 1967, and 1968

Industry	1965 <sup>2</sup>				1967 <sup>2</sup>				1968			
	Employment (thousands)	DOD-generated employment			Total employment (thousands)	DOD-generated employment			Total employment (thousands)	DOD-generated employment		
		Number (thousands)	Percent of total	Percent distribution		Number (thousands)	Percent of total	Percent distribution		Number (thousands)	Percent of total	Percent distribution
<b>Total</b> .....	54,089	2,101.9	3.9	100.0	57,844	3,081.6	5.3	100.0	58,931	3,574.2	6.1	100.0
<b>Agriculture forestry and fisheries</b> .....	4,616	70.1	1.5	3.3	4,101	89.6	2.2	2.9	4,038	86.3	2.1	2.4
Livestock and livestock products.....	4,430	66.3	1.5	3.1	3,913	84.7	2.2	2.8	3,043	81.0	2.1	2.3
Other agricultural products.....	62	1.2	1.9	.1	62	1.8	2.9	.1	64	2.0	3.1	.1
Forestry and fishery products.....	124	2.6	2.1	.1	126	3.1	2.5	.1	131	3.3	2.5	.1
Agricultural, forestry, and fishery services.....	634	31.9	5.0	1.5	626	37.4	6.0	1.2	614	43.2	7.0	1.2
<b>Mining</b> .....	28	1.5	5.4	.1	29	2.1	7.2	.1	28	2.4	8.6	.1
Iron and ferroalloy ores mining.....	53	3.9	7.4	.2	58	7.3	12.6	.2	45	7.1	15.8	.2
Nonferrous metal ores mining.....	145	5.5	3.8	.3	189	6.8	4.9	.2	142	7.7	5.4	.2
Coal mining.....	290	17.5	6.0	.8	279	16.1	5.8	.5	277	18.2	6.6	.5
Crude petroleum and natural gas.....	118	3.5	3.0	.2	121	5.1	4.2	.2	122	7.8	6.4	.2
Stone and clay mining and quarrying.....	3,120	67.3	2.2	3.2	3,230	75.7	2.3	2.5	3,225	75.2	2.3	2.1
Chemical and fertilizer mineral-mining.....	3,120	67.3	2.2	3.2	3,230	75.7	2.3	2.5	3,225	75.2	2.3	2.1
<b>Construction</b> .....	17,611	1,390.8	7.9	66.2	19,466	2,065.6	10.6	67.0	19,527	2,353.1	12.1	65.8
New construction.....	227	137.6	60.6	6.5	227	215.8	74.4	7.0	332	255.0	76.8	7.1
Maintenance and repair construction.....	1,756	22.1	1.3	1.0	1,786	38.1	2.1	1.2	1,779	36.5	2.1	1.0
<b>Manufacturing</b> .....	90	.1	.1	.0	85	.2	.2	.0	87	.2	.2	.0
Broad and narrow fabrics, yarn and thread mills.....	574	11.5	2.0	.5	607	30.7	5.1	1.0	608	31.3	5.1	.9
Miscellaneous textile goods and floor coverings.....	110	3.5	3.2	.2	122	5.1	4.2	.2	128	5.8	4.5	.2
Apparel.....	1,395	11.1	.8	.5	1,471	32.3	2.2	1.0	1,466	30.3	2.1	.8
Miscellaneous fabricated textile products.....	158	3.5	2.2	.2	171	7.6	4.4	.2	174	9.6	5.5	.3
Lumber and wood products, except containers.....	571	15.0	2.6	.7	567	20.7	3.7	.7	561	21.8	3.9	.6
Wooden containers.....	34	1.1	3.2	.1	37	3.5	9.5	.1	37	3.9	10.5	.1
Household furniture.....	302	8.9	2.9	.4	325	11.4	3.5	.4	326	12.3	3.8	.3
Other furniture and fixtures.....	117	1.9	1.6	.1	136	2.9	2.1	.1	135	3.4	2.5	.1
Paper and allied products, except containers.....	437	14.8	3.4	.7	464	22.0	4.7	.7	472	25.1	5.3	.7
Paperboard containers and boxes.....	196	7.0	3.6	.3	211	11.3	5.4	.4	216	12.4	5.7	.4
Printing and publishing.....	965	38.1	3.9	1.8	1,036	49.4	4.8	1.6	1,055	54.0	5.1	1.5
Chemicals and selected chemical products.....	406	19.3	4.8	.9	456	35.5	7.8	1.2	471	40.1	8.5	1.1
Plastics and synthetic materials.....	187	7.8	4.2	.4	206	12.9	6.3	.4	209	13.9	6.6	.4
Drugs, cleaning and toilet preparations.....	227	3.3	1.5	.2	252	5.7	2.3	.2	262	6.3	2.4	.2
Paints and allied products.....	65	2.9	4.5	.1	68	3.9	5.7	.1	69	4.3	6.2	.1
Petroleum refining and related industries.....	182	8.1	4.4	.4	183	11.6	6.3	.4	185	13.1	7.1	.4
Rubber and miscellaneous plastics products.....	454	21.5	4.7	1.0	515	35.3	6.9	1.1	536	43.5	8.1	1.2
Leather tanning and industrial leather products.....	35	.5	1.4	.0	33	1.1	3.3	.0	34	1.3	3.8	.0
Footwear and other leather products.....	315	3.4	1.1	.2	324	10.8	3.3	.4	320	12.1	3.8	.3
Glass and glass products.....	166	7.8	4.7	.4	178	11.2	6.3	.4	171	12.4	7.3	.4
Stone and clay products.....	454	14.1	3.1	.7	458	19.1	4.2	.6	457	21.3	4.7	.6
Primary iron and steel manufacturing.....	933	53.2	5.7	2.5	955	75.4	7.9	2.4	928	81.7	8.8	2.3
Primary nonferrous metals manufacturing.....	351	33.7	9.6	1.6	407	52.4	12.9	1.7	381	59.7	15.7	1.7
Metal containers.....	71	1.5	2.1	.1	77	2.5	3.2	.1	77	2.8	3.6	.1
Heating, plumbing, and structural metal products.....	444	11.4	2.6	.5	482	15.8	3.3	.5	483	18.2	3.8	.5
Stampings, screw machine products, and bolts.....	302	23.7	7.8	1.1	349	31.7	9.2	1.0	347	33.5	9.7	.9
Other fabricated metal products.....	408	20.4	5.0	1.0	459	31.7	6.9	1.0	459	37.2	8.1	1.0
Engines and turbines.....	88	6.7	7.6	.3	102	10.7	10.5	.3	107	11.8	11.0	.3
Farm machinery and equipment.....	130	1.4	1.1	.1	153	2.0	1.3	.1	143	2.2	1.5	.1
Construction, mining and oil field machinery.....	172	4.1	2.4	.2	192	10.2	5.3	.3	184	11.3	6.1	.3
Materials handling machinery and equipment.....	75	3.8	5.1	.2	88	7.8	8.9	.3	87	7.7	8.8	.2
Metalworking machinery and equipment.....	293	20.6	7.0	1.0	349	31.5	9.0	1.0	345	36.6	10.6	1.0
Special industry machinery and equipment.....	186	2.4	1.3	.0	207	4.0	1.9	.0	198	5.3	2.7	.2
General industrial machinery and equipment.....	251	14.7	5.9	.7	291	22.2	7.6	.7	290	26.5	9.1	.7
Machine shop products.....	180	29.3	16.3	1.4	223	53.5	24.0	1.7	227	63.0	27.8	1.8
Office, computing and accounting machines.....	179	13.2	7.4	.6	231	13.6	5.9	.4	245	13.2	5.4	.4
Service industrial machines.....	110	2.9	2.6	.1	128	4.7	3.7	.2	130	5.6	4.3	.2
Electric industrial equipment and apparatus.....	349	33.8	9.7	1.6	418	50.2	12.0	1.6	417	56.8	13.6	1.6
Household appliances.....	163	2.5	1.5	.1	179	3.3	1.8	.1	175	3.4	1.9	.1
Electric lighting and wiring equipment.....	165	9.6	5.8	.5	202	15.4	7.6	.5	203	18.5	9.1	.5
Radio, television and communication equipment.....	533	195.4	36.7	9.3	654	227.8	34.8	7.4	666	256.9	38.6	7.2
Electronic components and accessories.....	280	81.9	29.2	3.9	398	113.3	28.5	3.7	374	126.5	33.8	3.5
Miscellaneous electrical machinery, equipment, and supplies.....	96	6.3	6.6	.3	115	9.5	8.3	.3	115	12.3	10.7	.3
Motor vehicles and equipment.....	786	16.4	2.1	.8	844	29.0	3.4	.9	830	29.6	3.6	.8
Aircraft and parts.....	602	331.3	55.0	15.8	806	514.7	63.9	16.7	851	615.9	72.4	17.2
Other transportation equipment.....	261	66.2	25.4	3.1	302	77.0	25.5	2.5	300	79.1	26.4	2.2
Scientific and controlling instruments.....	252	24.5	9.7	1.2	291	36.3	12.5	1.2	294	43.5	14.8	1.2
Optical, ophthalmic, and photographic equipment.....	124	8.0	6.5	.4	152	10.3	6.8	.3	155	12.3	7.9	.3
Miscellaneous manufacturing.....	404	7.0	1.7	.3	431	10.6	2.5	.3	426	12.1	2.8	.3
<b>Services</b> .....	28,108	541.8	1.9	25.8	30,421	813.3	2.7	26.4	31,527	1,016.4	3.2	28.4
Transportation and warehousing.....	2,505	117.1	4.7	5.6	2,657	2,275.0	8.6	7.4	2,678	311.6	11.6	8.7
Communications, except radio and TV broadcasting.....	759	27.1	3.6	1.3	805	36.3	4.6	1.2	847	43.5	5.1	1.2
Radio and TV broadcasting.....	105	4.0	3.8	.2	118	6.7	5.7	.2	127	9.0	7.1	.3
Electric, gas, water, and sanitary services.....	619	15.1	2.4	.7	635	20.8	3.3	.7	653	24.2	3.7	.7
Wholesale and retail trade.....	12,427	115.3	.9	5.5	13,435	165.9	1.2	5.4	13,844	194.6	1.4	5.4
Finance and insurance.....	2,424	32.8	1.4	1.6	2,573	47.8	1.9	1.6	2,696	55.8	2.1	1.6
Real estate and rental.....	563	6.0	1.1	.3	576	8.2	1.4	.3	590	9.2	1.6	.3

See footnotes at end of table.



**Table 1. Continued—Private employment<sup>1</sup> attributable to Department of Defense expenditures in fiscal years 1965, 1967, and 1968**

Industry	1965 <sup>2</sup>				1967 <sup>2</sup>				1968			
	Employment (thousands)	DOD-generated employment			Total employment (thousands)	DOD-generated employment			Total employment (thousands)	DOD-generated employment		
		Number (thousands)	Percent of total	Percent distribution		Number (thousands)	Percent of total	Percent distribution		Number (thousands)	Percent of total	Percent distribution
Hotels; personal and repair services, except auto.....	1,787	36.7	2.1	1.7	1,883	49.9	2.6	1.6	1,945	59.9	3.1	1.7
Business services.....	1,752	90.3	5.2	4.3	2,021	126.3	6.2	4.1	2,129	159.6	7.5	4.5
Research and development.....		4.4	1.3	.2	347	7.7	2.2	.3	360	9.9	2.8	.3
Automobile repair and service.....	587	13.3	2.3	.6	608	16.0	2.6	.5	628	18.9	3.0	.5
Amusements.....												
Medical, educational services, and nonprofit organizations.....	4,251	79.7	1.9	3.8	4,763	100.2	2.1	3.3	5,030	120.2	2.4	3.4

<sup>1</sup> Employment estimates cover wage and salary employees in the United States, attributable to Department of Defense military functions. They do not include the self-employed, domestic workers, or U.S. citizens employed abroad other than military personnel. However, farm employment does include self-employed and unpaid family workers.

<sup>2</sup> Employment estimates for fiscal year 1965 and fiscal year 1967 have been changed in many cases from those shown in the 1967 article. In most industries employment

estimates were changed only slightly, while in a few cases changes were substantial. Changes in employment resulted from changes in estimated DOD purchases, the use of revised matrices for fiscal year 1965 and fiscal year 1967, and changes in industry output estimates. The most significant changes occurred in the 1967 estimates as a result of changes in estimated purchases. Military expenditures for 1967 in the earlier report were preliminary, having been estimated largely from contract awards data which required timing adjustments to convert them to an expenditure basis.

below 1 percent in the tobacco industry to about 77 percent (in 1968) in the ordnance industry. Aircraft and ordnance were the only industries with more than 50 percent of their employment in defense activities. In most other industries the proportions were less than 10 percent in both 1965 and 1968 as shown in table 1. The accompanying chart shows the industries with more than 10 percent of their employment attributable to defense purchases in 1968.

The proportion of defense employment increased from 1965 to 1968 in all industries except computers. Although defense purchases of computers increased during this period, civilian demand grew even more rapidly. The industries most dependent upon defense in 1965 remained so in 1968. The employment increase in the ordnance industry from 61 to 77 percent of the total does not reflect the total rise in expenditures for ordnance. Some of the increase in ordnance output occurred in arsenals owned and operated by the Government. The employment associated with this production is included in the increase in DOD civilian employment. National Aeronautics and Space Administration's purchases of space vehicles declined during this period. Since completed space vehicles are classified in the ordnance industry in Census data, this had the effect of reducing non-military employment in the industry and increasing DOD's share.

In the aircraft industry, defense employment rose from 55 percent in 1965 to about 72 percent

in 1968 despite substantial increases in the purchase of civilian aircraft. The proportion of defense jobs in the communications equipment industry rose only moderately, reflecting a strong civilian demand for television and telephone equipment and relatively low requirements for military operations in Viet Nam. Defense employment in transportation services more than doubled during the 3 years.

**DISTRIBUTION OF DEFENSE EMPLOYMENT.** The total employment generated in the private sector by defense spending was widely distributed. Most industries had less than 1 percent of this total and only five industries each had 5 percent or more of total defense-generated employment in 1965 and 1968. These were aircraft, ordnance, communications equipment, transportation, and wholesale trade. In aggregate, they accounted for a little over 40 percent of the total.

About half of the employment generated in the private sector by defense expenditures in 1965 and 1968 resulted from direct defense purchases, while the remainder occurred in supporting industries. In the three major defense industries—ordnance, aircraft, and electronics—the proportion of employment due to direct purchases was much higher than in other activities. The higher proportion resulted partly from DOD's policy of purchasing major components directly from manufacturers and providing them to another prime contractor for assembly. This practice reduces the amount of

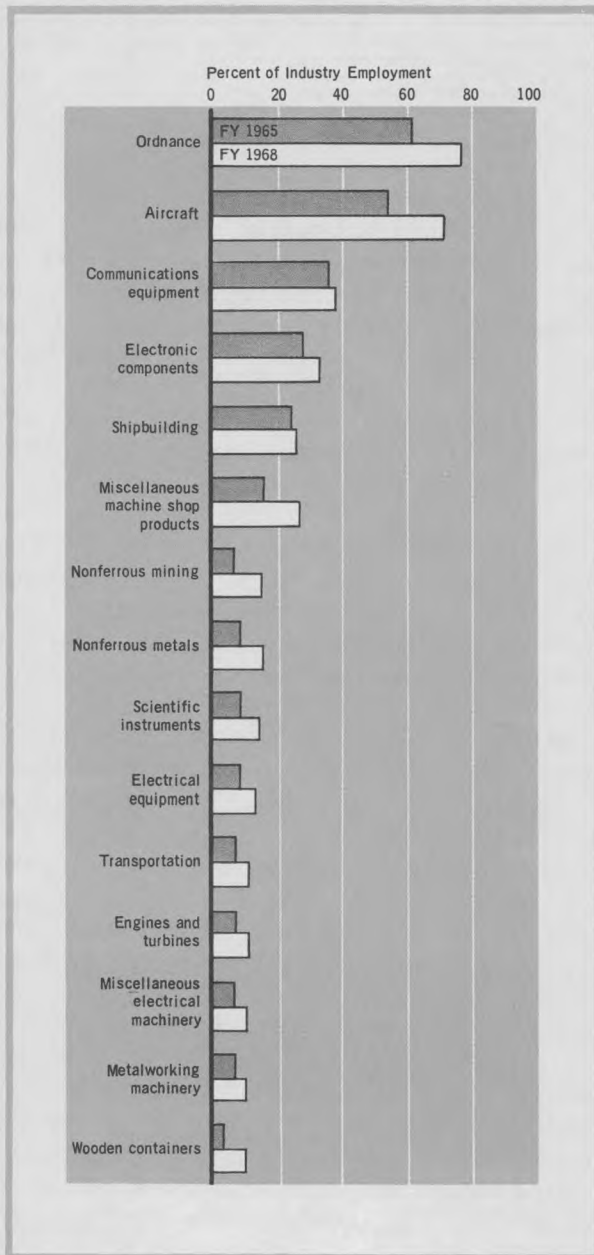


subcontracting from these industries, lowering the amount of supporting employment and increasing direct employment.

### Viet Nam employment effects

The 3-year period ending with fiscal 1968 coincides with the increase in expenditures for the war in Viet Nam from a relatively small amount

**Chart 1. Defense-generated employment as percent of total industry employment, fiscal years 1965 and 1968**



to almost their peak level. During this time DOD tried to reduce, or at least hold, expenditures not related to Viet Nam to existing levels, while most new non-Viet Nam projects were deferred. The increase in defense purchases in each industry during this period was, therefore, taken as an approximation of purchases for the war in Viet Nam. Thus, the increases in purchases between 1965 and 1968 were assumed to be the amount of the 1968 expenditures in each industry attributable to Viet Nam requirements, while the remainder was considered as the levels necessary to maintain non-Viet Nam military functions.<sup>6</sup>

This portion of the 1968 military expenditures was then used to calculate separate employment requirements. The employment due to the Viet Nam buildup was not estimated by simply taking the difference between defense-generated employment in 1965 and 1968. That measure would not fully account for changes in productivity.

Such calculation of the employment impact of Viet Nam showed that, of the 3.6 million jobs generated by military expenditures in 1968, about 1.4 million would have resulted from Viet Nam. This result, of course, does not mean that this number of jobs would be lost in the event of a withdrawal from Viet Nam. While the industries in which these employment increases occurred are likely candidates for a cutback, deferred non-Viet Nam requirements would probably keep overall defense employment at a high level, and in some industries increased civilian demand could take up the slack.

**VIET NAM DEPENDENCY.** The employment attributable to the Viet Nam buildup was a substantial part of total defense-generated employment in most industries in 1968. (See table 2.) However, only the ordnance and aircraft industries had employment increases which were large in relation to total industry employment—42 and 27 percent, respectively. Viet Nam buildup employment in miscellaneous machinery, or machine shop products, amounted to about 14 percent of the industry's total. This industry, which produces and repairs machine and equipment parts on a special-order basis, experienced a substantial increase in defense orders. Viet Nam-generated employment in transportation accounted for almost 12 percent of the industry's total as DOD increased its direct purchases of transportation, particularly ship and air services.

In some industries the buildup employment, though not a significant portion of total employ-

ment, provided a large part of the industry's total increase from 1965 to 1968. Such was the

Table 2. Private employment attributable to Viet Nam in fiscal year 1968

Industry	Viet Nam-attributed employment			
	Number (thousands)	As percent of total industry employment	As percent of total defense employment	Percent distribution
<b>Total</b>	<b>1,422.4</b>			<b>100.0</b>
<b>Agriculture, forestry and fisheries</b>	<b>29.9</b>	<b>0.7</b>	<b>34.6</b>	<b>2.1</b>
Livestock and livestock products	28.5	.7	35.2	2.0
Other agricultural products				
Forestry and fishery products	.8	1.3	40.0	0.1
Agricultural, forestry, and fishery services	.6	.5	18.2	
<b>Mining</b>	<b>17.1</b>	<b>2.8</b>	<b>39.6</b>	<b>1.2</b>
Iron and ferroalloy ores mining	1.0	3.6	41.7	.1
Nonferrous metal ores mining	2.9	6.4	40.8	.2
Coal mining	2.5	1.8	32.5	.2
Crude petroleum and natural gas	7.7	2.8	42.3	.5
Stone and clay mining and quarrying	3.0	2.5	38.5	.2
Chemical and fertilizer mineral mining				
<b>Construction</b>	<b>14.7</b>	<b>.5</b>	<b>19.5</b>	<b>1.0</b>
New construction	14.7	.5	19.5	1.0
Maintenance and repair construction				
<b>Manufacturing</b>	<b>948.1</b>	<b>4.9</b>	<b>40.3</b>	<b>66.7</b>
Ordnance and accessories	140.3	42.3	55.0	9.9
Food and kindred products	15.1	.8	41.4	1.1
Tobacco manufactures	1	.1	50.0	
Broad and narrow fabrics, yarn, and thread mills	19.4	3.2	62.0	1.4
Miscellaneous textile goods and floor coverings	2.3	1.8	39.7	.2
Apparel	19.6	1.3	64.7	1.4
Miscellaneous fabricated textile products	5.9	3.4	61.5	.4
Lumber and wood products, except containers	7.6	1.4	34.9	.5
Wooden containers	3.0	8.1	76.9	.2
Household furniture	4.0	1.2	32.5	.3
Other furniture and fixtures	1.1	.8	32.4	.1
Paper and allied products, except containers	9.1	1.9	36.3	.6
Paperboard containers and boxes	5.4	2.5	43.5	.4
Printing and publishing	16.1	1.5	29.8	1.1
Chemicals and selected chemical products	18.8	4.0	46.9	1.3
Plastics and synthetic materials	6.0	2.9	43.2	.4
Drugs, cleaning, and toilet preparations	2.9	1.1	46.0	.2
Paints and allied products	1.5	2.2	34.9	.1
Petroleum refining and related industries	5.6	3.0	42.7	.4
Rubber and miscellaneous plastics products	20.0	3.7	46.0	1.4
Leather tanning and industrial leather products	8	2.4	61.5	.1
Footwear and other leather products	8.5	2.7	70.2	.6
Glass and glass products	4.6	2.7	37.1	.3
Stone and clay products	7.1	1.6	33.3	.5
Primary iron and steel manufacturing	32.5	3.5	39.8	2.3
Primary nonferrous metals manufacturing	24.5	6.4	41.0	1.7
Metal containers	1.3	1.7	46.4	.1
Heating, plumbing, and structural metal products	6.1	1.3	33.5	.4
Stampings, screw machine products, and bolts	13.3	3.8	39.7	.9
Other fabricated metal products	15.6	3.4	41.9	1.1
Engines and turbines	5.4	5.0	45.8	.4
Farm machinery and equipment	.8	.6	36.4	.1
Construction, mining, and oil field machinery	7.0	3.8	61.9	.5
Materials handling machinery and equipment	4.1	4.7	53.2	.3
Metalworking machinery and equipment	15.1	4.4	41.3	1.1
Special industry machinery and equipment	2.8	1.4	52.8	.2
General industrial machinery and equipment	11.9	4.1	44.9	.8
Machine shop products	32.8	14.4	52.1	2.3
Office, computing, and accounting machines	2.3	.9	17.4	.2
Service industry machines	2.8	2.2	50.0	.2
Electric industrial equipment and apparatus	23.6	5.7	41.5	1.7
Household appliances	1.3	.7	38.2	.1
Electric lighting and wiring equipment	7.8	3.8	42.2	.5
Radio, television, and communication equipment	73.9	11.1	28.8	5.2
Electronic components and accessories	41.4	11.1	32.7	2.9
Miscellaneous electrical machinery, equipment, and supplies	5.7	5.0	46.3	.4
Motor vehicles and equipment	13.3	1.6	44.9	.9
Aircraft and parts	232.6	27.3	37.8	16.4
Other transportation equipment	20.1	6.7	25.4	1.4
Scientific and controlling instruments	15.2	5.2	34.9	1.1
Optical, ophthalmic, and photographic equipment	5.3	3.4	43.1	.4
Miscellaneous manufacturing	4.8	1.1	39.7	.3
<b>Services</b>	<b>412.6</b>	<b>1.3</b>	<b>40.6</b>	<b>29.0</b>
Transportation and warehousing	164.8	6.2	52.9	11.6
Communications, except radio and TV broadcasting	16.1	1.9	37.0	1.1
Radio and TV broadcasting	3.4	2.7	37.8	.7
Electric, gas, water, and sanitary services	9.7	1.5	40.1	.2
Wholesale and retail trade	75.7	.5	38.9	5.3
Finance and insurance	23.5	.9	42.1	1.7
Real estate and rental	3.6	.6	39.1	.3
Hotels; personal and repair services, except auto	21.3	1.1	35.6	1.5
Business services	49.8	2.3	31.2	3.5
Research and development				
Automobile repair and service	4.8	1.3	48.5	.3
Amusements	5.3	.8	28.0	.4
Medical, educational services, and nonprofit organizations	34.6	.7	28.8	2.4



Table 3. Defense expenditures,<sup>1</sup> fiscal years 1965, 1967, and 1968[In millions of 1958 dollars, producers' prices<sup>2</sup>]

Industry	1965		1967		1968	
	Defense purchases	Percent distribution	Defense purchases	Percent distribution	Defense purchases	Percent distribution
<b>Total</b> .....	<b>\$40,216.0</b>	<b>100.0</b>	<b>\$54,947.0</b>	<b>100.0</b>	<b>\$60,995.0</b>	<b>100.0</b>
<b>Agriculture, forestry and fisheries</b> .....	130.5	.3	154.0	.3	157.5	.3
Livestock and livestock products.....	47.0	.1	60.8	.1	62.7	.1
Other agricultural products.....	67.6	.2	82.4	.2	84.1	.1
Forestry and fishery products.....	2.0		3.0		4.0	
Agricultural, forestry and fishery services.....	13.9		7.8		6.7	
<b>Mining</b> .....	28.7	.1	27.7	.1	26.9	
Iron and ferroalloy ores mining.....	.1		.1		.1	
Nonferrous metal ores mining.....	.1		.1		.1	
Coal mining.....	28.3	.1	27.3	.1	26.5	
Crude petroleum and natural gas.....	.1		.1		.1	
Stone and clay mining and quarrying.....	.1		.1		.1	
Chemical and fertilizer mineral mining.....	.1		.1		.1	
<b>Construction</b> .....	1,595.0	4.0	1,846.0	3.4	1,787.4	2.9
New construction.....	852.0	2.1	1,023.0	1.9	945.0	1.6
Maintenance and repair construction.....	743.0	1.9	823.0	1.5	842.4	1.4
<b>Manufacturing</b> .....	17,760.5	44.2	26,418.0	48.1	30,020.2	49.2
Ordnance and accessories.....	2,463.5	6.1	4,714.0	8.6	5,963.8	9.8
Food and kindred products.....	564.4	1.4	1,049.6	1.9	977.9	1.6
Tobacco manufactures.....	1.2		1.5		1.5	
Broad and narrow fabrics, yarn and thread mills.....	62.0	.2	256.2	.5	223.4	.4
Miscellaneous textile goods and floor coverings.....	39.3	.1	42.9	.1	48.2	.1
Apparel.....	91.2	.2	326.9	.6	303.2	.5
Miscellaneous fabricated textile products.....	42.5	.1	103.9	.2	135.7	.2
Lumber and wood products, except containers.....	4.1		11.2		12.7	
Wooden containers.....	4.5		11.2		12.7	
Household furniture.....	12.7		36.2	.1	42.3	.1
Other furniture and fixtures.....	16.5		26.6	.1	27.4	
Paper and allied products, except containers.....	22.9		22.4		24.9	
Paperboard containers and boxes.....	7.1	.1	32.8	.1	33.1	.1
Printing and publishing.....	7.1		35.2	.1	32.6	.2
Chemicals and selected chemical products.....	139.0	.4	137.8	.3	124.6	.2
Plastics and synthetic materials.....	267.2	.7	574.3	1.1	612.0	1.0
Drugs, cleaning and toilet preparations.....	27.9	.1	36.9	.1	35.3	.1
Paints and allied products.....	56.7	.1	122.3	.2	130.2	.2
Petroleum refining and related industries.....	2.1		3.3		3.5	
Rubber and miscellaneous plastics products.....	627.3	1.6	908.9	1.7	1,054.2	1.7
Leather tanning and industrial leather products.....	113.9	.3	183.6	.3	269.9	.4
Footwear and other leather products.....	1.1		2.2		2.2	
Glass and glass products.....	29.3	.1	97.8	.2	110.4	.2
Stone and clay products.....	7.8		12.0		13.1	
Primary iron and steel manufacturing.....	6.0		11.9		12.5	
Primary nonferrous metals manufacturing.....	37.6	.1	101.8	.2	88.2	.1
Metal containers.....	57.5	.1	120.7	.2	117.5	.2
Heating, plumbing, and structural metal products.....	7.2		18.3		21.5	
Stampings, screw machine products and bolts.....	45.0	.1	83.5	.2	99.6	.2
Other fabricated metal products.....	13.4		39.3	.1	42.4	.1
Engines and turbines.....	17.7		62.1	.1	71.4	.1
Farm machinery and equipment.....	121.8	.3	218.8	.4	241.0	.4
Construction, mining and oil field machinery.....	5.1		4.3		4.2	
Materials handling machinery and equipment.....	49.8	.1	158.2	.3	189.3	.3
Metalworking machinery and equipment.....	58.3	.2	150.3	.3	142.6	.2
Special industry machinery and equipment.....	41.2	.1	91.4	.2	82.1	.1
General industrial machinery and equipment.....	11.6		21.8		39.3	.1
Machine shop products.....	60.5	.2	112.6	.2	143.1	.2
Office, computing, and accounting machines.....	38.2	.1	56.5	.1	76.3	.1
Service industry machines.....	281.2	.7	339.9	.6	312.3	.5
Electric industrial equipment and apparatus.....	40.7	.1	86.8	.2	108.4	.2
Household appliances.....	304.0	.8	491.0	.9	557.5	.9
Electric lighting and wiring equipment.....	10.0		12.1		14.4	
Radio, television, and communication equipment.....	9.1		24.0		37.1	.1
Electronic components and accessories.....	3,613.5	9.0	4,301.3	7.8	4,965.0	8.1
Miscellaneous electrical machinery, equipment, and supplies.....	308.3	.8	457.4	.8	496.7	.8
Motor vehicles and equipment.....	73.9	.2	105.1	.2	150.4	.3
Aircraft and parts.....	514.0	1.3	917.3	1.7	953.2	1.6
Other transportation equipment.....	6,102.3	15.2	8,113.5	14.8	9,098.3	14.9
Scientific and controlling instruments.....	928.0	2.3	1,049.3	1.9	1,159.8	1.9
Optical, ophthalmic, and photographic equipment.....	285.0	.7	353.3	.6	394.7	.7
Miscellaneous manufacturing.....	111.5	.3	168.1	.3	207.1	.3
Services.....	8.3		13.9		17.2	
Transportation and warehousing.....	4,011.5	10.0	6,147.7	11.2	7,540.2	12.4
Communications, except radio and TV broadcasting.....	1,035.0	2.6	2,542.4	4.6	3,407.1	5.6
Radio and TV broadcasting.....	249.0	.6	310.2	.6	356.0	.6
Electric, gas, water, and sanitary services.....	148.5	.4	176.8	.3	240.5	.4
Wholesale and retail trade.....	525.0	1.3	721.2	1.3	859.3	1.4
Finance and insurance.....	12.2		15.3		17.1	
Real estate and rental.....	70.5	.2	71.7	.1	72.2	.1
Hotels; personal and repair services, except auto.....	209.1	.5	265.7	.5	315.5	.5
Business services.....	514.8	1.3	630.9	1.2	744.7	1.2
Research and development.....	638.0	1.6	681.4	1.2	695.9	1.1

See footnotes at end of table.

Table 3. Continued—Estimated defense expenditures,<sup>1</sup> fiscal years 1965, 1967, and 1968

Industry	1965		1967		1968	
	Defense purchases	Percent distribution	Defense purchases	Percent distribution	Defense purchases	Percent distribution
Automobile repair and service.....	15.1		18.2		19.7	
Amusements.....	79.7	.2	89.3	.2	102.8	.2
Medical, educational services, and nonprofit organizations.....	514.6	1.3	624.6	1.1	709.4	1.2
<b>Government Enterprises</b> .....	53.6	.1	64.4	.1	66.0	.1
Federal government enterprises.....	46.5	.1	52.7	.1	53.3	.1
State and local government enterprises.....	7.1		11.7		12.7	
Imports.....	1,513.0	3.8	2,239.0	4.1	2,439.0	4.0
Directly allocated imports.....						
Transferred imports.....						
Dummy industries.....	85.2	.2	100.2	.2	102.8	.2
Business travel.....						
Office supplies.....	85.2	.2	100.2	.2	102.8	.2
Scrap.....						
Special industries.....	15,038.0	37.4	17,950.0	32.7	18,855.0	30.9
Government industry <sup>2</sup> .....	15,038.0	37.4	17,950.0	32.7	18,855.0	30.9

<sup>1</sup> Expenditure totals differ from national income totals in that adjustments for timing and receipts netted against expenditures have not been made in order to provide more realistic employment estimates.

<sup>2</sup> Producers' prices exclude the distribution costs of transportation and trade. These

are included in the totals for transportation and trade.

<sup>3</sup> Force account construction compensation is in sectors of new construction and maintenance and repair construction.

case with the ferrous and nonferrous metals industries, where defense employment in 1968 amounted to about 9 and 16 percent of the total. Much of the total increase in employment in these industries from 1965 to 1968 was attributable to the defense buildup. Other industries where the total increase in employment was largely due to defense included petroleum refining and food processing. Much of the increase in transportation employment during this period was due to Viet Nam.

**DISTRIBUTION OF VIET NAM-GENERATED EMPLOYMENT.** Most of the employment increases assumed to be attributable to Viet Nam occurred in the major defense industries of ordnance, aircraft, and electronics, as well as in transportation and trade. These were the only industries with 5 percent or more of the total employment created by the Viet Nam buildup. Most industries had 1 percent or less of such employment.

The distribution of Viet Nam-generated employment by industry in 1968 generally followed the patterns of total defense employment in 1965, 1967, and 1968. The incremental employment resulting from the Viet Nam buildup was relatively greater in ordnance and transportation and lower in electronics and shipbuilding. The aircraft proportion remained about the same. Differences were greatest in comparison with pre-Viet Nam levels in 1965. These shifts in industry emphasis for major defense industries are as follows:

	Percent distribution of DOD-generated employment	
	1965	Viet Nam buildup
Ordnance.....	6.5	9.6
Communications equipment.....	9.3	5.2
Electronic components.....	3.9	2.9
Aircraft.....	15.8	16.4
Other transportation equipment (primarily shipbuilding).....	3.1	1.4
Transportation.....	5.6	11.6

The industries most likely to be affected by a cutback of Viet Nam requirements would be aircraft, ordnance, and transportation, which together accounted for almost 40 percent of the increase in defense employment assumed to be due to Viet Nam. In the case of ordnance, most of the increase for Viet Nam occurred in the production of ammunition. With the end of fighting in Viet Nam, ammunition purchases would remain high for a short period to replenish stocks, but there would be little possibility of maintaining ammunition employment at recent levels. Increased missile expenditures will probably help to counter the overall decline in employment in the ordnance industry, but this would not affect ammunition workers.

Similarly, purchases of transportation services will probably decline, with little prospect of being restored by increased non-Viet Nam military expenditures. Reductions in Viet Nam expenditures for aircraft will probably be offset to some extent by other military requirements and a strong civilian demand. In the communications



equipment industry, which enjoyed only moderate increases in employment due to the Viet Nam effort, it is likely that other military requirements and strong civilian demand will maintain employment. In the shipbuilding industry, where certain expenditures have been deferred because of Viet Nam, employment could increase through heavier military and civilian purchases.

### Note on procedure

The reader is referred to the article in the *Review* of September 1967<sup>7</sup> for details of the analytical procedure followed. The basic approach of the input-output system remains the same. Use of interindustry models permitted tracing the impact of purchases of final products throughout the economy, determining output and, ultimately, employment requirements for all supporting industries, as well as requirements of the final producer.

Direct employment estimates generated by this approach should be considered as having general validity, although obviously not the precision of a survey. On the other hand, the input-output

approach used here provides an estimate of the total employment impact of defense purchases, which an employment survey would not, since suppliers beyond the first level would usually not know that their product was ultimately destined for DOD. Still, this approach does not include all indirect employment effects. No attempt was made to measure the income multiplier or accelerator effects which would account for substantial additional employment.

The defense purchases used for 1965, 1967, and 1968 are listed in table 3. Changes from the expenditures listed in the previous article were based mainly on additional data now available for 1967 and on some changes in the concept. Military expenditures for 1967 in the earlier report were estimated largely from contract awards data which had to be adjusted for timing and stated on expenditure basis. Expenditures and other types of DOD data are now available for 1967 that permit revisions. The most significant change in the concept occurred in the new and maintenance construction sectors. These now cover all expenditures, including force account or DOD expenditures for materials and compensation as well as contract construction. □

### FOOTNOTES

<sup>1</sup> Military expenditures, as considered in this article, differ from administrative budget figures in that they exclude grants and transfer payments, e.g., retirement pay. These expenditures are not the same as national income amounts. To obtain more accurate measures of the impact of defense expenditures on employment, national income adjustments for timing and miscellaneous receipts were not made. After eliminating the influence of price increases, this measure of military expenditures declined somewhat in fiscal year 1969. In fiscal 1965-69, these expenditures were as follows (in millions of 1958 dollars):

	1965	1967	1968	1969
GNP-----	\$595.1	\$660.3	\$689.1	\$720.3
DOD expenditures---	40.2	55.0	61.0	58.6
Percent-----	6.8	8.3	8.9	8.1

<sup>2</sup> All year references in this article are to fiscal years.

<sup>3</sup> See "The Employment Effect of Defense Expenditures," *Monthly Labor Review*, September 1967, pp. 6-16.

<sup>4</sup> Industry employment estimates were not made for 1969 since most data necessary for this analysis were not yet available. The aggregate private employment estimates for 1969 was derived from the change in total DOD purchases and average productivity.

<sup>5</sup> The employment effects of military purchases on each industry are examined in two ways. First, industry employment generated by defense expenditures is considered as a percent of total employment in each industry. This

relationship, or defense dependency, demonstrates the importance of direct and indirect defense purchases in each industry. Defense employment in each industry is then considered as a percent of the total defense-generated employment in each year, indicating the distribution or change in relative emphasis in defense purchases during this period. The same approach is followed in the next section dealing with the employment assumed to be attributable to the Viet Nam war.

<sup>6</sup> Of course, some of the base expenditures from 1965 were probably shifted from lower priority projects to the more urgent Viet Nam requirements, and some of the increases to 1968 were probably for non-Viet Nam purchases. While the initiation of non-Viet Nam projects during this period seems to have been small, shifts from non-Viet Nam to Viet Nam requirements were probably significant. This situation would have the effect of understating the Viet Nam-related purchases. On the other hand, since this treatment does not allow for growth in non-Viet Nam base requirements through 1968, there is an opposite tendency to overstate Viet Nam purchases. Since DOD data do not explicitly identify expenditures as Viet Nam-related, an exact determination cannot be made. The above approach is considered to provide a valid approximation of the impact of Viet Nam in 1968, although it would not be valid for later years. Viet Nam expenditures are now being cut back and new strategic weapons are being introduced.

<sup>7</sup> See footnote 3 above.

# Skills and location of defense-related workers

A fifth of the country's engineers  
and nearly a tenth of skilled  
and semiskilled workers  
were in defense-attributed jobs  
in fiscal 1968

MAX A. RUTZICK

CONTINUED demand for workers to fill jobs in defense-related activities, particularly those requiring high skills, pressed during fiscal year 1968 on the Nation's labor market, already affected by critical shortages. Employment generated by military expenditures, including military and civilian personnel of the Government, increased steadily between 1965 and 1968, although it leveled off in 1969.<sup>1</sup>

This article describes the work skills found in government and private defense-related enterprises in fiscal 1968, and the changes that occurred in the occupational structure of the defense work force between fiscal 1967 and 1968. It also discusses the regional distribution of defense employment by broad occupation groups, and the methods that were used to make the estimates.

## Skills in defense work

The labor force in defense-associated industries is generally more skilled than the civilian labor force as a whole. As shown in table 1, 20.1 percent of the 4.7 million defense workers in fiscal 1968 were in the skilled category; in the general labor force the proportion was 13.2 percent. Semiskilled workers made up 26.4 percent of the defense work force, and professionals 14.4 percent; in the whole labor force the corresponding proportions were 18.4 and 12.8 percent.

A notable characteristic of the defense work force was that nearly 18 percent of its members were in clerical occupations, as compared with 6 percent in the whole economy. Another marked distinction of the defense force was the smaller number of service personnel. This group, which in

the past several years had increased rapidly to the level of 12.3 percent of all workers in the economy, constituted only 4.6 percent of all defense workers.

## Defense work and labor force

Defense-associated workers made up 6.1 percent of the country's total employment in fiscal 1968, although the proportions were different for different skill categories. Defense workers constituted approximately 9 percent of all the skilled and semiskilled workers and nearly 7 percent of professional workers; but they were of minor proportions in such broad categories as salesworkers (2.4 percent), service personnel (2.3 percent), and laborers and farm workers (3.2 percent).

The representative list of 54 detailed occupations (table 2) includes three groups which had more than one-fourth of their numbers in defense-associated work in fiscal 1968. These were aeronautical engineers, aircraft mechanics, and physicists (not including physicist-professors).

Defense employment of fiscal 1968 included an estimated 244,000 (20 percent) of the Nation's engineers, a growth of 26,000 from the previous year. The highest proportions in this group were aeronautical engineers (59 percent of the U.S. total), followed by electrical engineers (22 percent), and mechanical and metallurgical engineers (19 percent each group). Technicians, whose work is closely related to that of engineers, had 100,000 workers in the defense group, and draftsmen 39,000 (14 percent of all the draftsmen).

There was a steady rise in the use of such highly trained technical personnel during the year. This demand for engineers and technicians most likely was a considerable factor in a labor market plagued by shortages in various occupations. Special incentive programs will probably be

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**Table 1. Civilian employment attributable to defense expenditures, by occupation group,<sup>1</sup> fiscal years 1967 and 1968**

[Numbers in thousands]

Occupation group	Defense-generated employment					
	1968	1967	Increase from 1967	As percent of all defense workers in 1968	As percent of all workers in 1968 <sup>2</sup>	Percent distribution in 1968 <sup>3</sup>
Total.....	4,700	4,200	500	100.0	6.1	100.0
Professional workers.....	680	609	71	14.4	6.9	12.8
Managers, officials, and proprietors.....	414	372	42	8.8	5.4	10.0
Salesworkers.....	112	97	15	2.4	2.4	16.8
Clerical and kindred workers.....	830	742	88	17.6	6.4	6.0
Craftsmen, foreman, and kindred workers.....	949	858	91	20.1	9.3	13.2
Operatives (semiskilled).....	1,233	1,090	143	26.4	8.8	18.4
Service workers.....	219	191	28	4.6	2.3	12.3
Laborers and farm workers.....	260	241	19	5.5	3.2	10.5

<sup>1</sup> Employment estimates cover wage and salary employees in the United States where pay is attributable to military functions of the Department of Defense. They do not include self-employed or domestic workers or U.S. citizens employed abroad other than military personnel. Farm employment, however, does include self-employed and unpaid family workers.

<sup>2</sup> Defense employment is given as a percent of all employment including self-employed workers. The number of self-employed workers is statistically insignificant in defense-related employment, so their theoretical exclusion does not affect relationship percentages.

<sup>3</sup> As of June 1968. Based on *Employment and Earnings and Monthly Report on the Labor Force*, July 1968, table A-19, Employed Persons by Occupation Group.

necessary if further rise in the demand for such workers is to be met.

The importance of electronics in defense production was indicated by a large number (69,000) of electrical engineers in defense work, and by an equally large number of skilled electricians—13 percent of all electricians in the country. And since defense work involves production of huge masses of metal goods it creates a great demand for metal trades workers. Machine-tool operators, sheetmetal workers, metalwork assemblers, metalworking inspectors, machinists, and toolmakers are needed in large numbers. Defense employment in these occupations ranges from 10 to 25 percent.

Construction workers, on the other hand, have a relatively minor role in defense work. Carpenters, bricklayers, stonemasons, and excavating machine operators have 5 percent or fewer of their numbers in defense activities.

Table 3 shows the distribution of workers in selected occupations, by industry, important in defense programs. Industries with the largest defense-related employment also had the largest shares of employment in such occupations. Of course, considerable numbers of defense workers were found throughout the economy, but they were relatively few per industry and in numerically less important occupations.

It is estimated that approximately 79,000 of defense engineers, including almost 90 percent of aeronautical engineers, were employed in aircraft industry. Next in importance as employer for this group was the Department of Defense itself, employing nearly 53,000 engineers; the electrical machinery industry absorbed nearly 40 percent of all electrical engineers engaged in defense production. Blue-collar workers such as metalworking assemblers were concentrated in the electrical machinery and the aircraft industries.

**Table 2. Civilian employment attributable to defense expenditures, by occupation, fiscal years 1967 and 1968**

[Numbers in thousands]

Occupation	Defense-generated employment			
	1968	1967	Increase from 1967	Percent distribution in 1968
Technical engineers.....	244	219	26	20
Aeronautical engineers.....	45	38	7	59
Chemical engineers.....	6	5	1	10
Civil engineers.....	17	16	1	10
Electrical engineers.....	69	63	6	22
Industrial engineers.....	24	21	3	16
Mechanical engineers.....	49	44	4	20
Metallurgical engineers and metallurgists.....	5	5	-----	19
Chemists.....	11	10	1	10
Biological scientists.....	2	2	-----	7
Physicists.....	9	8	1	38
Technicians except medical and dental.....	100	93	9	-----
Draftsmen.....	42	37	5	14
Statisticians.....	2	2	-----	6
Accountants and auditors.....	38	31	7	6
Designers except design draftsmen.....	7	6	1	8
Secretaries, stenographers, and typists.....	264	241	23	8
Office machine operators.....	44	41	2	9
Accounting clerks.....	52	49	3	-----
Carpenters.....	40	39	1	5
Brick and stonemasons and tilesetters.....	5	5	-----	2
Electricians.....	59	55	4	13
Excavating, grading, and road machine operators.....	8	7	1	3
Painters and paperhangers.....	24	23	1	6
Plumbers and pipefitters.....	30	29	1	9
Structural metalworkers.....	6	5	1	8
Machinists.....	113	99	14	19
Machine tool operators, semiskilled.....	57	49	8	-----
Blacksmiths, forge and hammermen.....	3	3	-----	11
Boilermakers.....	4	4	-----	13
Heat treaters, annealers, and temperers.....	4	4	-----	15
Millwrights.....	10	9	1	12
Molders, metal, except coremakers.....	8	7	1	15
Pattern and model makers.....	10	9	1	25
Sheetmetal workers.....	39	36	3	25
Tool and die makers.....	39	34	5	19
Assemblers, metalworking, skilled.....	34	29	5	-----
Assemblers, metalworking, semiskilled.....	108	94	14	-----
Inspectors, metalworking, semiskilled.....	48	41	7	-----
Photoengravers and lithographers.....	3	2	1	8
Linemen and servicemen, telephone, telegraph, and power.....	21	18	3	6
Air conditioning and heating mechanics.....	11	10	1	10
Airplane mechanics.....	73	66	7	54
Motor vehicle mechanics.....	31	27	4	4
Office machine mechanics.....	3	3	-----	5
Cranemen, derrickmen, and hoistmen.....	14	13	1	10
Loom fixers.....	1	1	-----	4
Opticians, lens grinders, and polishers.....	2	1	1	5
Drivers, bus, truck, and tractor.....	130	104	26	7
Furnacemen, smelters, and pourers.....	8	7	1	14
Heaters, metal.....	1	1	-----	11
Welders and flamecutters.....	63	57	6	13
Spinners, textile.....	3	3	-----	6
Weavers, textile.....	3	3	-----	6





**Table 4. Nonagricultural private defense-generated employment as percent of all comparable employment, by region,<sup>1</sup> fiscal year 1968**

[Numbers in thousands]

Region	Private employment average <sup>2</sup>	Defense employment	Defense as percent of total employment
All regions.....	66,857	3,500	5.2
Region 1.....	13,760	799	5.8
Region 2.....	12,673	612	4.8
Region 3.....	8,405	290	3.4
Region 4.....	11,624	564	4.8
Region 5.....	5,829	220	3.7
Region 6.....	4,664	230	4.8
Region 7.....	7,702	650	8.4
Region 8.....	2,197	125	5.6

<sup>1</sup> Region 1—Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Vermont; region 2—Delaware, District of Columbia, Kentucky, Maryland, Ohio, Pennsylvania, Virginia, West Virginia; region 3—Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, Tennessee; region 4—Illinois, Indiana, Michigan, Minnesota, Wisconsin; region 5—Arkansas, Louisiana, Oklahoma, New Mexico, Texas; region 6—Colorado, Iowa, Kansas, Missouri, Nebraska, North Dakota, South Dakota, Wyoming; region 7—Arizona, California, Hawaii, Nevada, Utah; region 8—Alaska, Idaho, Montana, Oregon, and Washington.

<sup>2</sup> Nonagricultural private employment was calculated from State data given in **Employment and Earnings**, issues for 1968 and 1969, table B-7.

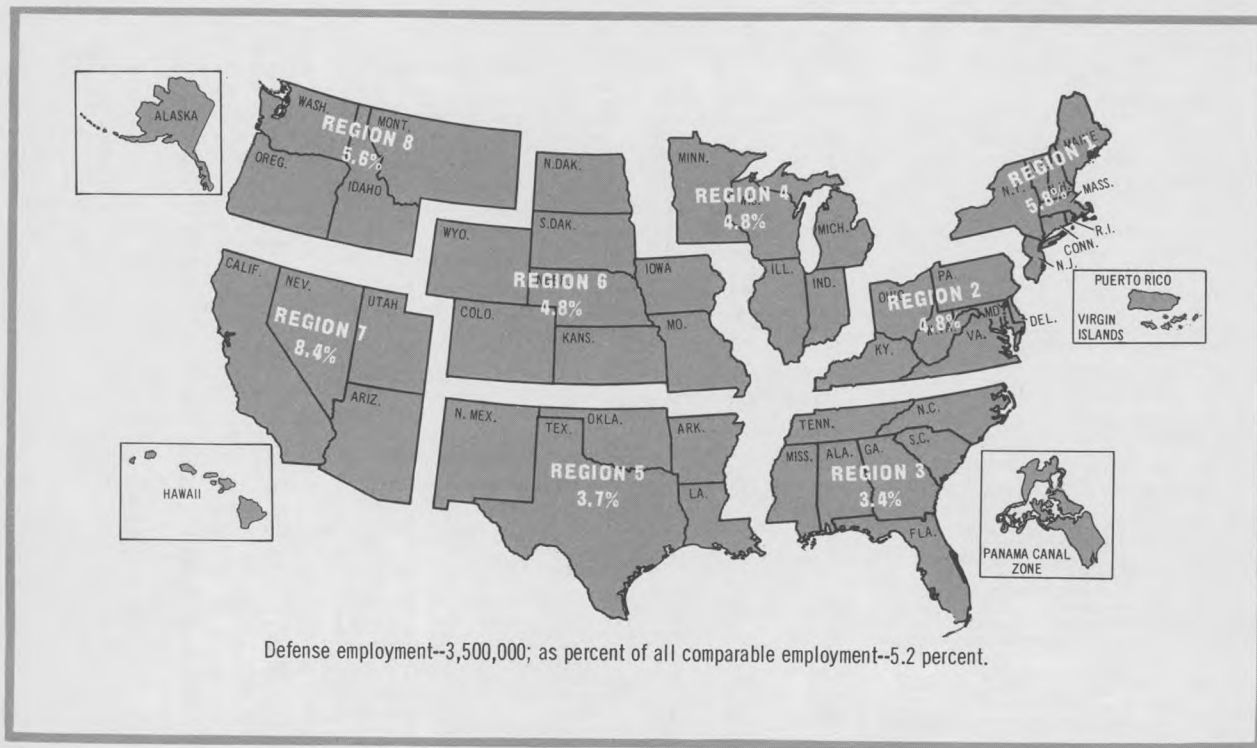
workers in each occupation in the industry. These industry numbers were added to obtain national totals for the various occupation groups. This simple technique rests essentially on the validity of the concept of distinctive industry

occupation patterns.

To appraise the importance of defense-generated work in relation to total employment in each occupation, current estimates of occupational employment were necessary. As there is no widely accepted set of such statistics for detailed occupations, the necessary data were obtained from a rather small sample (Bureau of the Census, Current Population Survey, 1968).

The methods used here, essentially employing computer-based economic and manpower models, are still in the process of development and improvement. The statistics on which this study is based, although the best available, were of uneven quality. Analytic judgment, therefore, was sometimes needed to prepare an internally consistent, economywide set of data. Where this was done, efforts were made to produce conservative estimates regarding the role of the highly trained, skilled groups. Despite these handicaps, the results shown here are believed to indicate adequately the kinds of skills found in defense-created employment and location of defense workers.

**Chart 1. Regional nonagricultural private defense-generated employment as percent of all comparable employment, fiscal year 1968**



**Location of skilled defense labor**

Another question that commands a special attention is, what proportion of workers in each occupation group of a region are engaged in defense related work?

No study has yet been made to answer this question on the basis of direct regional surveys—either of defense employment by occupation or of defense expenditures by the nature of goods and services procured. The Department of Labor, in cooperation with the Department of Defense, is currently engaged in such evaluation of defense

employment. The findings will be released some time in 1970. At present, the location of defense workers with particular skills must rest on interpretation of the national estimates of defense-generated employment, which have some limitations. Such an effort is attempted here.

Information on the location of defense-associated employment in a region was developed by using a technique that relies primarily on national patterns of industrial output in the United States. It assumes that defense expenditures by industry in regions generally follow the national geographic pattern of industrial production. For instance, if 25 percent of output of the Nation's electronics

**Table 5. Nonagricultural private defense-generated employment, by occupation group and region, fiscal years 1967 and 1968**

[Numbers in thousands]

Region and occupation	Defense-generated employment				Region and occupation	Defense-generated employment			
	1968	1967	Increase from 1967	Percent distribution in 1968		1968	1967	Increase from 1967	Percent distribution in 1968
All regions.....	4,639	4,128	511	100.0	Clerical and kindred workers.....	109	97	12	16.2
Professional workers.....	680	607	73	14.7	Craftsmen, foremen, and kindred workers.....	137	123	24	20.4
Managers, officials, and proprietors.....	415	371	44	8.9	Operatives, semiskilled.....	205	180	25	30.4
Salesworkers.....	112	98	14	2.4	Service workers.....	29	25	4	4.3
Clerical and kindred workers.....	830	742	88	17.9	Laborers.....	31	27	4	4.6
Craftsmen, foremen, and kindred workers.....	949	856	93	20.5	Total, region 5.....	326	292	34	100.0
Operatives, semiskilled.....	1,255	1,106	149	27.0	Professional.....	47	43	4	14.4
Service workers.....	219	190	29	4.7	Managers, officials, and proprietors.....	33	30	3	10.1
Laborers.....	179	158	21	3.9	Salesworkers.....	8	7	1	2.5
Total, region 1.....	962	845	117	100.0	Clerical and kindred workers.....	62	56	6	19.0
Professional.....	146	128	18	15.2	Craftsmen, foremen, and kindred workers.....	69	62	7	21.2
Managers, officials, and proprietors.....	82	72	10	8.5	Operatives, semiskilled.....	78	69	9	23.9
Salesworkers.....	28	24	4	2.9	Service workers.....	16	14	2	4.9
Clerical and kindred workers.....	169	149	20	17.6	Laborers.....	13	11	2	4.0
Craftsmen, foremen, and kindred workers.....	182	162	20	18.9	Total, region 6.....	304	270	34	100.0
Operatives, semiskilled.....	275	241	34	28.6	Professional.....	47	42	5	15.5
Service workers.....	47	40	7	4.9	Managers, officials, and proprietors.....	27	24	3	8.9
Laborers.....	33	29	4	3.4	Salesworkers.....	7	6	1	2.3
Total, region 2.....	953	865	88	100.0	Clerical and kindred workers.....	55	49	6	18.1
Professional.....	139	127	12	14.6	Craftsmen, foremen, and kindred workers.....	65	59	6	21.4
Managers, officials, and proprietors.....	90	82	8	9.4	Operatives, semiskilled.....	78	68	10	25.6
Salesworkers.....	20	17	3	2.1	Service workers.....	14	12	2	4.6
Clerical and kindred workers.....	177	162	15	18.6	Laborers.....	11	10	1	3.6
Craftsmen, foremen, and kindred workers.....	203	187	16	21.3	Total, region 7.....	817	716	101	100.0
Operatives, semiskilled.....	241	216	25	25.3	Professional.....	1299	113	16	15.8
Service workers.....	45	40	5	4.7	Managers, officials, and proprietors.....	70	62	8	8.6
Laborers.....	38	34	4	4.0	Salesworkers.....	17	15	2	2.1
Total, region 3.....	429	388	41	100.0	Clerical and kindred workers.....	148	130	18	18.1
Professional.....	57	51	6	13.3	Craftsmen, foremen, and kindred workers.....	169	150	19	20.6
Managers, officials, and proprietors.....	42	38	4	9.8	Operatives, semiskilled.....	219	190	29	26.8
Salesworkers.....	10	9	1	2.3	Service workers.....	38	32	6	4.7
Clerical and kindred workers.....	78	71	7	18.2	Laborers.....	27	24	3	3.3
Craftsmen, foremen, and kindred workers.....	85	78	7	19.8	Total, region 8.....	175	155	20	100.0
Operatives, semiskilled.....	177	105	12	27.3	Professional.....	27	24	3	15.4
Service workers.....	22	20	2	5.1	Managers, officials, and proprietors.....	16	14	2	9.1
Laborers.....	18	16	2	4.2	Salesworkers.....	3	3	0	1.7
Total, region 4.....	673	597	76	100.0	Clerical and kindred workers.....	32	28	4	18.3
Professional.....	88	79	9	13.1	Craftsmen, foremen, and kindred workers.....	39	35	4	22.3
Managers, officials, and proprietors.....	55	49	6	8.2	Operatives, semiskilled.....	42	37	5	24.0
Salesworkers.....	19	17	2	2.8	Service workers.....	8	7	1	4.6
					Laborers.....	8	7	1	4.6



industry is defense-related, it is assumed that 25 percent of each region's electronic output is defense-related. The estimated defense employment for each industry was weighted by the relative importance of that industry in each State, and the resulting numbers were aggregated into regions to obtain the estimates presented here.

Of course, there is a drawback to this method. The Department of Defense has the option, in most cases, of making all of its purchases from a given industry in a single region. These purchases frequently show substantial regional variations from year to year, reflecting the introduction of new weapons systems and changing opportunities to procure at lower costs.

Defense-generated nonagricultural employment in the private sector in fiscal 1968 differed in importance from one part of the country to another, both in numbers and relative to all comparable employment. (See table 4 and chart.) It was estimated at 3.5 million workers for the

whole country (or 5.2 percent of all comparable employment), of whom 800,000 were in New England (region 1) and over 600,000 in lower Northeast. The smallest number (125,000) were in the upper Northwest. However, in terms of relative importance of defense jobs to all non-agricultural employment, defense work ranged from the highest ratio of 8.4 percent of all employment in Far Western States (region 7, with concentration of defense activity in California) to the lowest of 3.7 in the Southeast.

There were no substantial differences among regions in worker skill distribution of defense employment. Generally, the distribution followed the national defense employment patterns, as shown in table 5. □

—————*FOOTNOTES*—————

<sup>1</sup> All year references in this article are to fiscal years.

<sup>2</sup> See pp. 3-10, this issue.

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### Employee compensation and payroll hours

Additional reports on 1967 surveys of employee compensation and payroll hours are now available free of charge from the Bureau of Labor Statistics. The new publications cover confectionery and related products manufacturing (Report 364), laundries and cleaning and dyeing plants (Report 367), and men's and boys' shirt manufacturing (Report 368). Earlier reports covered banks (362), commercial and development laboratories (363), fabricated structural steel manufacturing (365), and hotels and motels (366).

For a copy of any of these reports, write to your regional BLS office (listed on the inside front cover) or to the Bureau of Labor Statistics, U.S. Department of Labor, Washington, D.C. 20212.

# How trade union policy is made

The common tendency to exaggerate  
the power of labor leaders  
fails to reckon  
with membership pressures  
and the influence of subordinates

DEREK C. BOK AND JOHN T. DUNLOP

AT PRESENT, most commentators seem to assume that the future of the labor movement rests mainly in the hands of its leaders. This point of view is reflected in the constant criticism of labor leaders, and it is buttressed by a mass of opinion data to the effect that unions are run pretty much as the top officials see fit. Yet one must beware of such opinions, for each of the groups that most influence the public view of organized labor has its special reasons for misconceiving the role of the union leader and exaggerating his influence.

The businessman, for example, is accustomed to organizations where the leader enjoys considerable power (though not so much as the outsider tends to suppose). As a result, many executives assume instinctively that the union leader enjoys comparable authority; they overlook the fact that union officials must win office by election. Businessmen may also exaggerate the role of the union leader as a result of their natural tendency to assume a "harmony of interests" between themselves and their employees. This assumption has suffused the literature of business for decades and stems, once again, from understandable motives. Few managements wish to harbor the thought that they are pursuing their own interests at the expense of their employees. It would be most disagreeable to concede that wages are kept unfairly low or that the quest for efficiency has led to harsh supervision or uncom-

fortable working conditions. As a result, when employees organize or protest or strike, many employers assume that harmonious relations within their plants have been disrupted by some opportunistic union leader who has succeeded in leading the workers astray. This reaction, once again, is not a simple matter of tactics; it springs naturally from a network of beliefs that help many executives to justify their behavior as businessmen and human beings.

Intellectuals also have their reasons for ascribing great influence to the union leader. As Bertrand Russell has pointed out, the liberal critic has traditionally been sentimental toward the underdog. He has been unable to champion the cause of the poor and the disadvantaged without idealizing them as well. As a result—until recently, at any rate—these critics could seldom bring themselves to blame union shortcomings on the members; instead, they concluded that the leaders must somehow be responsible.

Other forces also helped to reinforce this bias. After the rush of organizing in the thirties, union members seemed to have become representative of the entire working class. Under these circumstances, it would have been most awkward to fault the members for labor's failure to press for social reform. How could the liberal justify his programs if the beneficiaries themselves were indifferent to them? Unless the rank and file were on his side, how could he urge the unions to reform and still keep true to his democratic principles? Above all, how could he harbor any optimism at all if the entire working class had to be persuaded to support his programs? With all these difficulties, it was far easier to assume that unions were made up of willing members who were held back by the stubbornness and selfishness of powerful leaders. These beliefs could begin to weaken only when union members were no longer seen as

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representative of the lower classes and unions were no longer the only organized force for social reform. Thus, it is no accident that intellectuals did not acknowledge the lack of liberal, reformist sentiments among the members until the 1960's, when students, black militants, and other groups had already begun to offer organized support for fundamental social reforms. (Characteristically enough, now that the pendulum has begun to swing, it has swung very far indeed in the minds of many critics. Union members are now viewed not only as apathetic and undisposed to social reform; they are erroneously perceived as a highly conservative force in the society.)

Because of these tendencies to exaggerate the influence of the labor leader, one must take pains to construct a more realistic picture of how union policy is actually made. Otherwise, society will often misdirect its energies by flailing away at union officials for actions that are not really within their power to change. In the process, deeper forces may be overlooked, forces that actually determine union behavior and must ultimately be changed if the conduct of unions is to change.

In the end, union behavior is the product of four broad influences that are constantly interacting upon one another: the desires of the members, the nature and abilities of the leadership, the capacities and opinions of subordinates, and the pressures of the environment. This book has been a series of illustrations showing how these forces interact in the most important areas of union activity. In the brief space remaining, it is possible only to distill these illustrations into a more succinct, more general statement.

### **What the members want**

Starting first with the rank and file, a mass of data suggests that the members are primarily interested in their union as an agent for negotiating with the employer and administering the collective bargaining agreement. Where these functions are involved, the members exert influences through many different channels to impose certain restraints upon their leaders. Sometimes the demands of the members are very high, even impossibly so; sometimes they can be modified by the leaders through education and persuasion. Once formed, however, these demands can be ignored only at the risk of decertification, election

defeat, refusals to ratify contracts, wildcat strikes, or other forms of withholding cooperation.

The members expect little and ordinarily demand even less in other areas of union activity, such as organizing, political action, or community service. Their main interest is simply that these programs not require too large an expenditure of dues or demand too much time and attention from union officials. To enforce this interest, members exert pressure either by refusing dues increases and special levies to pay for the programs or by withholding their cooperation or participation, which is often essential if the programs are to succeed.

Throughout the entire range of union programs, the members tend to impose closer restraints upon local leaders than upon national officials, especially if the local organizations are small. At the national level, it is much more difficult to marshal an effective protest or to oust the incumbent officials, since opposition must be mounted in many widely scattered groups of members. But in the national as well as in the local union, the influence of the member expresses itself more insistently and through many more channels than most observers have been prepared to concede. On the whole, moreover, the influence has been much less salutary than critics of unions like to acknowledge. A candid appraisal compels the conclusion that the rank and file has contributed to most of the widely condemned union shortcomings: racial discrimination, excessive wage demands, featherbedding, and—in many instances—irresponsible strikes. Corruption, of course, is one form of union misbehavior that cannot be attributed significantly to the membership. Critics may often respond to the above-mentioned arguments by asserting that autocratic unions can also indulge in featherbedding, racial discrimination, etc. This is undoubtedly correct, but one reason may be that democratic elections are only one way by which the views of the members are impressed upon the leader; there are other highly effective conduits for transmitting membership demands and values, even in seemingly autocratic unions.

### **Influence of subordinates**

The union leader is also limited by his subordinates. In many cases, of course, the sub-

ordinate is simply a vehicle for pressures arising from the membership. Thus, local officials will resist advice or commands which, if carried out, would threaten defeat at the next local election. But subordinates can limit their superiors in ways quite independent of any rank-and-file sentiments. Local leaders may develop personal ambitions that can be furthered by resisting the international. Staff personnel may have views and priorities that conflict with those of the union leaders they serve. Local officials or staff can simply lack the ability to carry out orders effectively. In theory, of course, the higher official may have formal authority to order his subordinates about. In practice, however, the situation is not so simple. The leader must normally obtain genuine cooperation and even enthusiasm from his subordinates, and this cannot often be achieved if the leader does not accommodate himself, to some extent at least, to the abilities and desires of those whom he commands.

### Effect of environment

The environment presses in upon the union from many directions: through the policies of employers; the market pressures affecting the firm, the industry and the entire economy; the attitudes of the public; and the provisions of the law. With all its endless variety, the environment affects the union in three essential ways.

To begin with, the environment acts upon the members and shapes their outlook, their expectations, and their preferences. For example, the openness of the society and the lack of class divisions have had much to do with the unwillingness of union members to support a labor party. The educational system and the gradual evolution of community values have produced large changes in the attitudes of union members toward the Negro. The restless disaffection of the young pervades the unions as it does so many other institutions. Advertising and the widespread emphasis on material success inflate the demands that members make in collective negotiations. As a general rule, influences of this sort play their most vital role in helping to determine union goals.

The environment also affects the methods unions can use to achieve their goals and the degree of success that they will achieve. Thus, the creation of vast conglomerate firms has impelled many different unions to join in "coalition

bargaining" to increase their bargaining power. In turn, the effectiveness of this strategy will be conditioned by the financial health and competitive position of the firm and its separate units, as well as by conditions in the economy as a whole. In similar fashion, labor's success in organizing mass-production industries in the thirties (after repeated failures in the past) was greatly helped by such factors as the impact of the Depression, the personnel policies of the firms involved, and the newly enacted Federal law to protect union organization. Conversely, the inability of many of the same labor officials to organize the South 10 years later was due to another set of social and community pressures that hampered the organizer and dulled the incentive of employees to join a union.

The environment affects the union movement in still another way by helping to shape the quality of labor leadership. The political traditions and the laws of this country insure that union leaders will be chosen by the members. This policy in turn implies that the leaders will be chosen from the ranks and will be generally representative of the membership. At the same time, the educational system, the programs of scholarships and student aid, the emphasis on social mobility, and the willingness to recognize talent whenever it appears, all create opportunities through which promising individuals can escape the shop floor and the assembly line from which tomorrow's labor leaders must be drawn. The low prestige that society accords to union leaders also helps to insure that many employees will take advantage of these opportunities instead of seeking a union post. In this way, environmental forces diminish the pool of talent available for union office.

### The limits of leadership

What freedom of action remains to the union leader caught between the pressures of the environment and the demands of the rank and file? To begin with, he can experiment and innovate, at least on a modest scale. He may not always be able to launch new programs costing large sums nor will he be quick to experiment at the risk of failing to meet the critical demands imposed by his members. Moreover, his innovations will eventually have to win acceptance by the rank and file in order to survive and flourish. Nevertheless,



the activities and achievements of the union will ultimately reflect the capacity of its officials to offer up new goals, new programs, and new benefits for the members to consider.

Union leaders can also do something to alter the opinions of the members and affect their attitudes toward the goals and policies of the organization. On specific trade-union issues—to accept or reject the contract; to strike or not to strike—the leader may have great influence, especially if he is popular and without vocal opposition. On more general matters of value, social attitude, and political choice, his opportunities for exerting influence may be sufficient to deserve attention, but they are not large. Where these issues are concerned, it is normally too difficult to reach the members, too hard to engage their attention seriously, too arduous to overcome all the competing messages reaching them through other media and other sources.

Finally, and perhaps most important, the leader can have the imagination to conceive of new strategies and new opportunities in the environment to help the union make fresh progress toward its goals. This capacity is partly a matter of knowing the environment well, but it is ultimately dependent on the intuition, the judgment, and the imagination of the leader. It is this type of influence and power that John L. Lewis demonstrated so tellingly in perceiving that the time was ripe for massive organizing in the thirties.

It is very hard to guess how much an able, imaginative leader could accomplish to make progress toward union goals. Nevertheless, it is safe to say that the process of selecting union officials—while admirably suited for certain purposes—is not likely to produce an unusual number of leaders with exceptional vision or imagination. Indeed, one would frankly expect less talent of this sort in unions than in most other major institutions. In addition, many of the forces that press upon the labor leader are strong indeed and leave him with much less freedom of action than many critics seem to recognize. For example, those who exhort the unions to exercise wage restraint, eliminate featherbedding, or refrain from strikes seem greatly to underestimate the pressures from the members. Although most union leaders have a degree of influence over the policies of their organizations, few would stay in office very long if they slighted their members' concern for safe-

guards against the loss of work or ignored their desire to seek pay raises—and go on strike if need be—to keep pace with wage and price increases they see occurring all around them.

One can readily sympathize with the visions of other critics who deplore the failure of union leaders to seize opportunities to turn their talents to new fields: organizing the poor, mobilizing the members to fight for consumer protection, and taking the lead in searching for a more meaningful life for workers caught between their television set and the tedium of a semiskilled, repetitive job. In one sense, unions seem naturally suited to such tasks in view of their experience in organizing mass movements, their large memberships, and their commitment to high social purposes. Yet, critics invariably overlook the enormous difficulties involved; the members' lack of interest in undertaking ventures outside the traditional union domain, their unwillingness to see their dues expended for such purposes, the shortages of talented leadership in labor's ranks, and the pressures on existing leaders, whose time and energy are already stretched thin attending to conventional union tasks. In the face of such limitations, even a leader as gifted and energetic as Walter Reuther has been unable to make noteworthy progress in organizing the poor, expanding union membership, altering Detroit politics, or expanding the skilled job opportunities for Negro members. By underestimating these problems, liberal critics have succeeded—after two decades of biting prose—in accomplishing virtually nothing except to antagonize the union leadership.

### The critic's role

This sketch of union behavior has clear implications for the critic's role in assessing social institutions. In reality, union members, leaders, subordinates, and environmental forces interact in such an intimate way that it is treacherous to single out one set of actors in the drama and heap responsibility upon them. Union behavior must be seen as the product of a complex, interrelated process. In order to be effective and fair, the critic must seek to identify the various centers of initiative throughout this process and suggest the actions that can be taken by each of these groups to make it easier for unions to progress toward desirable goals. □

Study of craftsmen  
in upstate New York reveals  
that skills are often acquired  
through informal training within  
and outside the industry

HOWARD G. FOSTER

# Nonapprentice sources of training in construction

FOR MANY YEARS, labor supply in the construction industry was regarded primarily as a function of apprenticeship training. Recently, it has been recognized that formal apprenticeship is not the exclusive, or even major, source of skilled manpower for the building trades.<sup>1</sup> Little is known, however, of the nature of alternative sources and their relative significance for particular crafts.

This article, based on a larger study of construction labor supply in upstate New York,<sup>2</sup> attempts to provide some information on these questions. The data presented here were gathered through (1) a series of interviews with more than 70 persons familiar with construction labor (including 20 business agents and 26 contractors) and (2) questionnaire returns from 784 workers in four important crafts (bricklayers, carpenters, electricians, and operating engineers).<sup>3</sup>

## Training in construction

Other than completion of an apprenticeship program, training in construction is gained essentially through the informal and unstructured acquisition of skills in the production process itself. Such training is actually aided by the severe seasonal fluctuations in activity character-

istic of the industry, for the employer is obliged at times to utilize unskilled and semiskilled workers at jobs for which they are only partially prepared, and the experience thus gained is a vital part of learning. At the same time, the process does not work as smoothly as in an industrial context, for union craft jurisdictions impede somewhat the free flow of manpower from one occupation to another. Nevertheless, the avenues of occupational change remain partially open, and the astute (or sometimes lucky) worker is often able to take advantage of them. Thus, nearly 20 percent of the operating engineers surveyed reported that they had once been laborers or truckdrivers on construction jobs. A similar proportion of bricklayers (not including tile setters) had been laborers, presumably mason tenders. The proportion for carpenters was surprisingly low at 10.3 percent.<sup>4</sup> As might be expected, the number of electricians who were once laborers was negligible. Other crafts not included in the questionnaire survey—cement masons and reinforcing ironworkers, for example—also derive many of their journeymen from unskilled ranks.<sup>5</sup>

It is difficult to assess the overall role of informal training within construction in quantitative terms, but the questionnaires do provide some clues. Respondents were asked to identify sources of their skills other than apprenticeship. (If the worker had taken apprenticeship training, he was not asked to go any further.) One of the questionnaire choices was "picked it up on the job in construction." Of 784 respondents, 280 either had taken apprenticeship or did not answer in any way. Of the remaining 504, 455 checked the "picked up on the job" option. Of these, 169 or one-third checked only that option. In short, 21.5 percent of all the respondents indicated that their only source of skill was informal training on the job in construction.

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Much informal training is carried on by the nonunion sector of construction, primarily home-building, where the absence of jurisdictional limitations on work assignments facilitates movement from unskilled to skilled occupations. The questionnaire attempted to probe movements between the union and nonunion sectors in two ways. First, respondents were asked to report on the types of projects on which they had worked in the preceding 10 years, including the union status of the projects. Second, those respondents who had not undergone apprenticeship and who had "picked up skills on the job in construction" were asked whether their training had been on union jobs, nonunion jobs, or both. The results of these two questions are presented in table 1.

The discrepancy in the "nonunion" percentages between the two questions, of course, is attributable in part to the fact that the employment question referred only to the past decade, whereas the training question had no time limits. Presumably, some workers had had nonunion employment experience more than 10 years ago. In any event, table 1 illustrates the importance of nonunion construction as a training ground for union craftsmen. Fully 46 percent of the respondents for whom the training question was applicable had had some nonunion work in their background. The highest percentage (62) was for carpenters, followed by bricklayers (59), engineers (37), and electricians (35).<sup>6</sup>

### Training outside construction

The development of construction skills outside the industry springs from four broad sources: Training or experience in industries other than construction; formal education, including both vocational and standard high schools; military service; and informal instruction by friends and relatives. The questionnaire sought to probe the relative influence of these sources by asking respondents to specify the industry of their last three jobs, their last three occupations, and their prior training for construction work.

### Industries other than construction

Perhaps the first characteristic of the previous employment experience of the respondents deserving mention is that a significant proportion of them

**Table 1. Union background of construction workers in Syracuse, selected trades, by employment experience and training**

Craft in 1968	Number	Employment experience, preceding 10 years only		Sector where trained			
		Union	Union and non-union	Union	Non-union	Both	Not applicable <sup>1</sup>
Total.....	781	82.2	17.8	30.5	8.3	18.0	43.2
Bricklayers, tile setters....	126	88.1	11.9	18.1	12.6	13.4	55.9
Carpenters.....	207	74.9	25.1	22.2	12.1	24.6	41.1
Electricians.....	229	84.7	15.3	19.6	4.3	6.5	69.6
Operating engineers.....	219	83.1	16.9	56.8	6.4	26.4	10.4

<sup>1</sup> Respondents who had taken apprenticeship or who reported sources of skill outside construction only.

had none. Over 26 percent of the sample indicated that they had never worked in another industry or at another occupation. By craft, the proportions were 37 percent of bricklayers, 26 percent of carpenters, 24 percent of electricians, and 22 percent of operating engineers.

The process of imparting construction skills in other industries is largely informal. According to one Government study, the number of construction craftsmen who undergo formal training in company schools is negligible.<sup>7</sup> Our questionnaire tended to confirm that finding. But the significance of even this informal training is easily overstated. Although interindustry mobility provides construction with a substantial number of workers, the extent to which these workers are actually trained in other industries is yet another question.

**BRICKLAYERS.** There is, on the whole, little training of bricklayers outside the construction industry. As noted previously, over one-third of our sample had never held a different job. Another 20 percent or so simply advanced from an unskilled construction occupation. Even among those who had held jobs outside the industry, only a smattering held jobs even remotely related to the bricklaying trade. The above finding is consistent with the results of the sources-of-skill question. One of the available options on that question was "picked it up on the job in a factory or shop." Only three bricklayers utilized this option. In sum, then, bricklayers may be termed essentially an indigenous construction craft, the skills being learned almost exclusively through apprenticeship or upgrading.

**CARPENTERS.** Carpentry skills are much more likely to be acquired in other industries than are masonry skills. Over one-fifth of all carpenters are employed outside construction.<sup>8</sup> In addition, proficiency at carpentry work is more likely to be found in persons classified in other occupations, from the farmer to the do-it-yourself homeowner. The questionnaires revealed a relatively high number of farm backgrounds among the Syracuse carpenters (about 29 percent). Farm work, of course, entails such chores as building fences and other structures that involve a basic knowledge of working with wood. Furthermore, a number of carpenters seem to acquire their skills in industries other than construction or agriculture. In the source-of-skill question, about 10 percent of the respondents checked the "factory or shop" option. Most of these were former maintenance employees in factories or employees of building material supply companies. For the most part, however, the previous jobs reported had little or nothing to do with carpentry work.

**ELECTRICIANS.** Since so many of the electricians (nearly 70 percent) gained their skills through apprenticeship programs, most of the previous jobs reported were undoubtedly temporary employment immediately upon graduation from high school. At the same time, however, there were occupational relationships that seem to govern to some extent the flow of electricians into construction. In particular, there was a relatively high proportion (15.5 percent) of previous jobs in the service industries. For the most part, these jobs were in such businesses as auto repair, radio and television maintenance, and shops that sell and repair various electrical appliances. Although such jobs bear little direct relationship to construction, many do involve a working knowledge of electrical currents and wiring. In addition, a number of respondents had previously worked for manufacturers of electrical products and for electric utility companies.

Training outside the industry, therefore, seems on the whole more relevant and more scattered for electricians than for the other crafts. Electricians entering construction from other industries—although numerically less important—seem generally better prepared for their work than most other beginning craftsmen. This conclusion is buttressed by the responses on the source-of-skill question in which about 13 percent

of all the electricians checked the "factory or shop" option.

**OPERATING ENGINEERS.** In this trade, there has long been an informal training procedure in which a worker serves for 4 years as an oiler, during which time he is expected to "pick up" the trade by observation and self-learning. A disproportionately large number of engineers in our survey (nearly 18 percent) had previously worked in unskilled and semiskilled construction occupations. On the whole, though, the previous experience of this group was sufficiently different from the others to indicate a reasonably systematic set of flows into the occupation.

To start with, an extremely large number of engineers reported some background on the farm. While operating a tractor and operating construction machinery are by no means the same, they both involve the manipulation of heavy equipment over unpaved terrain. And, even though the relationship is not perfect, it is surely significant that 40 percent of the engineer respondents indicated a farm background somewhere on the questionnaire, compared with 29 percent for carpenters and well under 10 percent for the other crafts. Furthermore, a disproportionate number of the operatives had been truck or bus drivers. While driving a truck is even less closely related to operating construction equipment than is running a tractor, both involve moving and directing large vehicles. Third, a large number of engineers were previously employed as auto and truck mechanics, particularly those who designated their current occupation as "equipment mechanic" rather than "operator." Again, this type of employment necessarily imparts (or requires) a general working knowledge of how machines run. Finally, there was previous employment on highway or public works crews, sometimes involving the actual handling of heavy equipment.

The training of operating engineers is probably best summarized in the following way. It often begins outside the craft (and outside the construction industry), but the kind of training obtained elsewhere is only the most rudimentary kind. Essentially, it involves merely an acquaintance with moving parts. The real skill is then obtained on the job in construction, by an informal process of learning and experience. In sum, however,



the making of an operating engineer involves a kind of interindustry "cooperation" which is not nearly as important—numerically, at least—in the other three crafts.

THE PRINCIPAL CONCLUSION of this part of the study is that simply to speak of interindustry mobility into and out of construction may be misleading. While other industries may well send large numbers of workers to construction over the years, the construction skills themselves seem to be in the main internally generated. The mere fact that an increase in job opportunities in construction attracts workers from other industries does not in and of itself guarantee that the supply will be adequate in terms of the skills needed. And the mere fact that there are large numbers of trained craftsmen outside the construction industry<sup>9</sup> does not necessarily mean that such workers will make themselves available for construction work even if the demand were there.

### Training in the military

The main source of information for training in the military was the question asking respondents to specify the sources of their skill. Over 12 percent of all respondents—and 19 percent of those who had not taken apprenticeship—indicated that they had learned at least part of their trade in military service. Table 2 summarizes the responses by craft. Perhaps the most striking figure in the table is the 36 percent for nonapprentice electricians, although the percentages for carpenters and operating engineers are also noteworthy.

The numbers in table 2, however, can be somewhat deceptive. While electricians seem to avail themselves more of training opportunities in the

**Table 2. Relevant military training of construction workers reported on questionnaire, by craft**

Craft in 1968	Respondents		Military training		
	Total	Non-apprentice	Number	Percent of all respondents	Percent of non-apprentice respondents
Total.....	784	504	96	12.2	19.0
Bricklayers, tile setters.....	127	60	2	1.2	3.3
Carpenters.....	207	143	21	10.1	14.7
Electricians.....	230	89	32	13.9	36.0
Operating engineers.....	220	212	41	18.6	19.3

**Table 3. Vocational education of construction workers reported on questionnaire, by craft**

Craft	Respondents		Vocational education		
	Total	Non-apprentice	Number	Percent of all respondents	Percent of non-apprentice respondents
Total.....	784	504	103	13.1	20.4
Bricklayers, tile setters.....	127	60	4	3.1	6.7
Carpenters.....	207	143	36	17.4	25.2
Electricians.....	230	89	41	17.8	46.1
Operating engineers.....	220	212	22	10.0	10.4

military than do the other crafts, comments on the questionnaire suggested that the type of training received—in terms of its direct relevance to construction work—may have been more appropriate for carpenters and operating engineers. Some of the electricians who checked "military" as a source of skill gave their service occupation as "radio technician," "electronic technician," "electronics repairman," and the like. Others were ship's electricians. While these occupations may be indirectly related to electrical construction work and involve a basic knowledge of electricity, they are still not the same as wiring a construction project.

On the other hand, most of the carpenters and operating engineers who checked "military" seemed to have had direct experience at a building site. Many of the carpenters had served in the Navy Construction Battalion ("Seabees"); similarly, a number of operating engineers had served with the Army Corps of Engineers. Both of these agencies perform construction work of various kinds in the United States and abroad.

### Vocational training in schools

Vocational training in the public schools has long been the neglected stepchild of the American education system.<sup>10</sup> It is, therefore, not surprising that few workers manage to move directly into a journeyman position upon completion of a vocational curriculum. In some areas, building trades unions, concerned over the establishment of a potentially competitive and nonunion workforce, have succeeded in limiting vocational course offerings in the schools.<sup>11</sup> These observations suggest that in-school vocational education, in and of itself, does not seem to have provided a significant number of craftsmen.

The qualifying phrase "in and of itself" is

important, for the responses to our questionnaire would seem to tell a very different story. A total of 103 respondents indicated that they had acquired at least some of their skills in school. (The responses are broken down by craft in table 3.) But care must be exercised in evaluating the figures. In the first place, most construction craftsmen tend to regard on-the-job training as more helpful in acquiring skills than in-school instruction.<sup>12</sup> Perhaps more importantly, however, the contribution of vocational education is in part a function of the extent to which the student can move directly into construction work without any further training. For example, of the 198 workers who indicated friends or relatives as a source of skills, 111 (56 percent) specified no other form of training. By contrast, of the 103 respondents with schooling as a source of skills, only 19 (18 percent) had no other training source. The point here is by no means that in-school vocational education is a useless form of training, but rather that in current practice it often does not complete the worker's training, that it usually must later be combined with other avenues of skill acquisition, such as military service, apprenticeship, or training in other industries. Thus vocational education, at least for these four crafts in the Syracuse area, seems to have been only the first step of several in the attainment of skilled craftsman status.

All this should not serve to obscure important differences in vocational education among the four crafts studied. The ranking of the crafts is similar to that in table 2 (military training). Again the bricklayers show the lowest percentage and the electricians the highest, although the positions of the carpenters and operating engineers are re-

**Table 4. Father's occupation reported on questionnaire, by connection with construction and craft**

[Percent distribution]

Connection	Bricklayers <sup>1</sup>	Carpenters	Electricians	Operating engineers	Total
Same as respondent.....	35.4	25.1	24.9	15.0	23.9
Other construction.....	14.2	12.1	10.0	19.5	13.9
Other blue collar.....	28.4	44.0	31.0	38.6	36.1
White collar.....	6.2	12.6	12.2	5.4	9.5
No answer <sup>2</sup> .....	15.7	6.3	21.8	21.4	16.6
Number of respondents.....	127	207	230	220	784

<sup>1</sup> Including tilesetters.

<sup>2</sup> The large proportion of "no answers" is attributable to failure to ask respondents to specify father's occupation even if father is dead or retired. This omission was corrected for carpenters only.

**Table 5. Friends and relatives as a source of skill as reported on questionnaires, by craft**

Craft	Respondents		Friends and relatives		
	Total	Non-apprentice	Number	Percent of all respondents	Percent of non-apprentice respondents
Total.....	784	504	198	25.2	39.3
Bricklayers, tilesetters.....	127	60	33	26.0	55.0
Carpenters.....	217	143	73	35.5	51.0
Electricians.....	230	89	27	11.7	30.3
Operating engineers.....	220	212	65	29.5	30.7

versed. The reasons for this ranking are undoubtedly related to the ease or difficulty in teaching the various trades off the job. Two considerations in this regard seem noteworthy: the relative degree to which a craft requires intellectual ability as opposed to manipulative skills, and the relative expense and convenience of providing such manipulative training in the classroom.<sup>13</sup>

### Training by friends and relatives

The construction industry has often been characterized as nepotistic. Indeed, when racial discrimination in apprenticeship began to emerge as a fiery national issue, primary attention was focused on the alleged practice of giving special consideration to relatives of current union members. Whether or not conscious discrimination was in fact widespread, it is true that substantial numbers of construction craftsmen do indeed follow in their fathers' footsteps. Thus, as shown in table 4, almost a quarter (23.9 percent) of the respondents were pursuing the craft of their fathers, and the fathers of an additional 13.9 percent worked at some other construction occupation.<sup>14</sup> Furthermore, the craft-by-craft breakdown is particularly illuminating in the case of the bricklayers, half of whose fathers had worked in construction. This finding helps to explain why the other sources of skill development discussed earlier were relatively insignificant in the training of bricklayers.

The importance of friends and relatives as a source of skill was more directly demonstrated by responses to the question asking, "If you did not get training in an apprenticeship program, how did you get your skill?" Respondents were given a series of options, including "Was taught by a close friend or relative." The numbers choosing

this option<sup>15</sup> are broken down by craft in table 5. Again, bricklayers stand out, although it is clear that such informal "handing down" of skills is not uncommon for any of the crafts surveyed.

### A summing up

In summary, it seems safe to conclude that the *primary* means of skill acquisition is training, formal and informal, within the construction industry itself. For bricklayers, skills are developed almost exclusively within the operations of the industry. The only exception is learning from friends and relatives, and it could easily be argued that even this method is in essence endogenous to construction. Carpenters rely to a somewhat greater degree

on outside sources, particularly farm work and the military. Most electricians are trained formally through apprenticeship, although military training and formal vocational education also contribute. Finally, most operating engineers tend to acquire skill informally by picking it up on construction work as oilers or other unskilled and semiskilled workers. Important outside sources for engineers are farming, the military, and various occupations which involve a basic knowledge of machines, although not necessarily heavy equipment. In all these occupations, learning from friends and relatives is common. Although some vocational education was reported by a significant number of respondents, this appeared to be only a short first step in the development of construction skills. □

### FOOTNOTES

<sup>1</sup> See, in particular, George Strauss, "Apprenticeship: An Evaluation of the Need," in Arthur M. Ross, ed., *Employment Policy and the Labor Market* (Berkeley; University of California Press, 1965), pp. 299-332.

<sup>2</sup> Howard G. Foster, "Labor Supply in the Construction Industry: A Case Study of Upstate New York," unpublished Ph.D. dissertation, Cornell University, 1969.

<sup>3</sup> The interviews were conducted in Buffalo, Rochester, Syracuse, and Binghamton. The questionnaire was administered in Syracuse, and the returns constituted about half of those surveyed. The four crafts together amounted to nearly 60 percent of all skilled construction workers in 1960 (*Census of Population*, part 7c).

<sup>4</sup> Surprising in the sense that laborers often work closely with carpenters and are thus in a fortunate position to learn the fundamentals of carpentry through observation. One possible explanation is that opportunities to obtain carpentry skills are extraordinarily abundant outside the industry, coupled with the fact that the Carpenters union is among the most liberal of the construction crafts in its admission policies. Thus an individual is more likely to become a construction carpenter without going through the informal "apprenticeship" of laborer's work than is, say, a bricklayer.

<sup>5</sup> As reported by several of the interviewees.

<sup>6</sup> These figures are derived by dividing the sum of

"nonunion" and "both" percentages by the percentage of "applicable" responses. Thus 46 percent equals 26.3 divided by 56.8.

<sup>7</sup> *Formal Occupational Training of Adult Workers* (U.S. Department of Labor, Manpower/Automation Research Monograph No. 2, December 1964), p. 368.

<sup>8</sup> Allan F. Salt, "Estimated Need for Skilled Workers in 1975," *Monthly Labor Review*, April 1966, p. 368.

<sup>9</sup> *Ibid.*

<sup>10</sup> See, for example, Jacob J. Kaufman, "Occupational Training Needs of Youth," *Journal of Human Resources*, Vol. 3, Supplement, Summer 1968, p. 136.

<sup>11</sup> Strauss, *op. cit.*, p. 328.

<sup>12</sup> *Formal Occupational Training of Adult Workers*, *op. cit.*, p. 44.

<sup>13</sup> In this connection, see Strauss, *op. cit.*, especially pp. 310-311.

<sup>14</sup> It should be noted, moreover, that these percentages are based on *total* responses, including "no answers." Presumably some of those fathers whose occupations were not specified had worked in construction.

<sup>15</sup> The respondents were not, of course, limited to a single option, since an individual may have picked up skills from more than one source before becoming a construction worker.



# New training plan in Britain's construction industry

Basic certification offered after 1½ to 2 years of intensive classroom instruction and on-the-job specialization

HERBERT A. PERRY

TO MAINTAIN the building craft labor force in Britain, 25,000 apprenticeship recruits are needed annually. Only about 20,000 have been completing apprenticeships each year. Along with the chronic shortage problem, there has long been a concern about the poor quality of training most apprentices receive.

The Industrial Training Act, passed by Parliament in 1964, ushered in a new era in British manpower policy. It empowered the Ministry of Labor to establish training boards to cover all industries. One of the first areas affected was construction,<sup>1</sup> where antiquated apprenticeship schemes were in need of overhauling. This article traces the evolution of the training system established by the Construction Industry Training Board.

In the past, building craft apprentices had to serve 4- or 5-year apprenticeships. This system was supported by the British building craft unions as a means of controlling entry into the trades and by many employers because it provided a source of low-cost labor.

Continued criticism of industrial training in Britain and lack of any real progress along with the government's growing interest in manpower planning finally resulted in government intervention. The Industrial Training Act of 1964<sup>2</sup> established industrial training boards to:

1. Provide and secure the provision of sufficient training facilities for employees in their respective industry;
2. make recommendations about the nature, length, standard, and content of training for different occupations;
3. pay grants to employers providing training of improved standard; and,
4. impose a levy on employers in their industry in order to accomplish the above.

The Construction Industry Training Board, one of the first established under the new law, broke with past practice when it proposed new

concepts of craft training. The Board's proposals were based, in part, on a survey report of construction occupations by the Building Research Station, an agency of the Ministry of Public Building and Works.

The report emphasized that the length of training required differs considerably for the various trades and that practical job training is more important than technical (classroom) education for some occupations. Although the quality of most current job training was not measured, the study showed that bricklayers with 6 months' training at a government training center could serve between 6 and 18 months as improvers or trainees and do the same range of work as those whose practical training had consisted of 5 years' site experience.<sup>3</sup> The report also revealed that few apprentices had the opportunity to practice the full range of the trade's work.

The Building Research Station suggested that, within the general area of work in a main trade and within some areas of specialization, two levels or more of skill should be recognized.<sup>4</sup> Competence at the basic level would permit operatives to undertake the easier and most common work of the trade, while a small proportion who have the necessary ability and motivation would receive advanced training and technical education. The skill differential would be recognized by a higher wage rate and a certificate of achievement would be issued once an acceptable standard at the basic level is met.

## The new plan

Under the plan adopted by the Construction Industry Training Board, a trainee receives intensive training the first year. He spends 30 to 40

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percent of the time in a training center receiving technical instruction and practical training, with the remainder of the year spent in on-the-job training. The second year follows a similar pattern, except that the trainee is given more specialized training in a specific craft or sub craft. For example, the first year in the wood trades includes courses in basic carpentry, joinery, and wood machining, but the second year concentrates on only one of these areas. At the end of the 1½- to 2-year training period, the apprentice usually is expected to meet the standards of his craft.

For those who wish to gain a higher standard of competency, advanced training modules are available. A module, in this context, is a unit of training which can be given at any time after basic training is completed. It may vary from an offsite 2-week course in scaffolding for laborers to a 6-month course in electronics for electrician journeymen, integrating college courses and onsite training. Persons completing a module receive certification and in some cases a higher wage rate. Highly motivated or brighter apprentices are expected to take the advanced modules immediately following basic training. Those persons who terminate training after the initial 2 years may return in later years to pick up advanced modules if they wish. The modular approach should make it easier to accommodate new skill needs resulting from technological change. New modules can be added or old ones modified as changes in the industry dictate, and the craftsman who has had the basic 18 months or 2 years can advance his competency and keep up to date as he and his employer see fit.

The new plan includes basic courses to cover the nine principal groups of operatives in the construction industry. In all cases, there is a 2-week preliminary course on the structure of the industry, the industry's processes and trades, career patterns and prospects, and conditions of employment and citizenship. Visits to job sites are also recommended. After completion of the preliminary course, the trainee starts one of the following nine basic courses.

*General construction* operations apply to laborers, ironworkers, operating engineers, and prefabrication workers. Courses for these trainees, where there have been no previous apprenticeship schemes, last 4 to 6 weeks, depending on the job classification. They are given at the construction industry's training center at Bircham Newton, a

refurbished Royal Air Force Base in Norfolk. Centers are also planned for other regions of the country. Advanced modules are available in such specialties as scaffolding and bar bending.

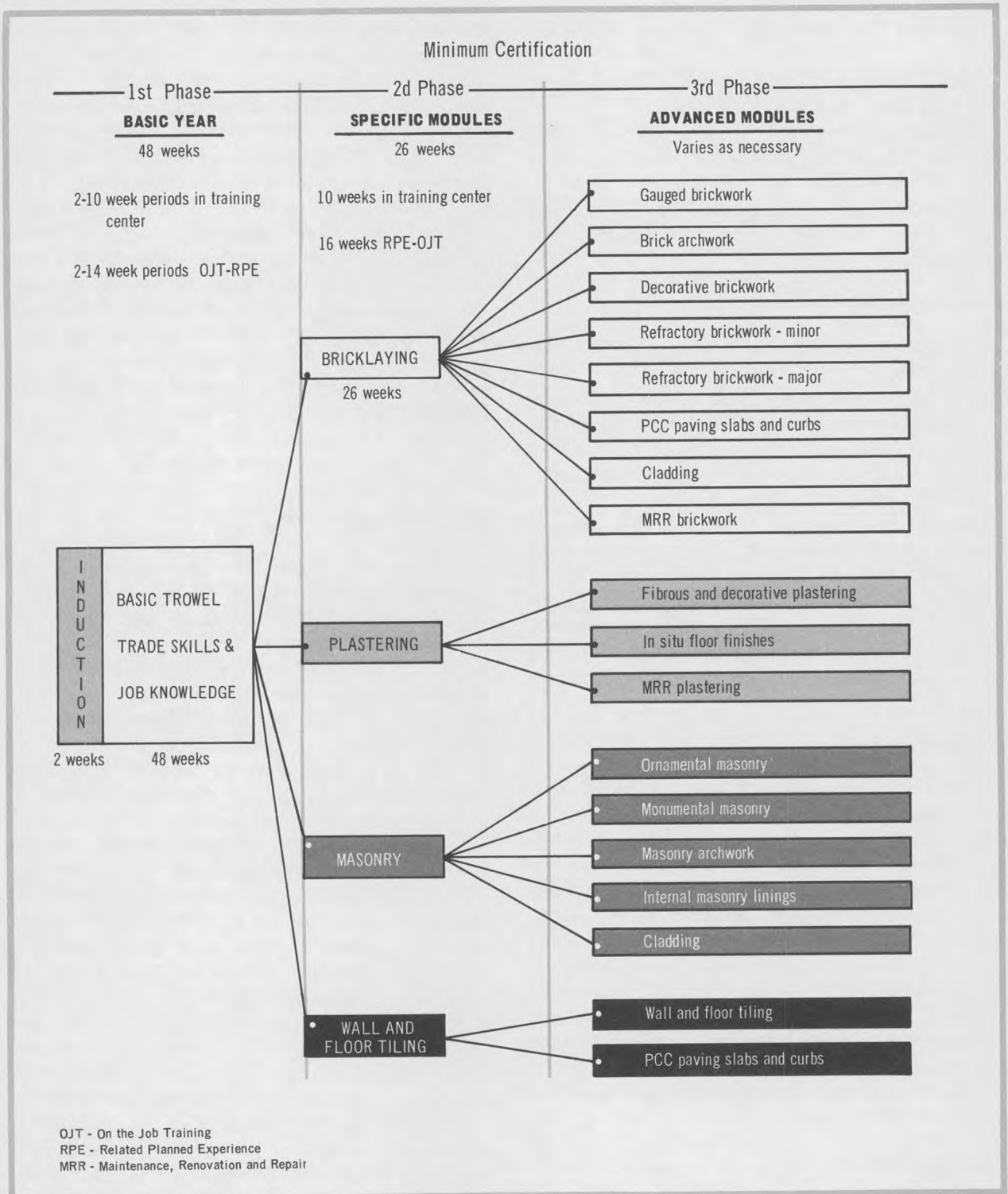
*The trowel trades* basic course deals with operations common to four of the trowel trades as approved by the National Joint Council for the Building Industry—bricklaying, plastering, masonry, and wall and floor tiling. The basic year of 48 weeks is divided into Part A, 10 weeks of instruction, practice, and technical education in either a technical college (similar to a junior college in the United States with both academic pre-university courses and terminal craft and technical courses offered), college of building (a trade school for training craftsmen and technicians solely for the building industry), college of further education (community colleges offering vocational subjects, general education and extension courses for adults, generally less rigorous than the technical colleges), company training center (operated by some large construction firms to train their own employees), or government training center (operated by the Department of Productivity and Employment for training adult workers in industrial skills). This instruction is followed by 14 weeks of on-the-job training with the experience related to the first phase of college or training center instruction. Part B consists of 10 weeks of off-the-job instruction, practical and theory, followed by 14 weeks of planned experience related to the second 10 weeks of instruction. (A detailed description of the course is shown in chart 1.)

An important aspect of the new plan is that the off-the-job sessions in the college or training center contain strong practical training with short periods of classroom instruction. Extended exercises enable trainees to develop their skills. Another new element requires the employer to assign the trainee during his period on the job to certain tasks and jobs which involve the use of skills learned in the college or training center. In the second year, the same format is followed except that the trainee is trained in greater depth in only one of the four trowel trades.

*Wood trades'* practical training is in carpentry, joinery, wood machining, and formwork carpentry.

*Roofing's* basic course involves the use of a variety of materials including slate, tile, and various kinds of sheet material.

Chart 1. New plan of training for trowel trades





*Asphalting* includes built-up felt, asphalt, roofing, and lining industrial tanks.

*Painting and decorating* includes industrial painting.

*Glazing* takes in all types of glass fitting, with lead work in an advanced module.

*Electrical engineering* services include construction electricians and installers of electrical equipment.

*Mechanical engineering* services include plumbing, heating, and ventilating, refrigeration, and industrial pipe work.

### **Training facilities**

At its training center at Bircham Newton, the Construction Industry Training Board offers short courses for civil engineering operatives, work study and other management courses, a training course for advisers and, since September 1969, a 2-year residential college for aspiring civil engineering operatives just out of school.

One of the most promising of the training board's accomplishments is the establishment of 124 group training associations covering about 1,500 firms with over 1 million employees. Many more are being formed. The training associations employ full-time training advisers and provide many small firms an opportunity to participate more fully in training.

### **Employer grants**

The Construction Industry Training Board operates a grants scheme which subsidizes in-company training programs, group training schemes, external courses at various levels, certain technical college courses, and a number of special programs including outside research at universities and research institutes. Critics on the use of grants say that it involves an unnecessary collection and allocation of funds at considerable cost, with great inequity and with no proven positive impact on training. The system is somewhat complex, tending to favor the larger firms who have the personnel to handle the necessary paperwork and establish approved training schemes.

### **Levy on training**

The Industrial Training Act requires the training boards to raise a levy from the industry to redistribute the costs of training fairly. At least,

this is intended; but equity in practice is difficult to attain. In 1969, the Construction Industry Training Board introduced a differential levy on the basis of extent of training required by certain classes of workmen. Until then, the levy was a percentage of the employer's wage and salary bill.

Small firms were not covered initially; now the levy covers all employers irrespective of size. One problem area was that of the "labor only" subcontractors who claim to be groups of individually self-employed. The "labor only" subcontractors contract to supply labor for a specific job and craft, e.g., bricklayers, where the practice is most common. To escape the responsibilities of being an employer, these contractors often claim that their gang of workers is made up of self-employed individuals. They are generally paid on a piece-rate basis and are employed by general contractors. They are now assessed through the main contractors, but administrative problems still abound.

### **Adopting the new plan**

The new plan of training for operative skills was presented to the Construction Industry Training Board early in 1968 with the request that it be introduced in about 36 centers throughout the country. There was adverse reaction, particularly about the lack of consultation between the Construction Industry Training Board staff and various interested parties. The board adopted the plan in June 1968, but its building committee decided that basic courses should be allowed to start in September 1968 at only 10 colleges and on a trial basis. The subjects included four on trowel trades, four on wood trades, two on painting and glazing, and one course on roofing. Subcommittees were established to evaluate and recommend future action. With some minor modifications, the building committee authorized the expansion of courses to 36 colleges in September 1969, with the number of trainees to rise from about 150 to about 800 in new plan courses. Those who completed the basic year in 1968-69 entered the second phase courses in September 1969. By March 1970, some will have qualified for minimum certification as craftsmen with the option to take advanced modules in their craft. New plan courses in electrical installation were started at seven colleges in 1968 and expanded in 1969. The plumbing and heating and ventilating

courses were not approved in 1968 because of interindustry controversy on other matters, but the Mechanical Services Committee of the Construction Industry Training Board allowed them to start on a pilot basis in 1969.

While the basic concept outlined will probably be maintained, there will be more modifications as experience indicates the optimum time for off-the-

job and on-the-job phases and recognition is given to the need for regional variation in timing and course content. Institutional lag makes it difficult to determine at what speed changes will take place, but the present situation seems to indicate an increasing momentum towards rapid change as a result of Construction Industry Training Board action.

—FOOTNOTES—

<sup>1</sup> In Britain, the term construction covers a wide range of activities in civil engineering and building including both new work and repairs and maintenance. The construction industry straddles the public and private sectors of the economy. It employs about 1.7 million workers including about 720,000 skilled building craftsmen and about 1 million less skilled building and civil engineering tradesmen. There are approximately 130,000 apprentices and trainees included in this group, with an annual input of about 45,000 boys of whom 67 percent are apprenticed to skilled crafts. The remainder in the industry includes self-employed, clerical, technical, and managerial grades. There are about 85,000 private firms in the industry and 80 percent employ no more than 10 operatives.

<sup>2</sup> See Gary B. Hanson, *Britain's Industrial Training Act: Its History, Development and Implications for America* (U.S. Department of Labor, National Manpower Policy Task Force, 1967).

<sup>3</sup> According to the Building Research Station report, training for occupations other than the apprenticeable trades is probably the largest task to be faced by the building industry in the near future. In the past, there has been very little training done for those who are not in apprenticeable occupations.

<sup>4</sup> E. Warrington, *Building Occupations and Training*, Part 11, Building Research Station current paper CP/25/68, 1968.

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### Migrant Labor

A concerted program to help migrant farm workers move into more productive occupations—farm and nonfarm—that would lead to the eventual elimination of migratory farm labor in the United States is recommended by the Agriculture Committee of the National Planning Association. The Committee's statement, "Ending the Misery of Migratory Farm Labor," appears in the January issue of NPA's monthly publication, *Looking Ahead*.

Furthermore, the Committee says, while education, training, and job opportunities are being provided to pull migratory workers from the labor stream, measures should be adopted to boost wages and benefits and to improve the lot of those who remain, for the time being, in their traditional occupation. In this respect the committee recommends bringing migrant farm workers under Federal minimum wage coverage at the prevailing standard level; providing for collective bargaining for farm workers under the National Labor Relations Act or similar Federal provisions; extension of benefits of unemployment compensation, workmen's compensation for injuries on the job, and public assistance without residence requirements for farm workers; and reform of the crew leader registration program.

# Changes in health and insurance plans for salaried employees

Study of major plans reveals significant improvements in protections during 6-year period

DOROTHY R. KITTNER

MAJOR COMPANIES substantially improved the health and insurance protection of their salaried employees during the past 6 years. Although improvements in both the levels and types of benefits provided salaried workers were almost always unilaterally made by the employer, they often reflected gains achieved by production workers through collective bargaining. Some of the changes, however, reflected the employer's awareness of the necessity of broader and greater coverage to meet changing standards of health care protection and rising living costs, particularly medical costs.

Health and insurance plans for salaried workers generally provided greater income protection and more comprehensive coverage than plans for production workers. In particular, plans for salaried workers included optional life insurance, long-term disability benefits, and major medical benefits more frequently than those for production workers. Also, salaried employees, unlike most production workers, often continued to receive their regular pay while temporarily absent from work because of illness.<sup>1</sup>

Some recent improvements in salaried employee benefit plans represent interesting innovations and special benefits supplementing or liberalizing existing private plan benefits, while others involve new ways of supplementing government-provided benefits, such as Medicare and disability pensions. In the income area, a special survivors' benefit, which provided certain survivors a percentage of the deceased employee's salary for at least 12 months, was increasingly superimposed on basic and optional life insurance benefits.<sup>2</sup> In the health area, liberal benefits for convalescent and nursing home care, psychiatric care, and dental

care are now added to health care packages. Service benefits, covering surgical-medical care for all employees regardless of their incomes, became more frequent as more plans paid all reasonable and customary charges of physicians and surgeons instead of a fixed allowance.<sup>3</sup>

Although benefits paid for solely by the employer (noncontributory) became more common, many workers still had to pay part of the cost of their health and insurance plans. In 1968, as in the previous 5 years, more than 40 percent of all employees surveyed by the Health Insurance Institute participated in noncontributory programs, and more than half were in contributory ones.<sup>4</sup> Of course, as implied by the term "optional," all employees with optional life insurance coverage paid at least part of its premium, and those with long-term disability and major medical benefits coverage usually helped finance it. As in the past, the proportion of office workers with noncontributory benefits lagged behind the proportion of plant workers whose benefits were similarly financed. The only major exception to this generalization is in the area of major medical coverage, as shown in the following tabulation, showing the proportion of workers in metropolitan areas during 1967-68 covered by noncontributory benefit plans:

Benefit	Plant workers		Office workers	
	1967-68 period	1967-68 period	1963-64 period	Percent increase since 1963-64
Life insurance.....	66	58	54	7
Accidental death.....	42	33	28	18
Weekly accident and sickness.....	47	26	21	24
Hospital.....	65	50	46	9
Surgical.....	64	49	44	11
Basic medical.....	55	44	36	22
Major medical.....	30	39	28	39

Nevertheless, since 1963, there has been a noticeable increase in the proportion of office workers covered by plans paid for entirely by their employers.<sup>5</sup>

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In 1963 and again in 1969, the Bureau of Labor Statistics compiled a digest of health and insurance plans covering salaried employees of major companies.<sup>6</sup> These plans, selected to illustrate only those of large manufacturing and nonmanufacturing firms, are not necessarily typical plans, nor are they a representative selection. Improvements in the plans contained in the BLS digest frequently occur earlier than in other plans, and innovations are often made in them which, with appropriate modifications, are later adopted by others, and thus are pattern-setting. The following discussion, limited to these plans, examines changes made between 1963 and 1969.

### Prevalence of benefits

While all plans provided for basic life insurance in 1963 and 1969, almost twice as many provided optional life insurance as in 1963 and almost 3 times as many paid special benefits to relatives of deceased employees. Long-term disability benefits were provided by almost half the companies studied—a fivefold increase since 1963 when only approximately 1 in 10 provided such benefits.<sup>7</sup>

Since 1963, there has been a slight decline in the proportion of plans that offer basic hospital and surgical-medical benefits to their active employees and their dependents, but in 1969, as in 1963, those not offering basic benefits offered comprehensive major medical plans, which usually provided broader protection than most basic benefit plans. Between 1963 and 1969, three of the plans substituted comprehensive major medical benefits for basic hospital-surgical-medical benefits. Major medical benefits now are offered by nine-tenths of the plans studied. In 1963, slightly more than four-fifths of them had this benefit.

Psychiatric care and treatment in facilities other than hospitals are now specifically offered in three plans. Previously, no plan had a benefit solely for this type of care. However, the basic hospital benefits of most plans provided coverage for hospital confinement for short periods due to mental and nervous disorders, and the major medical benefit, when available, covered a limited amount of out-of-hospital psychiatric treatment both in 1963 and 1969.

In both years, 4 out of 5 of the companies continued life insurance coverage for their employees after retirement and 2 out of 3 continued health benefit coverage. Upon retirement at age 65,

optional life insurance is usually discontinued, basic life insurance is reduced, and health benefits are modified so as to supplement rather than duplicate Medicare. Since 1963, only three companies, which previously required the retirees to pay the full cost of their health benefits, discontinued health benefits for retirees. Of course, salaried employees of these companies who retire at age 65 are eligible for Medicare protection, as are most employees age 65 and over in private industry.<sup>8</sup>

### Plans covering active employees

**FINANCING.** In early 1969 about 1 out of 6 of the companies paid the full cost of all benefits, except optional (added) life insurance. Basic life insurance was provided without charge to employees of more than 2 out of 5 of the companies studied; in 1963, more than half the plans required employee contributions. Optional life insurance was generally offered on a contributory basis but only two of the plans required employees to pay the full cost of their added insurance.

Long-term disability benefits, generally not provided in 1963, were fully paid for by about 30 percent of the firms that offered them. About 30 percent of the other companies with this benefit required employees to pay the full cost of it. In the remaining cases, company and employees shared the cost.

Roughly half of the companies studied paid the full cost of all health benefits covering their salaried employees. Five of these, however, required their employees to contribute toward or pay the full cost of their dependents' coverage. In addition, seven companies paid the basic health program's full cost but required their employees to contribute toward major medical coverage. Six years earlier, more than two-thirds of the plans required employees to contribute toward their own basic benefits.

The striking change in the financing of health and insurance benefits for salaried workers during the past 6 years became apparent only when the same package of benefits available in 1963 was compared with those available in 1969. By early 1969 one-third of the companies paid the full cost of benefits available to salaried employees and their dependents, compared with one-seventh in 1963.

**LIFE INSURANCE.** Since 1963 almost half of the companies made one major change or more in the life insurance benefit offered salaried employees. The most typical change being a revision of the benefit schedule or formula to provide almost everyone with greater protection. In a few cases, however, only those workers at the lower or higher salary levels profited by the revisions. Different levels of coverage were eliminated between 1963 and 1969 in those few cases where greater life insurance coverage had been provided men than women. At least for insurance purposes, all of the companies treated men and women employees alike.

The level of life insurance protection for salaried employees is generally geared to salary levels. In early 1969, basic and optional coverage provided by most companies ranged from an amount approximately equal to annual salary to 4 times salary. Six years earlier, maximum coverage provided by several companies was much less than annual salary and only one company had insurance limits which exceeded 3 times salary. A few plans adopted changes between 1963 and 1969 that adversely affected some future participants—generally those to be hired into entry-level jobs—while improving the plan for all others. This type of revision does not adversely affect the benefits of current plan participants, but does occasionally result in lower benefits being offered to future participants at certain entrance-level salaries than prevailed under the superseded plan. One of the ways that this can occur is illustrated by changes in the Douglas Aircraft Co., Inc. plan. In 1969, the Douglas plan provided basic coverage equal to annual salary plus optional coverage in the same amount; 6 years earlier, the plan had offered \$9,000 basic coverage to all employees plus optional coverage based on an earnings schedule. As a result basic coverage for employees currently hired at \$5,000 and \$10,000 is \$5,000 a year less than it was in 1963. Those workers previously employed at these salary levels continued to receive the insurance protection they had previously enjoyed. However, because basic coverage under this plan is now based on annual salary, new employees earning over \$9,000 yearly get more noncontributory insurance coverage than they would have received in 1963.

Some modifications made by companies in the life insurance benefit increased the basic coverage amount provided by the company on a non-

contributory basis without affecting total coverage. This was accomplished in one of the plans by eliminating the contributory optional insurance provided in 1963 and increasing the free basic insurance by a corresponding amount.

**INCOME PROTECTION BENEFITS.** Income protection was usually provided during temporary disability periods either by an insured weekly accident and sickness benefit, the company's self-insured paid sick leave plan, or both. The "building block" approach used when both these benefits are provided guarantees employees, with few exceptions, full pay for a specified period and part pay for an additional period.<sup>9</sup> A significant number of companies also provided nonmanagerial employees income protection benefits during long-term disabilities.

**ACCIDENT AND SICKNESS BENEFITS.** For most employees the accident and sickness benefits offered by the companies were considerably higher than those available 6 years ago. Nevertheless, higher-paid employees frequently were eligible for a smaller fraction of their salary than lower-paid employees. For example, with few exceptions, the size of the benefit in early 1969 for the \$5,000-a-year man ranged between 50 percent of weekly salary and 75 percent, the median plan paying between 60 and 65 percent. By contrast, the size of the benefit for the \$10,000-a-year man ranged from 25 percent to 75 percent with the median plan paying between 40 and 45 percent of weekly salary. The amount of the benefit and the ratio of benefit to average salary rose substantially between 1963 and 1969. For example, the \$5,000-a-year employee's benefit in 1969 averaged \$59 (62 percent of his weekly salary) as compared with \$55 (57 percent of salary) in 1963.

Between 1963 and 1969, only a few plans extended the duration of accident and sickness benefit periods. Three plans made changes with two of them doubling the period to 52 weeks (none had a longer period) from 26 weeks and the other, to 26 weeks from 13 weeks. One out of 5 companies with accident and sickness benefits provided them for 52 weeks in 1969 and 7 out of 10 for 26 weeks. In 1963 about one-eighth of the plans with accident and sickness benefits made payments for 52 weeks and two-thirds for 26 weeks.

**LONG-TERM DISABILITY.** These benefits are usually

designed to assure totally disabled employees an income until age 65 when normal retirement benefits under private pensions typically become available.<sup>10</sup> Because age and long service are rarely considered in determining the employee's eligibility, these plans are of special importance to young and new employees, who could not qualify for regular disability retirement benefits under their company's retirement plan, and to employees with short service who are entitled only to small inadequate disability retirement benefits. Following the qualification standards developed under Social Security, the plans required employees to be totally disabled for 6 months to become eligible for benefits. While waiting, they usually collect some weekly accident and sickness benefits, sick leave pay, or both.<sup>11</sup>

Under long-term disability plans, all eligible employees typically are guaranteed a specified monthly income. The benefit paid never equaled full pay, but together with other benefits generally provided at least half pay. The actual amount paid by the plan, however, usually depended on the employee's Workmen's Compensation, Social Security, and private retirement plan benefits. Most of the companies explicitly reduced monthly benefit payments by these other payments. One, however, deducted only half of the employee's Social Security benefit. Of course the few companies paying benefits without a Social Security reduction probably considered Social Security payments in establishing the benefit formula. This type of consideration seemed particularly likely in the case of one plan that established a monthly payment equal to 25 percent of monthly salary plus 35 percent of salary in excess of \$550 monthly (in 1966 and 1967, earnings above this amount were not subject to Social Security taxes).

Most plans provided payment until the employee's disability ended or until he reached age 65, whichever occurs first. However, under one plan, the employee's length of service determined the duration of benefit payments. Those with less than 5 years of service received payments for 5 years; those with 5 but less than 15 years received benefits for a period equal to their length of service, and those with at least 15 years of service, received them until normal retirement.

The monthly payment under long-term disability plans (as shown in table 1) was calculated with four exceptions, by using a "percentage of salary" formula, frequently with an upper limit

on the monthly benefit. The excepted plans either graded the percentage used in the computation according to salary and service, paid a larger proportion of an employee's salary during the first part of his disability than later on, used a combination flat amount and percentage-of-salary formula, or paid a flat amount based on an earnings schedule.

**HOSPITAL BENEFITS.** Basic hospital benefits are not quite as common in the plans in 1969 as they were in 1963. Two plans that dropped this benefit, as well as one that never had it, helped defray hospital expenses by providing comprehensive major medical benefits. Many of the remaining plans provide hospital benefits that differ in one respect or more from those in effect in 1963. The principal changes involved lengthening the duration of benefit payments, switching from cash benefits to service benefits, and increasing cash allowances for room, board, and ancillary services.

Service hospital benefits, such as those provided by most Blue Cross plans, have a built-in cost adjustment feature. Because they cover the full cost of hospital confinements for specified periods, the monetary value of service benefits increases as hospital charges for room, board, and ancillary services increase and as more services—often requiring expensive new machinery and personnel—are provided owing to technological advances in hospital care and treatment. The value of and protection provided by the plans

**Table 1. Distribution of plans by long-term disability benefit formula**

Benefit formula for monthly disability payment	Number of plans
All digest plans with long-term disability benefit.....	23
Including Social Security and other statutory benefits, and private disability retirement benefits:	
50 percent of salary.....	14
No maximum payment.....	19
Maximum payment (\$1,000-\$3,125 monthly).....	25
60 percent of salary.....	3
No maximum payment.....	2
Maximum payment (\$2,000 monthly).....	1
66⅔ percent of salary (maximum, \$2,000 monthly).....	1
80 percent of after-tax salary (maximum, \$3,000 monthly).....	1
25 percent of salary under \$550 monthly; 35 percent of salary over \$550.....	1
Graduated amount based on salary.....	1
Graduated percent of salary based on salary and service <sup>3</sup> .....	1
\$100 plus 50 percent of salary over \$400 monthly <sup>4</sup> .....	1

<sup>1</sup> Under one plan only employees earning \$6,600 annually or more, are eligible for benefit. One plan provided a minimum benefit of \$265 monthly, another paid two-thirds of salary during first 24 months, and another paid employees with at least 15 years of service, an additional 1 percent of salary for each year of service over 15.

<sup>2</sup> Under one plan only employees with earnings of \$400 monthly or more are eligible for benefit, and under another, only employees earning \$15,000 annually or more.

<sup>3</sup> Only employees with annual earnings of \$7,000 or more were eligible for benefit.

<sup>4</sup> Applicable to employees with less than 15 years of service; employees with at least 15 years of service received \$100 plus 30 percent of salary over \$400 monthly.



with service benefits increased significantly during the past 6 years.<sup>12</sup> In particular, the protection provided by the six plans that switched from cash to service benefits since 1963 was superior to that provided previously.

Most of the Digest plans provided service-type benefits with only about 1 out of 5 paying cash allowances. These plans have substantially higher room and board allowances than in 1963, the amounts ranging from \$14 to \$40 a day compared with \$12 to \$18 in 1963, and averaged \$28 instead of about \$15. Only one plan paid under \$20 a day but 5 paid at least \$30. As a result, since 1963 the 87-percent increase in the average room and board allowance of the plans with cash hospital benefits surpassed the 66 percent increase in semiprivate room and board charges reported in the Bureau's Consumer Price Index.

Not only have the major companies covered a larger proportion of the hospital charge because of a switch to service benefits for room and board or payment of higher room and board allowances, but about half the companies also increased the maximum number of days for which full benefits were payable. By early 1969, over three-fifths of the plans provided full benefits for 120 days or more of hospital confinement compared with one-half in 1963 and the number of plans providing full coverage for at least 365 days of hospitalization increased from 8 to 11.

Additional improvements were made by plans that shifted from cash to service benefits for room and board. They changed their ancillary service benefit from a cash allowance to the full cost of specified services. In addition, plans that increased the duration of room and board benefits also made identical increases in the period during which the ancillary services were payable. The maximum allowances of plans which paid the full cost of such services up to a specified amount, ranged from \$300 to \$450 with two exceptions. One of the excepted plans paid \$150 and the other, \$800. In 1963 only two plans with cash benefits had an ancillary allowance of \$300 or more.

**SURGICAL BENEFITS.** Over half of the companies revised their plans' surgical benefits by raising the maximum payable for surgical procedures. In addition, six companies improved their surgical benefit by switching from fee-for-service benefits to full payment of reasonable and customary charges. Under the scheduled benefit plans, al-

lowances for all procedures were not affected to the same extent, the greatest increase generally occurring in those for the most expensive operations.

**BASIC MEDICAL BENEFITS.** Over half of the companies with basic medical benefits (benefits for nonsurgical treatment by a physician) revised these benefits during the past 6 years. In addition to paying the entire surgeon's fee, four plans also paid a reasonable and customary fee to physicians for in-hospital nonsurgical treatment instead of providing a cash allowance as in 1963. These plans, like most of those with basic medical benefits, did not cover medical treatment in the home or doctor's office. The remaining ones slightly raised the allowance for in-hospital (and if covered, out-of-hospital) visits. As a result, 11 plans (up from 4 in 1963) paid at least \$5 for an in-hospital treatment.<sup>13</sup>

**MAJOR MEDICAL BENEFITS.** In early 1969, three-fourths of the 44 plans that had a major medical benefit, specified a uniform amount of medical expenses (the deductible) that employees, regardless of their earnings, had to pay before the major medical benefit became operative. In 1963, two-thirds specified a uniform deductible. This difference from 1969 levels reflected a decrease in the proportion of plans with a deductible graded by employee's annual earnings. However, because all plans dropping a deductible tied to earnings retained a minimum deductible of \$100, the change to the uniform amount did not aid lower paid employees. In fact, only two companies reduced the deductible for everyone—one reducing the amount from \$100 to \$75, and the other, from 4 to 3 percent of earnings. Most plans allowed employees to meet the deductible by accumulating all medical expenses for an entire calendar year. This and other types of deductible accumulation periods are summarized in table 2.

Plans modified the coinsurance provision by raising the proportion of charges the plan paid from 75 percent to 80 percent thereby lowering the proportion the employee had to pay from 25 to 20 percent of costs. These modifications and the addition of three plans that did not have a major medical benefit in 1963 raised the proportion of plans with an 80/20 percent coinsurance provision to three-fourths from three-fifths.

The most frequent and often the most significant

**Table 2. Major medical benefits: deductible accumulation period, early 1969**

Accumulation period	Number of plans
All Digest plans with major medical benefits.....	44
Per disability.....	11
2 months.....	1
3 months.....	3
4 months.....	1
6 months.....	4
12 months.....	2
All disabilities.....	33
6 months.....	3
12 months.....	6
1 calendar year <sup>1</sup> .....	23
2 years <sup>2</sup> .....	1

<sup>1</sup> With "carry-back" to last 3 months of preceding year.

<sup>2</sup> Applicable to other than hospital and surgical expenses.

change in major medical benefits made since 1963 involved the maximum benefit payment. Several plans removed the restriction on plan payments for a single disability, thus providing greater protection for a catastrophic illness. However, they placed a limit ranging from \$20,000 to \$100,000 on total plan payments to any employee during the employee's lifetime. These lifetime limits were always higher than the maximums "per disability" previously specified. Those plans that retained the limitation on payments for each disability at least doubled the amount the plan paid before coverage ceased.

In 1969 as well as in 1963 the other plans with revised maximum payments had no limit other than a lifetime one. The limit in early 1969 was usually \$20,000—double the \$10,000 maximum in 1963. Maximum payments specified in the 44 plans with major medical benefits in early 1969 and the period to which they apply are shown in table 3.

### Plans covering retirees

About two-thirds of all the companies continued to provide health benefits for retirees, three-quarters provided life insurance coverage, and about one-half of them continued to provide both life insurance and health benefits to retirees. In addition, retirees of some companies carried paid-up life insurance policies (fully paid for during their active working years) into retirement and almost all age 65 and over were eligible for Medicare.

All retiree benefits were paid for by about half of the companies providing these benefits. Almost three-fifths of those with health benefits for retirees paid the full cost, and three-fourths of those extending life insurance paid for it. Of the 14 companies that provided both life insurance and health benefits and required retirees to pay some

of the cost, only three required them to contribute toward the cost of both benefits; the remaining companies divided almost evenly between those that required them to contribute only for their life insurance and those that required them to contribute only for their health benefits.

Changes in the financing of health and insurance benefits for retirees during the past 6 years, like those for active employees, were most striking when compared with the package of benefits available in 1963. In 1969, 60 percent of the companies paid the full cost of benefits provided compared with only 35 percent in 1963. This large increase was probably due in part to Medicare's making it possible for five companies with retiree health benefits in 1963 to either assume the full cost of these benefits or to discontinue retiree-financed health benefits.<sup>14</sup>

**LIFE INSURANCE.** The amount of life insurance coverage extended to retirees has increased over the years, primarily because a retiree's life insurance coverage is related to his coverage prior to retirement, and, as pointed out previously, life insurance coverage for active workers has increased since 1963. However, the amount extended was still usually much less than that available prior to retirement. The practice of many companies was, as in the past, to gradually reduce

**Table 3. Major medical benefits: maximum payments and basis of payments, early 1969**

Basis of payment and maximum amount	Number of plans		
	Total	With disability limit	With benefit period limit
All digest plans with major medical benefits.....	44		
Plans with limits applying only to each disability or benefit period, total.....	13	10	3
\$5,000.....	1	1	
10,000.....	7	5	2
15,000.....	1	1	
20,000.....	2	2	
25,000.....	1		1
100,000.....	1	1	
		Limit for each disability (one-half lifetime maximum)	Limit for each benefit period (one-half lifetime maximum)
Plans with lifetime limits, total.....	31	1	8
\$5,000.....	1		22
10,000.....	9		1
15,000.....	4		4
20,000.....	4	1	2
25,000.....	11		9
30,000.....	1		1
40,000.....	1		1
50,000.....	1		1
100,000.....	1		1
Other.....	1		1

<sup>1</sup> Limit each benefit period is two-third lifetime maximum.

employees' retirement coverage over a period of about 5 years to from 25 to 50 percent of that available before the initial reduction. As in the past, a few companies reduced preretirement coverage to a nominal amount, such as \$1,000, immediately after retirement.

Employees of some companies that did not continue life insurance coverage after retirement had a combination of group-term and paid-up insurance coverage for active employees. Under this arrangement, the employee's contributions bought units of paid-up insurance, which accumulated over the years, and the employers contributions bought term insurance equal to the difference between the amount of paid-up insurance purchased by the employee and the total amount of insurance specified in the plan. Because the paid-up portion of the employee's total insurance coverage was available to him when his employment terminated, long-service employees of these companies, when they retire, had most or all of the coverage possessed immediately prior to retirement.

**HEALTH BENEFITS.** Like other employees in private industry who are over 65 years old, salaried employees who retired at that age were generally eligible for the hospital and medical benefits of Medicare.<sup>15</sup> Customarily, companies let their employees, who are eligible for Medicare's Part B (medical) insurance be responsible for paying the premium for their coverage and that of their dependents.<sup>16</sup> However, nine companies paid some of the cost and three of them paid the full premium for the retiree and his spouse.

Two companies purchased Part B coverage for both their eligible active and retired employees and their eligible dependents by paying the entire monthly premium of \$4 for each individual. One company paid the original premium of \$3 for all eligible groups except dependents of active employees (the employee paid the balance of his premium and all of the premium for his dependents).<sup>17</sup> Another company paid the full premium only for retirees; the latter had to pay it for their dependents. The following tabulation shows the number of companies paying the

Medicare premium in full or in part for each of the eligible groups:

<i>Eligible group (65 years and over)</i>	<i>Full Medicare premium</i>	<i>Part of Medicare premium</i>
Active employee.....	6	1
Dependents of active employees.....	6	.....
Retired employees.....	4	2
Dependents of retired employees.....	3	2

All companies providing benefits for retirees in 1963 (except the three that discontinued coverage since then and those adding this coverage, modified their benefits during the past few years to avoid duplication of Medicare benefits. They did this by using one of the following three methods developed by the insurance industry: Under one method, the "benefit carveout," Medicare benefits are deducted from the same or similar benefits provided workers under age 65; under another, the "building block" method, payment is made for specific services or expenses not covered by Medicare; and under the third, the "major medical" method, partial payment (commonly 80 percent) is made for practically all medical expenses not covered by Medicare in excess of a certain amount.

Over two-fifths of the 43 companies with retiree health benefits used the "benefit carveout" approach. However, the benefits extended frequently differed from those available prior to retirement. For example, basic hospital and medical benefits might be available for a shorter period, the major medical deductible might be larger, or the maximum payment under the major medical benefit might be smaller.

Roughly equal proportions of the remaining companies utilized the "major medical" and "building block" methods. Companies using the former method extended to retired employees the major medical benefits available to active employees under age 65 or a cut-down version of it (a higher deductible, lower maximum payment, or both). Those using the last method either paid some or all of the Medicare deductibles and certain charges that the retiree otherwise had to pay, provided benefits for certain major expenses (private duty nursing care and out-of-hospital drugs) that are not covered by Medicare, or both.<sup>18</sup> □



## FOOTNOTES

<sup>1</sup> In 1967-68 for example, about 4 out of 5 of the office workers in metropolitan areas as compared with 1 out of 2 of the plant workers had a major medical benefit, and 7 out of 10 of the former group and 3 out of 10 of the latter group had a paid sick leave plan. Separate data on the incidence of optional life insurance and long-term disability benefits for the various groupings of employees are not available. However, all indications are that these benefits are much more prevalent for salaried employees than for production workers. *Wages and Related Benefits, Part II: Metropolitan Areas, United States and Regional Summaries, 1967-68* (BLS Bulletin 1575-87).

<sup>2</sup> This benefit which provides certain survivors a percentage of the deceased employee's salary for at least 12 months, is also payable in addition to the survivors benefits of a pension plan.

<sup>3</sup> See Donald M. Landay, "Trends in Negotiated Health Plans: Broader Coverage, Higher Quality Care," *Monthly Labor Review*, May 1969, pp. 3-10, and J. F. Follman, Jr., "Health Insurance Plan Design Trends—Coverage and Benefits," *Pension and Welfare News*, February 1969, pp. 13-22.

<sup>4</sup> *New Group Health Insurance: I. Policies Issued in 1968; II. The Five-Year Trend, 1963-1968*, Health Insurance Institute, New York, N.Y. This survey is based on an analysis of the group health insurance policies, providing health care and income replacement benefits, written by insurance companies between January 1 and March 31, 1968, and an analysis of benefits provided employee groups of 25-499, which the Health Insurance Institute stated represents group health insurance trends.

<sup>5</sup> See BLS Bulletins 1575-87 and 1385-82

<sup>6</sup> *Digest of 50 Selected Health and Insurance Plans for Salaried Employees, Spring 1963* (BLS Bulletin 1377), and *Digest of 50 Health and Insurance Plans for Salaried Employees, Early 1969* (BLS Bulletin 1629). All, except one plan, were included in both digests. Thirty-six of these plans are in manufacturing industries and 13 in nonmanufacturing industries.

<sup>7</sup> This protection was rarely available in 1963. However, since the exact incidence of this protection in 1963 is unknown the change in prevalence since then is also unknown.

<sup>8</sup> Medicare, the Federal health plan for individuals age 65 and over, became effective July 1, 1966. Hospital benefits are available without charge to those qualifying for Social Security old age benefits and the medical benefits are available to those paying the monthly premiums.

<sup>9</sup> Formal paid sick leave plans which are now provided by about 3 out of 5 of the 50 Digest companies are not

discussed in this article. They are summarized in BLS Bulletin 1629.

<sup>10</sup> Long-term disability benefits are income protection benefits for employees totally disabled for over 6 months. The monthly payments, usually a high percentage of the employee's salary when combined with Social Security and workmen's compensation benefits, generally continue until age 65 (unless he recovers earlier) when he ordinarily becomes eligible for full regular benefits under his company's private pension plan.

<sup>11</sup> Both paid sick leave and weekly accident and sickness benefits have brief waiting period requirements or none at all. Weekly accident and sickness benefits were payable for at least 6 months in all but three of the plans.

<sup>12</sup> According to the Bureau of Labor Statistics Consumer Price Index, hospital semiprivate room charges increased 66 percent in the 5-year period, and operating room charges and certain diagnostic services rose over 41 and 16 percent, respectively.

<sup>13</sup> For plans that paid a higher allowance for treatment during the first 2 days of hospitalization or a lower allowance after several days of hospitalization, the allowance referred to is the one payable for treatment on the third day.

<sup>14</sup> Medicare provides more comprehensive hospital, medical, and other health care benefits than virtually any private health plan formerly provided for people age 65 and over.

<sup>15</sup> To be eligible for Medicare hospital benefits employees have to be entitled to primary Social Security benefits. For details on the benefits provided under Medicare, see *Your Medicare Handbook: Health Insurance Under Social Security* (U.S. Social Security Administration, 1968). For a discussion of Medicare's effect on private insurance plans and how private plans have adapted to it see Dorothy R. Kittner, "Negotiated Health Benefits and Medicare," *Monthly Labor Review*, September 1968, pp. 29-34.

<sup>16</sup> Part A (hospital insurance) of Medicare is paid for under the Social Security program by active employees under 65 and their employers.

<sup>17</sup> Prior to January 1, 1969, the premium for Part B of Medicare was \$3.

<sup>18</sup> The hospital deductibles are the first \$44 during the first 60 days of confinement, \$11 daily during the 61st to 90th days, and \$20 daily during the 91st to 150th days; the convalescent home deductible is \$5 daily for 80 days; and the medical and other health care deductible is the 1st \$50 of charges (Medicare pays 80 percent of charges in excess of \$50).

# Employment and unemployment developments in 1969

Job growth lost steam  
after strong surge in first quarter,  
and the unemployment rate  
inched upward  
from a 15-year low

PAUL O. FLAIM AND PAUL M. SCHWAB

EMPLOYMENT rose substantially in 1969, with about 2 million additional jobs being created. The most vigorous job growth, however—as well as the lowest rate of unemployment—was recorded in the early months of the year. In the ensuing months, the demand for labor slackened significantly under the impact of the Government's anti-inflationary measures, and the jobless rate moved to somewhat higher levels.

The slower pace of employment growth that prevailed after the first-quarter surge halted a sustained decline in the incidence of unemployment. After reaching a post-Korean war low of 3.3 percent as 1969 began, the jobless rate returned gradually to the 3.5 to 4.0-percent range of the previous 2 years. As 1969 drew to a close, however, the rate dipped again slightly below the 3.5 percent mark.

For the year as a whole the unemployment rate averaged 3.5 percent, slightly lower than the annual rate for 1968, which was the lowest since 1953. The number of unemployed persons remained at the 2.8 million level of 1968, despite a huge increase in the labor force.

## Employment growth

The year opened with an exceptionally strong demand for labor prevailing in nearly all sectors of the economy. This surge in the demand for workers, which had begun in the closing months of 1968, led to a 1.8-million increase in employment (on a seasonally adjusted basis) between September 1968 and March 1969. (See chart 1.)

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This pace of employment growth could obviously not be sustained, because additional workers would be increasingly difficult to locate under the relatively tight labor market conditions that prevailed in the first half of 1969, and because the stepped-up Government efforts to restrain the economy were bound to have some dampening effect on the demand for labor. As the year progressed, the demand for labor did taper off considerably, as reflected both by the gradual rise in unemployment and by the much smaller employment increases which took place after the first quarter of the year.

The annual employment gain, however, was still very impressive. At 2.0 million it exceeded the average annual increases posted during the 1961-68 period of sustained economic expansion, and raised total employment to 77.9 million.

## Who got the new jobs

Because of the very tight labor market situation that prevailed in early 1969, the additional workers required by the economy during the year had to be drawn almost entirely from outside the labor force. This was unlike the situation in previous years when a portion of the workers added to the employment rolls came from the ranks of the unemployed, which were being gradually whittled down from the highs of the early 1960's. With unemployment reaching a 16-year low in early 1969, it became increasingly difficult to find qualified workers—especially adult male workers—among the jobless.

Drawing workers from outside the labor force means essentially the hiring of large numbers of women and teenagers, which is exactly what took place in 1969. Employment of adult women increased by more than 1 million and teenage em-

ployment rose by 330,000. By contrast, adult male employment rose by only 550,000 over the year, although men make up about three-fifths of the civilian labor force. (See table 1.)

Although adult women have been making rapid advances in the job market for many years, the gain in employment achieved in 1969 was the biggest since World War II. Women 20 years old and over now hold slightly more than one-third of the Nation's jobs. This is a considerable advance compared with the situation in the immediate post-World War II period, when women accounted for only one-fourth of employment.

Of the 1.1 million additional jobs secured by women in 1969, about one-third were obtained by 20- to 24-year-olds, for whom the increase in population and labor force participation has been particularly rapid in recent years. Women 25 to 54 years old accounted for about one-half (560,000) of the year's gain in female employment. But even women 55 years and over posted a very sizable increase in employment in 1969 (200,000).

Teenagers (16- to 19-year-olds) accounted for 330,000, or about one-sixth of the employment increase. Annual job gains by this group have varied widely during the decade; increasing dramatically between 1963 and 1966, but falling off sharply in the next 2 years, reflecting primarily a leveling off in the growth of the teenage population, as well as stepped-up draft calls.

Employment of adult males increased by about 550,000 in 1969, which was about 100,000 less than the job gain posted by this group in each of the previous 2 years, but in line with the group's average annual gain since 1961. Of the 550,000 adult men added to the employment rolls, about two-fifths were men 20 to 24 years old. Product of the baby boom of the late 1940's, these young men are now coming into the labor force in increased numbers, and the influx will gain momentum if the present reduction of draft calls continues for a protracted period.

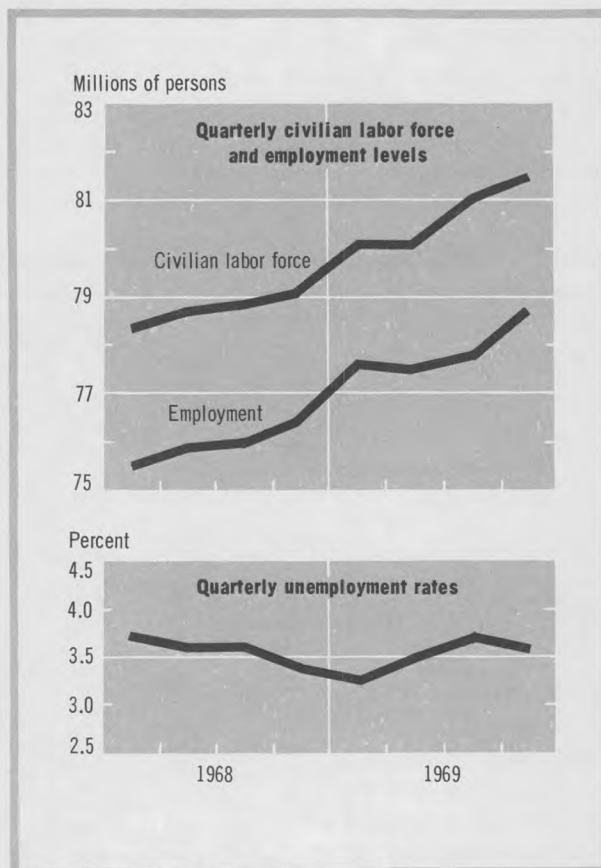
### Full-time and part-time workers

About one-third of the employment increase in 1969 was accounted for by part-time workers. These are persons who customarily work less than 35 hours a week, either for personal reasons or because of the nature of the job. The number of such workers, which has been increasing at a much

faster rate than total employment in recent years, passed the 11-million mark in 1969 and now accounts for about 15 percent of all employed persons. (See table 2.)

It should be emphasized that the rapid increase in part-time employment does not necessarily denote a scarcity of full-time employment opportunities. In some fields, the increased use of part-time workers is dictated by changing business patterns. A typical example is the greater reliance on part-time help made necessary by the suburbanization of the retail trade industry and the "open-every-evening" policy of most suburban stores. In other cases, employers must turn to part-time help simply because they cannot find workers who are available on a full-time basis, particularly during periods of peak demand. The great majority of the 11 million persons who usually worked only part time in 1969 were either not available for or did not want full-time work. Only about 1 million of them said that they preferred full-time but had

**Chart 1. Employment and unemployment, 1968-69, seasonally adjusted**





found only part-time work, or had seen their workweek reduced below 35 hours because of a shortage of work.

Of the 10 million workers on voluntary part time, slightly over one-half (or 5.5 million) were adult women. The greater availability of part-time jobs has no doubt contributed significantly to the sharp increase in labor force participation by women in recent years. Adult men accounted for about 2 million of the persons usually working part time in 1969, with slightly more than a quarter 20 to 24 years old and thus likely to be in college. A roughly similar proportion were 65 years of age and over and apparently semiretired. The balance of the part-time workers (nearly 3 million) were teenagers, for whom such employment has almost doubled since 1963.

### Occupational developments

Blue-collar employment, which had grown only moderately in the previous 2 years, posted an impressive gain in 1969 despite the leveling off of industrial production that took place in the second half of the year. The number of workers in blue-collar occupations rose to 28.2 million, an increase of 700,000 over 1968.

An interesting development among these workers in 1969 was the sharp increase in the employment of operatives and laborers. These unskilled

and semiskilled workers are relatively easier to find and train than skilled workers, and thus their employment is much more responsive to cyclical movements in the economy. With the vigorous tempo of economic activity and the tight labor market of early 1969, many employers had no practical alternative but to hire and train unskilled and semiskilled workers in order to meet production goals.

The increased demand for blue-collar workers in 1969 was clearly reflected in the unemployment rate for this group. Primarily on the strength of particularly low unemployment in the early months, the annual rate of unemployment for blue-collar workers edged down to a record low of 3.9 percent in 1969. However, with the pace of industrial production slackening in the second half of the year, the demand for blue-collar workers tapered off considerably. By the end of the year, their jobless rate had returned to the 4.0 to 4.5-percent range of the previous 3 years.

Even with the relatively strong showing of blue-collar employment, the proportion of workers engaged in white-collar work posted another increase in 1969. Over the year, white-collar employment advanced by 1.3 million to 36.8 million, resulting in nearly one-half of the Nation's jobs being white-collar.

Consistent with employment trends characterizing the entire post-World War II period, the

**Table 1. Civilian labor force, employment, and unemployment, by age, sex, and color, 1968 and 1969**

[Numbers in thousands]

Age-sex-color group	Civilian labor force			Employment			Unemployment		
	1969	1968	Percent change, 1968-69	1969	1968	Percent change, 1968-69	1969	1968	Percent change, 1968-69
<b>ALL RACES</b>									
Total, 16 years and over.....	80,733	78,737	2.5	77,902	75,920	2.6	2,831	2,817	.5
Men, 20 years and over.....	46,351	45,852	1.1	45,388	44,859	1.2	963	993	-3.0
Men, 20-24 years.....	5,282	5,070	4.2	5,012	4,812	4.2	270	258	4.7
Men, 25 years and over.....	41,068	40,782	.7	40,376	40,047	.8	692	735	-5.9
Women, 20 years and over.....	27,413	26,266	4.4	26,397	25,281	4.4	1,015	985	3.0
Women, 20-24 years.....	4,597	4,235	8.5	4,307	3,950	9.0	290	285	1.8
Women, 25 years and over.....	22,815	22,031	3.6	22,090	21,331	3.6	726	700	3.7
Both sexes, 16-19 years.....	6,970	6,618	5.3	6,117	5,780	5.8	853	839	1.7
<b>WHITE</b>									
Total, 16 years and over.....	71,779	69,977	2.6	69,518	67,751	2.6	2,261	2,226	1.6
Men, 20 years and over.....	41,772	41,318	1.1	40,978	40,503	1.2	794	814	-2.5
Women, 20 years and over.....	23,839	22,821	4.5	23,032	22,052	4.4	806	768	4.9
Both sexes, 16-19 years.....	6,168	5,839	5.6	5,508	5,195	6.0	660	644	2.5
<b>NEGRO AND OTHER RACES</b>									
Total, 16 years and over.....	8,954	8,760	2.2	8,384	8,169	2.6	570	590	-3.4
Men, 20 years and over.....	4,579	4,535	1.0	4,410	4,356	1.2	168	179	-6.2
Women, 20 years and over.....	3,574	3,446	3.7	3,365	3,229	4.2	209	217	-3.7
Both sexes, 16-19 years.....	801	779	2.8	609	585	4.1	193	195	-1.0

**Table 2. Full-time or part-time status of employment by age and sex, 1968 and 1969**

[Numbers in thousands]

Full-time or part-time status	Total, 16 years and over			Male, 20 years and over			Female, 20 years and over			Both sexes, 16-19 years old		
	1969	1968	Percent change	1969	1968	Percent change	1969	1968	Percent change	1969	1968	Percent change
All employed persons.....	77,902	75,920	2.6	45,388	44,859	1.2	26,397	25,281	4.4	6,117	5,780	5.8
Persons usually working full time	66,596	65,277	2.0	43,100	42,721	.9	20,454	19,601	4.4	3,042	2,956	2.9
Working on full-time schedules.....	65,503	64,225	2.0	42,530	42,164	.9	20,053	19,219	4.3	2,921	2,842	2.8
Temporarily working 1-34 hours.....	1,093	1,052	3.9	570	557	2.3	401	382	5.0	121	114	6.1
Persons usually working part time	11,306	10,644	6.2	2,288	2,139	7.0	5,944	5,681	4.6	3,074	2,823	8.9
Voluntarily working 1-34 hours.....	10,343	9,726	6.3	2,002	1,863	7.5	5,524	5,268	4.9	2,817	2,595	8.6
Involuntarily working 1-34 hours.....	963	918	4.9	286	276	3.6	420	413	1.7	257	228	12.7

latest annual increase in white-collar employment occurred almost exclusively among workers in the professional, technical, and clerical fields. Persons in managerial positions registered a relatively small increase in employment, while the number of sales workers, which has shown little growth in recent years, remained practically unchanged.<sup>1</sup>

The jobless rate for white-collar workers was 2.1 percent in 1969, practically the same as the record-low rate of 2.0 percent posted by this group in 1966 and 1968.

Employment of service workers rose by 150,000 in 1969, with all the growth taking place among those engaged in other than private household work (for example, restaurant work, protective services, etc.). Those engaged in private household work continued to decline (for the fifth consecutive year), falling by 110,000 to 1.6 million. In large part, this trend reflects the emergence of many new employment opportunities for these workers. This has particularly been the case for Negroes, whose occupational upgrading has been relatively rapid in recent years.

### Occupational advances of Negroes

Negroes and members of other minority races made significant progress on the occupational ladder in 1969. Although at year's end they still held a disproportionately large share of the Nation's least desirable jobs, their most rapid employment gains for the year were achieved in the higher-skill, higher-status occupations.

As table 3 shows, overall Negro employment increased by about 3 percent in 1969 (to 8.4 million), but the number of Negroes employed in white-collar work rose by about 10 percent. Moreover, this rise saw significant numbers of

blacks secure jobs in the professional and managerial fields as well as in clerical and sales occupations.

Encouraging upward progress was also made by Negroes in blue-collar occupations. Nearly all the additional jobs they secured in the blue-collar sector were in the craftsmen and foremen group or as operatives. The number of Negroes employed as nonfarm laborers was practically unchanged over the year.

The exodus of Negroes from low-skill, low-status occupations is reflected in a decline in their employment as service workers (particularly as private household employees) and as farmworkers. With more attractive jobs opening up in other occupations, the number of Negroes employed in private households or on farms declined by about a tenth during the year.<sup>2</sup>

### Industry developments

The 1968-69 advance in total employment was concentrated entirely in the nonagricultural sector of the economy. Employment in agriculture continued its long-term decline, falling by about 200,000 to 3.6 million. With the exception of 1968, when farm employment remained virtually unchanged, annual declines in agriculture have exceeded 100,000 in each of the past 10 years. In the past two decades, the number of farm jobs has been cut in half and agricultural employment has now dropped to less than 5 percent of employment. The main factors contributing to this fairly steady decline have been the continuing mechanization of farming processes and the availability of more attractive jobs in the nonfarm sector. The exodus from agricultural jobs in recent years has been particularly rapid for Negroes. In 1960 they held about 900,000 farm jobs, now only 400,000.

Total nonagricultural employment—including self-employed and unpaid family workers, and wage and salary workers—increased by about 2.2 million in 1969, reaching a record of 74.3 million. Despite a noticeably slower rate of growth in the second half, the year's gain in total nonfarm employment exceeded the increases of the previous 2 years.

Payroll employment in the nonagricultural sector advanced by 2.3 million in 1969, passing the 70-million mark for the first time. (Payroll employment excludes private household, self-employed, and unpaid family workers, but counts workers more than once if they hold more than one job.)<sup>3</sup> The 1969 increase in the number of payroll workers was about one-fifth greater than the gains the previous 2 years.

The growth in payroll employment was particularly rapid (seasonally adjusted) in the closing months of 1968 and the early months of 1969. During the September 1968–March 1969 period, monthly gains in payroll employment averaged about 250,000. These advances, moreover, were broadly based, being spread across most major industries. (See table 4.)

Beginning in the second quarter of 1969, however, the pace of employment growth slackened considerably in most major industries. For

the remainder of the year, it showed only moderate gains, coinciding with other signs of a general deceleration in the nation's economy.

As has been the trend for several years, the bulk of new job opportunities in 1969 were provided by the service-producing industries—trade; services; government; transportation and public utilities; and finance, insurance, and real estate. It is these industries which provide most of the new job opportunities for women and teenagers. Even in these industries, however, employment growth had begun to slow down as 1970 approached.

Substantial job growth was also exhibited by the goods-producing industries in 1969, particularly in the first half of the year. During the second half, however, employment growth in this sector—which includes manufacturing, construction, and mining—slackened considerably. The employment developments for each major industry are discussed briefly below.

**MANUFACTURING.** Employment in the manufacturing industries continued to be a key indicator of the general pace of our economy. Although manufacturing employment rose by 350,000 in 1969, surpassing the 20-million mark for the first time, virtually all of the year's advance took

**Table 3. Occupational distribution of employment by color, 1968 and 1969 annual averages**

Color and occupation	1969		1968		Percent change, 1968-69
	Level (in thousands)	Percent distribution	Level (in thousands)	Percent distribution	
<b>WHITE</b>					
All employed persons.....	69,518	100.0	67,751	100.0	2.6
White-collar workers.....	34,647	49.8	33,560	49.5	3.2
Professional and technical workers.....	10,074	14.5	9,685	14.3	4.0
Managers, officials, and proprietors.....	7,733	11.1	7,551	11.1	2.4
Clerical workers.....	12,314	17.7	11,836	17.5	4.0
Sales workers.....	4,527	6.5	4,489	6.6	.8
Blue-collar workers.....	24,647	35.5	24,063	35.5	2.4
Craftsmen and foremen.....	9,484	13.6	9,359	13.8	1.3
Operatives.....	12,368	17.8	12,023	17.7	2.9
Nonfarm laborers.....	2,795	4.0	2,681	4.0	4.3
Service workers.....	7,289	10.5	7,066	10.4	3.2
Farmworkers.....	2,935	4.2	3,062	4.5	-4.2
<b>NEGRO AND OTHER RACES</b>					
All employed persons.....	8,384	100.0	8,170	100.0	2.6
White-collar workers.....	2,197	26.2	1,991	24.4	10.4
Professional and technical workers.....	695	8.3	641	7.8	8.4
Managers, officials, and proprietors.....	254	3.0	225	2.8	12.9
Clerical workers.....	1,083	12.9	967	11.8	12.0
Sales workers.....	166	2.0	158	1.9	5.1
Blue-collar workers.....	3,591	42.8	3,462	42.4	3.7
Craftsmen and foremen.....	709	8.5	656	8.0	8.1
Operatives.....	2,004	23.9	1,932	23.6	3.7
Nonfarm laborers.....	877	10.5	874	10.7	.3
Service workers.....	2,239	26.7	2,315	28.3	-3.3
Farmworkers.....	356	4.2	402	4.9	-11.5



Table 4. Employees on nonagricultural payrolls by industry, 1968 and 1969 (seasonally adjusted)

[Numbers in thousands]

Industry	Annual averages		Quarterly averages							
	1969 <sup>1</sup>	1968	1969				1968			
			4 <sup>1</sup>	3	2	1	4	3	2	1
Total.....	70,139	67,860	70,648	70,379	70,034	69,465	68,655	68,076	67,611	67,057
Mining.....	628	610	633	630	623	627	606	620	615	598
Construction.....	3,410	3,267	3,441	3,421	3,412	3,359	3,316	3,275	3,268	3,203
Manufacturing.....	20,121	19,768	20,054	20,232	20,142	20,061	19,898	19,808	19,743	19,625
Durable goods.....	11,881	11,624	11,807	11,986	11,891	11,846	11,698	11,649	11,605	11,544
Nondurable goods.....	8,240	8,144	8,247	8,246	8,251	8,214	8,201	8,159	8,138	8,081
Transportation and public utilities.....	4,449	4,313	4,487	4,482	4,450	4,375	4,351	4,325	4,283	4,292
Wholesale and retail trade.....	14,644	14,081	14,806	14,696	14,602	14,463	14,276	14,148	14,019	13,871
Wholesale trade.....	3,768	3,618	3,820	3,779	3,756	3,714	3,669	3,634	3,603	3,564
Retail trade.....	10,876	10,464	10,985	10,918	10,846	10,749	10,607	10,514	10,417	10,308
Finance, insurance, and real estate.....	3,558	3,383	3,607	3,578	3,543	3,502	3,450	3,396	3,357	3,326
Services.....	11,102	10,592	11,266	11,112	11,058	10,967	10,782	10,614	10,517	10,451
Government.....	12,227	11,846	12,354	12,226	12,203	12,112	11,977	11,889	11,808	11,691
Federal.....	2,756	2,737	2,721	2,759	2,767	2,762	2,714	2,748	2,740	2,722
State and local.....	9,471	9,109	9,633	9,467	9,436	9,350	9,263	9,141	9,068	8,969

<sup>1</sup> The 1969 annual averages and the data for the 4th quarter of the year are preliminary.

place during the first half. Stepped-up Government efforts to halt the mounting pace of inflation weakened the demand for factory labor in the ensuing months, as evidenced by the trend of unemployment in the manufacturing industries. The jobless rate in this sector, which had dropped from 3.3 percent in 1968 to a 16-year low of 3.1 percent in the first half of 1969, moved to 3.5 percent in the last 6 months of the year.

The number of production workers employed in manufacturing rose by 230,000 to 14.7 million in 1969, approaching once again the 15-million record posted during World War II. Despite the latest gain, however, the ratio of production workers to all manufacturing employees slipped another notch to 73.2 percent.

Three-fourths of the gain in manufacturing employment in 1969 was concentrated in the durable goods industries. This skewed distribution of factory employment growth, unlike the 1967 and 1968 experiences, resembled the pattern of 1965-66, when the hard goods industries set the fastest pace of economic activity.

In 1969, 10 of the 11 durable goods industries registered employment pickups, whereas only 6 of the 10 soft goods industries recorded advances. Especially large employment gains were shown by the electrical equipment (60,000) and fabricated metal (60,000) industries. Machinery and primary metals also registered considerable increases over the year (50,000 and 40,000, respectively). Together, these four industries accounted for slightly more than half of the 1969 increase in manufacturing employment. Employment strength among

these industries resulted largely from the combination of a continuing boom in capital equipment and firm demand for domestically produced steel. The only hard goods industry to register an employment decline over the year was ordnance (a drop of 10,000). This development was not unexpected in view of the cutbacks in defense spending implemented during the year.

In contrast to the relatively strong performance among durable goods industries in 1969, employment among nondurable industries advanced only moderately (95,000). The bulk of this increase was accounted for by gains of 20,000 to 25,000 each in the printing, paper, chemicals, and rubber industries. Smaller job increases were registered in the food processing and apparel industries.

**CONSTRUCTION AND MINING.** Activity in the construction industry was exceptionally strong in early 1969, with large employment gains and a drop in the jobless rate to a 16-year low. As the year progressed, however, the building industry showed signs of increasing weakness, with housing activity, in particular, softening under the impact of tightening credit and high interest rates. Construction employment, consequently, showed no growth during the second half of 1969. Nevertheless, the 1968-69 employment gain in this industry remained impressive, with 140,000 new workers added to payrolls.

After 11 years of continuous declines in employment, the number of mining employees rose by 20,000 in 1969 to 630,000 workers. Largely responsible for this relatively strong showing were

Table 5. Unemployment rates by industry, 1968 and 1969 (seasonally adjusted)

Industry	Annual averages		Quarterly averages							
	1969	1968	1969				1968			
			4	3	2	1	4	3	2	1
Private wage and salary workers <sup>1</sup> .....	3.5	3.6	3.7	3.7	3.5	3.3	3.4	3.6	3.6	3.7
Construction.....	6.0	6.9	6.2	6.9	5.6	5.7	6.0	6.5	6.7	7.8
Manufacturing.....	3.3	3.3	3.7	3.3	3.2	3.1	3.1	3.3	3.2	3.4
Durable goods.....	3.0	3.0	3.6	2.9	3.1	2.6	3.0	3.0	2.9	3.1
Nondurable goods.....	3.7	3.7	3.9	3.8	3.4	3.7	3.4	3.7	3.8	3.9
Transportation and public utilities.....	2.2	2.0	2.5	2.0	2.3	2.0	2.0	2.4	1.7	1.9
Wholesale and retail trade.....	4.1	4.0	4.0	4.4	4.1	3.8	4.0	4.0	4.0	4.1
Finance and service industries.....	3.2	3.4	3.0	3.5	3.3	3.0	3.2	3.5	3.5	3.3
Government wage and salary workers.....	1.9	1.8	2.2	1.9	1.7	1.7	1.8	1.9	1.8	1.9
Agricultural wage and salary workers.....	6.0	6.3	6.0	7.9	5.4	5.2	5.3	7.9	6.6	5.4

<sup>1</sup> Includes mining, not shown separately.

job pickups in the oil and gas extraction segment of the industry, and reduced strike activity in coal and metal mining.

**TRADE.** Throughout most of 1969, employment gains in trade were off substantially from the sharp increases recorded during the September 1968–March 1969 period. Nonetheless, employment in this industry, which is a large user of part-time help, registered a substantial annual increase of 560,000 workers.

A significant portion of the 1968–69 gain in trade employment was accounted for by the wholesale sector, the number of wholesale trade employees increasing by 150,000. However, virtually all of this advance occurred during the first half of the year.

**SERVICES.** Employment in services increased at a particularly rapid rate during the first quarter. Between March and August, however, employment remained relatively unchanged. One possible explanation for the absence of the usual March–August gains in services might have been the difficulty of obtaining seasonal workers in low-paying industries. Despite the mid-year lull, employment in services registered a year-to-year gain exceeding 500,000 workers. About two-fifths of this increase occurred in private medical and other health services, a field where employment has doubled over the past decade.

**GOVERNMENT.** Employment in the government sector rose by 380,000 in 1969 to 12.2 million

workers. This was well below employment pickups recorded in this sector in recent years. State and local government employment continued to expand, but at a reduced rate as the year progressed. Federal government employment, meanwhile, was virtually unchanged over the year, due largely to a stringent budget and severe staffing limitations.

**TRANSPORTATION AND FINANCE.** Elsewhere in the service-producing sector, transportation and public utilities showed impressive job strength over the year, with an employment rise of 140,000. Employment in finance, insurance, and real estate, where growth has been accelerating since 1965, increased by 180,000, to 3.6 million workers.

### Hours of work and earnings

Despite the unusually high rate of economic activity which prevailed early in the year, the average weekly hours of American rank and file workers declined another notch in 1969. Hourly earnings continued to increase during the year, but the gains were canceled out by the steady rise in prices.

**WORKWEEK.** For all production and other non-supervisory workers on private payrolls, the average workweek in 1969 slipped 0.1 hour to 37.7 hours, representing the fourth consecutive year in which the workweek has declined. Among major industries, however, the year-to-year picture was mixed, with workweek declines in the trade and manufacturing industries offsetting increases in mining and construction. (See chart 2.)

In manufacturing, the average workweek inched slightly downwards to 40.6 hours. This was only the second year since 1960 in which the weekly hours of factory production workers have dropped. The only other decline took place in 1967, when a period of mild economic readjustment occurred after the rapid expansion in the preceding 2 years. Overtime for production workers in manufacturing averaged 3.6 hours a week in both 1968 and 1969. In the closing months of 1969, however, overtime hours were running somewhat below this average.

The workweek for employees of the trade industry continued its long-term decline in 1969, dropping another 0.4 hour to 35.6 hours. The shortening workweek in this industry, however, is clearly not a reflection of declining business. It is instead a reflection of the increased use of part-time help made necessary by the great expansion of retail stores in the growing suburbs of our cities. Since suburban stores must maintain late closing hours in order to serve their clientele, they can be staffed efficiently only through the

**Chart 2. Average weekly hours of production workers on private nonagricultural payrolls, 1968-69, monthly averages**



hiring of many part-time workers.

The average workweek increased for workers in mining and construction by 0.4 and 0.6 hours, respectively. Even in these two industries, however, weekly hours tended to be higher during the first part of the year.

**EARNINGS.** Under the tight labor market conditions which prevailed during most of 1969, particularly in the first half, workers exerted increased pressure on employers to obtain higher wages and employers, in turn, often had to offer higher wages in order to maintain or increase their work force. This being the setting, the wage level in 1969 increased at an exceptionally fast pace set during the previous year, rising to \$3.04 per hour—6.7 percent above 1968.

On a year-to-year basis, the average gross weekly earnings for the Nation's rank and file workers rose about \$6.90 (or 6.4 percent) to \$114.60. Since the average workweek dipped slightly over the year, the increase in weekly earnings was attributable entirely to the higher hourly wage level.

Because of rapid increases in the price level, however, average gross earnings for all rank and file workers rose by only 1 percent in terms of constant (1957-59) dollars. Although the rate of consumer price increases appeared to taper off toward the close of 1969, the total increase represented the fastest annual rise in consumer prices since 1951, virtually erasing all wage gains achieved by workers.

Take-home pay (gross weekly earnings less Federal income and social security taxes) for the average worker with three dependents rose nearly 5 percent in 1969. Because of continued price pressures, however, real take-home pay remained virtually unchanged for this hypothetical breadwinner. His purchasing power, in fact, has not increased since 1965, despite the steady rise of his wage rates.

Among major industries, construction registered the sharpest rise in gross weekly earnings (10.1 percent), reflecting both a higher wage rate and a longer workweek. A similar combination of factors brought higher weekly earnings in mining and in finance, insurance and real estate. Larger average weekly earnings for manufacturing and trade nonsupervisory workers, meanwhile, stemmed entirely from increases in hourly earnings.



## Unemployment trends

As a result of the surge in demand for labor which began in the fall of 1968, the Nation entered 1969 with the unemployment rate (seasonally adjusted) at a 15-year low of 3.3 percent. At this level, the jobless rate was not only much lower than it had been during the early 1960's, when it hovered around 6 percent; it was substantially below the 3.5 to 4.0 percent range within which it had fluctuated during most of 1967 and 1968, years which have generally been viewed as representing relatively full employment.

Unfortunately, perhaps inevitably, the unusually high rate of economic activity, which sparked the strong demand for labor, also added fuel to the fires of inflation. As the unemployment rate was dropping to a record low for the decade, the rate of price increases began to rise, forcing Government to take fiscal and monetary measures that ultimately moderated the demand for labor and returned the unemployment rate to the 3.5 to 4.0 percent range.

While on an annual basis unemployment in 1969 showed little change from 1968, the quarterly averages show clearly how the jobless rate dropped as the economy surged ahead and how it returned to previous levels as the Government anti-inflationary restraints began to slow the pace of economic growth. As chart 1 shows, the seasonally adjusted unemployment rate had dropped from 3.7 percent in the first quarter of 1968 to a post-Korean War low of 3.3 percent in the first quarter of 1969. It then reversed the trend, rising gradually during the next two quarters and averaging about 3.7 percent for the second half of the year, despite a small decline in joblessness among marginal workers toward the close of the year.

The general upward turn in unemployment did not spread immediately to all industries. Within manufacturing, for example, this was the case only for the durable goods industries. For workers in nondurable goods production, the unemployment rate continued to decline until mid-year, before the trend reversed. By the fourth quarter, however, all major industries had somewhat higher unemployment than at the beginning of the year.

Although unemployment moved to generally higher levels in the second half of 1969, the

jobless rate had still not exceeded the 4.0-percent level, once regarded as an interim index of full employment. While the number of unemployed also rose significantly, after having dipped to 2.7 million (on a seasonally adjusted basis) early in the year, the average unemployment level for 1969 (2.8 million) was virtually unchanged from the 1968 average.

Under present economic conditions, a further slowing of the rate of economic growth should not lead to as sharp increases in unemployment as those experienced during previous slowdowns. First, a much larger proportion of total employment is now in white-collar and service occupations, fields that are not very sensitive to changes in the general economy. Another factor that should militate against, or at least defer, any sharp increases in unemployment is the still relatively high levels of overtime work which prevail in many industries. Gradual elimination of overtime work in industries having to adjust production to lower levels of consumer demand should act as a buffer against layoffs of workers.

Another element, however, will add some uncertainty to the manpower and unemployment situation in the coming months. A stepped-up disengagement of American troops from Viet Nam and their subsequent demobilization might substantially swell the ranks of the jobseekers. How promptly these men could be absorbed by the job market would depend largely on the general health of the economy and on the impact of specific programs designed to assist their readjustment to civilian employment.

## Jobless trends for major groups

Paralleling the Nation's overall unemployment rate, the rates for most major groups in the labor force also moved from relatively low levels at the beginning of 1969 to generally higher levels by the end of the year. On an annual basis, however, even these rates showed little change from 1968. (See table 6.)

**ADULT MEN.** Unemployment rates for adult men, who make up the main body of full-time workers, continued at relatively low levels in 1969. The incidence of joblessness was particularly low among men 25 years of age and over. Although the

unemployment rate for this group of experienced workers edged up slightly in the second half, as an annual average it remained below 2 percent for the second consecutive year. The strong demand for experienced workers was also reflected in the low jobless rate for married men, the most important group of breadwinners.

For men 20 to 24 years old, the unemployment rate fluctuated widely during 1969. The annual jobless rate for these young men, who are now entering the labor force in swelling numbers, remained at the 5.1 percent level of 1968, which was up from 4.6 percent in 1967. The extent of unemployment among them in the near future will depend not only on the availability of new jobs, but also on the rate at which they will be absorbed into and discharged from the Armed Forces.

**ADULT WOMEN.** The unemployment rate for women inched up slightly during the year, after attaining a relatively low level in the first quarter. The annual rate however, was practically unchanged from 1968. The only significant 1969 improvement was registered by women 20 to 24 years of age—a group that has experienced the sharpest rise in labor force participation. Their jobless rate declined from 6.7 percent in 1968 to 6.3 in 1969. The rate for women age 25 years and over, on the other hand, remained at the 3.2 level of 1968.

**TEENAGERS.** Youths 16 to 19 years old continued to experience severe difficulties in securing employment in 1969, and their jobless rate remained substantially above 10 percent for the 16th consecutive year. While the rates for most adult worker groups attained very low levels in the first part of the year, the rate for teenagers did not decline much, hovering stubbornly around the 12-percent mark all year. The annual teenage rate was only slightly lower than in 1968 and thus not far below the levels of the early 1960's. Within the teenage group, the unemployment rate continued to be somewhat higher for girls than for boys. It also remained much higher for Negro than for white youngsters. Although many of the unemployed teenagers want only part-time work, the difficulties which these young persons encounter in

**Table 6. Unemployment rates for major labor force groups, 1967-69**

Group	1969	1968	1967
Total, all civilian workers.....	3.5	3.6	3.8
Men, 20 years and over.....	2.1	2.2	2.3
Men, 20 to 24 years.....	5.1	5.1	4.7
Men, 25 years and over.....	1.7	1.8	2.0
Married men.....	1.5	1.6	1.8
Women, 20 years and over.....	3.7	3.8	4.2
Women, 20 to 24 years.....	6.3	6.7	7.0
Women, 25 years and over.....	3.2	3.2	3.7
Teenagers, age 16-19 (both sexes).....	12.2	12.7	12.9
White, total.....	3.1	3.2	3.4
Negro and other races, total.....	6.4	6.7	7.4

finding a job remains one of the most vexing unresolved manpower problems, which assumes greater urgency due to the restiveness and alienation exhibited by members of this group in recent years.

**NEGROES.** Relative to their white counterparts, Negroes and members of other minority races continued to experience serious problems in securing and holding a job. Although the Negro unemployment rate dropped to the lowest quarterly level for this decade in early 1969, it nevertheless continues to be about twice as high as the white rate. Averaged over the whole year, the Negro rate was 6.4 percent compared with 3.1 percent for the whites.

Several factors account for the disproportionately high incidence of unemployment among Negroes: they are handicapped in the job search by their lower median level of education and skills; their labor force includes a comparatively larger proportion of women and teenagers, two groups that are generally more vulnerable to unemployment than adult men; they are undoubtedly still the victims of some discriminatory practices.

Teenage Negro girls find it particularly hard to obtain a job. The unemployment rate for this group fluctuated around the 30-percent mark during 1969—nearly 3 times as high as the jobless rate for white girls. For Negro boys, the jobless rate hovered around the 20-percent mark—about double the white rate. The Negro jobless rates for adult males and adult females, 3.7 and 5.8 percent respectively, averaged somewhat less than double the rates for their white counterparts.

**OCCUPATIONAL GROUPS.** The unemployment rate for white-collar workers, who continued to expand their share of total employment in 1969, averaged 2.1 percent, slightly above the 2.0-percent level of 1968. The rate for blue-collar workers, on the other hand, declined slightly over the year, edging down from 4.1 to 3.9 percent. Within the blue-collar group, nonfarm laborers—the most unskilled group—again bore the highest unemployment in 1969. However, the latest annual rate for this group (6.7 percent) was somewhat lower than their jobless rate for 1968 (7.2 percent). (See table 7.)

For service workers, the jobless rate averaged 4.2 percent in 1969 compared with 4.4 percent in 1968. Within this group, however, workers engaged in private household work—an occupation declining rapidly in popularity—enjoyed the lowest unemployment rate on record in 1969. Farm workers, whose number is also declining steadily, had a jobless rate of 1.9 percent.

### Characteristics of the unemployed

The stereotype that most of the unemployed are men of prime working age who have lost their jobs does not represent the present unemployment situation. The composition of unemployment has changed substantially since the early 1960's, with primary male breadwinners now making up a substantially smaller proportion of total unemployment, and only two-fifths of the persons currently unemployed attributing their situation to job-loss.

**AGE-SEX-COLOR DISTRIBUTION.** Of the 2.8 million persons who were unemployed in 1969, nearly

**Table 7. Unemployment rates by occupational group, 1967, 1968, and 1969**

Occupational group	1969	1968	1967
Total.....	3.5	3.6	3.8
White-collar workers.....	2.1	2.0	2.2
Professional and technical workers.....	1.3	1.2	1.3
Managerial, officials, and proprietors.....	.9	1.0	.9
Clerical.....	3.0	3.0	3.1
Sales.....	2.9	2.8	3.2
Blue-collar workers.....	3.9	4.1	4.4
Craftsmen and foremen.....	2.2	2.4	2.5
Operatives.....	4.4	4.5	5.0
Nonfarm laborers.....	6.7	7.2	7.6
Service workers.....	4.2	4.4	4.5
Private household.....	3.6	3.9	4.1
All other.....	4.3	4.6	4.6
Farmworkers.....	1.9	2.1	2.3

million were adult men, another million were adult women, and 850,000 were teenagers. Of the unemployed adult men, one-half were 25 to 54 years old and thus likely to be their families' main breadwinners. About 570,000, or 20 percent of total unemployment, consisted of Negroes and members of other minority races. The following tabulation shows the percent distribution of the civilian labor force and unemployment in 1969:

Group	Civilian labor force	Unemployment
Total, all age groups.....	100.0	100.0
Adult men.....	57.4	34.0
Adult women.....	34.0	35.9
Teenagers.....	8.6	30.1
Total, all race groups.....	100.0	100.0
White.....	88.8	79.9
Negro and other races.....	11.1	20.1

The proportion of unemployment accounted by each group bore little relation to the group's share of the labor force. Because of the very high incidence of joblessness among teenagers and Negroes, these two groups accounted for disproportionately large shares of total unemployment.

**REASONS FOR UNEMPLOYMENT.** Data on the causes of unemployment indicate that job loss has accounted for only about two-fifths of recent unemployment. Most of the unemployed are persons who have either left their last job voluntarily to search for another one, or are entering or reentering the labor force, as shown in the following tabulation:

	1969	1968
Number unemployed (in thousands).....	2,831	2,817
Percent.....	100.0	100.0
Lost last job.....	35.9	38.0
Left last job.....	15.4	15.3
Reentering labor force.....	34.1	32.3
Looking for first job.....	14.6	14.4

Only among adult men was job-loss the main reason for unemployment. Adult women cited reentering the labor force as the most common cause for unemployment. Looking for the first job is, understandably, the most common reason for teenage unemployment.<sup>4</sup>

**SEEKING FULL-TIME OR PART-TIME WORK.** About 700,000 (one-fourth) of the unemployed in 1969 sought only part-time work. These included 100,000 (about one-eighth) of the adult male unemployed, 200,000 (one-fifth) of the female unemployed, and 400,000 (nearly one-half) of the teenage unem-



ployed. Most of the teenagers and many of the young adults seeking a part-time job are students. Most of the women seeking part-time work were housewives who wanted to boost their families' incomes while still maintaining their primary role as homemakers.

**HOUSEHOLD STATUS.** Less than one-fourth of the unemployed were male heads of household. This is in sharp contrast to the situation in the early 1960's, when male heads of household accounted for well over one-third of the unemployed. Wives or other relatives of the household head constituted two-thirds of the unemployed, while female heads of household made up about 8 percent.

**OCCUPATIONAL DISTRIBUTION.** Unemployment continued to be most prevalent among low-skill workers in 1969, with the unemployment rates for the individual occupational groups showing little change from 1968.

Although white-collar workers now hold practically one-half of the Nation's jobs, their unemployment rate continued relatively low (only 2.1 percent). Thus they accounted for only one-third of all the experienced unemployed. Blue-collar workers, being much more vulnerable to joblessness, accounted for about one-half of experienced unemployment. Within the blue-collar group, non-farm laborers—the least skilled group—accounted for a particularly large proportion of the jobless.

Service workers had a jobless rate of 4.2 percent in 1969, accounting for nearly one-fifth of total unemployment, and farm workers had a jobless rate of only 1.9 percent, accounting for only 2 percent of the Nation's unemployed.

**DURATION OF UNEMPLOYMENT.** Most of the 2.8 million persons who were unemployed on average during 1969 were generally able to secure a job after searching for only a relatively short period. Only about one-third remained unemployed for more than 5 weeks and only one-eighth were still without a job after 15 weeks of search:

Duration of unemployment	Number (in thousands)		Percent distribution	
	1969	1968	1969	1968
Total unemployed .....	2,831	2,817	100.0	100.0
Less than 5 weeks .....	1,659	1,594	57.5	56.6
5-14 weeks .....	827	810	29.2	28.8
15 weeks and over .....	377	412	13.2	14.6
15-26 weeks .....	242	256	8.5	9.1
27 weeks and over .....	133	156	4.7	5.5

Long-duration unemployment, which has been declining as a proportion of total joblessness for several years, was particularly low in early 1969. For the entire year, the number of persons remaining jobless for 15 weeks or more reached the lowest mark since the Korean War.

## Geography of unemployment

Newly available data show clearly that the burden of unemployment and underemployment was distributed very unevenly, not only among the various groups that make up the labor force, but also among geographic areas.<sup>5</sup> For example, the jobless rate is much higher in the West than in other areas of the country. It is also generally much higher for residents of central cities than for persons residing in suburbs.

**REGIONAL PATTERN.** Data for 1969 indicate that the West in general and the Pacific area in particular continue to carry a substantially higher unemployment burden than other regions of the country. This situation is probably attributable in large part to the continuous migration to the West of jobseekers from other areas of the country and to the initial delay they encounter in locating a job. The following tabulation shows the percent of the civilian labor force unemployed or working part time for economic reasons, by region and color:

Percent unemployed:	United States	North-east	North Central	South	West
Total .....	3.5	3.2	2.9	3.6	4.9
Negro and other races .....	6.4	5.5	6.8	6.4	6.8
Percent limited to part-time work for economic reasons:					
Total .....	2.5	1.6	2.1	3.6	2.9
Negro and other races .....	5.1	2.6	2.9	7.5	3.1

Another interesting finding from the regional employment data concerns the high number of Negro workers in the South who are involuntarily limited to part-time work. While unemployment among southern Negroes does not exceed national averages, the percentage of Negro workers performing part-time work was twice as high in the South as in the other regions. The principal reason for this situation is that Negroes in the South are still heavily concentrated in the lowest skill occupations—such as household work or farm labor—where work is often not available on a full-time basis.

**METROPOLITAN AREAS.** A special series of labor force data for the Nation's 20 largest metropolitan areas have shown clearly that unemployment is generally much higher in the central cities than in the surrounding suburban areas and that the rates also vary significantly from city to city. In 1969 the unemployment rate for the central cities of these 20 areas was 3.9 percent, while the rate for their suburban areas was only 3.0 percent. This compares with 1968 jobless rates of 4.1 and 2.9 percent, respectively. The suburban areas are mainly white, while some central cities are becoming predominantly Negro. Over one-third of total Negro unemployment in the Nation is concentrated in the central cities of these 20 areas.

The slight improvement in the unemployment situation for central city residents appears to reflect in part a decline in joblessness among persons residing in the poorest urban neighborhoods. Based on data for the 100 largest metropolitan areas, the jobless rate in the poorest one-fifth of the urban neighborhoods edged down from 6.0 percent in 1968 to 5.5 percent in 1969.

The metropolitan areas with the highest unemployment in recent years have been Los Angeles-Long Beach and San Francisco-Oakland in the West and Pittsburgh in the East. The jobless rate has been running well above 4 percent in each of these three areas. In a few other metropolitan areas, on the other hand, unemployment has been exceptionally low in recent years. In Boston, Dallas, Minneapolis-St. Paul, and Washington, D.C., for example, the jobless rate has averaged only around 2.5 percent.

**SLUMS.** In order to pinpoint the employment problems of persons residing in the poorest urban areas, the U.S. Department of Labor initiated a special study in July 1968 (known as the Urban Employment Survey) conducted in Concentrated Employment Program (CEP) areas of six large cities—Atlanta, Chicago, Detroit, Houston, Los Angeles, and Detroit.<sup>6</sup> Initial findings from this study indicate that the residents of these areas, who are mainly Negroes or Spanish-Americans, not only have generally high unemployment rates, but also are concentrated in the less desirable occupations that often provide only intermittent work and thus a low level of annual income. The study also revealed, however, that the situation varies widely from city to city. The areas with

the highest unemployment, as was the case in Detroit, were not necessarily those with the lowest incomes. The lowest level of weekly earnings and family income was found among the residents of the Atlanta and Houston target areas.

**OTHER AREAS.** While concern is justly focused on the troubled urban scene, unemployment problems are still in evidence even outside of urban areas.

The unemployment rate for workers residing in small towns runs somewhat above the national average; it was 3.9 percent in 1968 and 3.8 percent in 1969. The rate for workers residing on farms, on the other hand, was only 1.6 percent both in 1968 and 1969.

Workers living on farms, however, are much more likely to be employed only part time or as unpaid family workers. Although their low unemployment situation may not indicate economic problems, the continuous exodus of farm residents to the cities is a clear indication of the lack of reasonably attractive employment opportunities in these areas.

### Other employment problems

Being without a job is not the only problem confronting a worker. He may, for example, want full-time work but be confined involuntarily to a part-time job where his earnings may not be commensurate with his capacity.

**INVOLUNTARY PART-TIME WORK.** In 1969, about 1 million workers on average wanted full-time work but were able to locate only a part-time job. Also, about 1.1 million workers supposedly employed full-time were limited to less than 35 hours of work per week because of economic factors (shortages of material, reduced orders, etc.). The number of workers confined to part-time employment was particularly low during the first half of 1969, but in the slower second half of the year the number increased significantly. On an annual basis, their average number was about the same as in 1968.

**DISCOURAGED WORKERS.** In addition to workers who are unemployed or underemployed, there is another group of persons who have long worried manpower experts: "discouraged workers" who want jobs but who feel that any search for work

on their part would be futile. Since these persons do not take overt steps to look for work, they are not included in the unemployment count, being viewed as "out of the labor force."

Through special questions added to the Current Population Survey questionnaire in 1967, it is now possible to identify and count such persons on a regular basis. They averaged about 700,000 in both 1967 and 1968, but their number dropped to about 600,000 in 1969, reducing the proportion of "discouraged workers" relative to unemployed workers from 1 to 4 to 1 to 5.<sup>7</sup>

Discouragement over job prospects is a serious problem only among the very young and the old. Persons of prime working age—particularly men—have included very few discouraged workers in recent years. Out of approximately 210,000 adult men in 1968 and 180,000 in 1969 who wanted work but felt that they could not find a job, only about one-third were between 20 and 59 years of age. It can thus be said that discouragement over job prospects has kept relatively few persons of prime working age from the labor force in recent years. □

#### FOOTNOTES

<sup>1</sup> It should be noted that these data refer only to workers for whom sales work is the primary employment. Those multiple jobholders who are "moonlighting" as part-time sales workers but whose primary job is in another field are not counted as sales workers from an occupational standpoint.

<sup>2</sup> For a longer-term look at the occupational advances of Negroes, see Claire C. Hodge, "The Negro Job Situation: Has It Improved?" *Monthly Labor Review*, January 1969, pp. 20-28.

<sup>3</sup> See Gloria P. Green, "Comparing Employment Estimates From Household and Payroll Surveys," *Monthly Labor Review*, December 1969, pp. 9-20.

<sup>4</sup> For a detailed discussion of the reasons for unemployment, see Kathryn D. Hoyle, "Job Losers, Leavers, and Entrants—A Report On the Unemployed," *Monthly Labor Review*, April 1969, pp. 24-29.

<sup>5</sup> See, for example, Howard V. Stambler, "New Directions in Area Labor Force Statistics," *Monthly Labor Review*, August 1969, pp. 3-9; Paul M. Schwab, "Unemployment by Region and in 10 Largest States," *Monthly Labor Review*, January 1970, pp. 3-13; Paul O. Flaim,

"Unemployment in 20 Large Urban Areas," *Employment and Earnings*, March 1969, pp. 5-18; Paul M. Ryscavage, "Employment developments in urban poverty neighborhoods," *Monthly Labor Review*, June 1969, pp. 51-56, Harvey J. Hilaski and Hazel M. Willacy, "Employment patterns by place of residence," *Monthly Labor Review*, October 1969, pp. 18-25.

<sup>6</sup> See Norman Root, "Urban Employment Surveys: Pinpointing the Problem," *Monthly Labor Review*, June 1968, pp. 65-66. The initial findings from this survey were summarized in BLS Report No. 370, October 1969. Individual reports for each of the six cities where the survey is being conducted may be obtained from the regional offices of the Bureau of Labor Statistics.

<sup>7</sup> Detailed data on persons not seeking work because of discouragement over job prospects—as well as other specific reasons—are now being published quarterly in *Employment and Earnings*, with the first series of tables having appeared in the December 1969 issue. For a discussion of these new data, see also Paul O. Flaim, "Persons not in the labor force: who they are and why they don't work," *Monthly Labor Review*, July 1969, pp. 3-14.

#### Erratum

In table 3 (page 7) of the article on "Unemployment by region and in 10 largest States," in the January *Review*, the 1960 unemployment rate for Negro and other races in California should read 9.9 rather than 4.9.



# Work experience of the population

Special Labor Force Report  
examines the movements  
into and out of the labor force  
in the 1968  
work experience survey

VERA C. PERRELLA

THE WORK EXPERIENCE of the population during the course of a year indicates the mixture of stability and movement in the American labor force. In addition to the millions who are in the labor force year-round, millions move into and out of the labor force over a year's time.

Students who fit work in with their school schedules, women who work as home responsibilities permit, persons who work at seasonal jobs, those who come out of retirement, persons entering or leaving civilian life upon leaving or entering military service are examples of the variety of the people and the circumstances which generate this amount of movement. In addition, there is the normal turnover from death, retirement, disability, and new entrants.

During 1968, for example, the combined total of *labor force entries and exits* was estimated at about 90 million. These figures represent a count of different actions and not of different persons, since many individuals change status more than once in the course of a year. Further, an entry to the labor force is also an entry into either employment or unemployment. The combined total of entries into and exits from *employment status* during 1968 was also about 90 million; entries and exits to and from *unemployment status* were only about half that.

This volume of movement results in a significantly larger number in the annual than in the monthly total of individuals with labor force experience. It accounts, too, for the differing patterns of that experience with respect to weeks of employment and extent and frequency of unemployment over the 12 months.

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Despite its volume and importance, flux is not of course, the whole picture with respect to work experience, nor even the largest part of it. There is a stable core to the labor force, composed of year-round participants: 7 out of every 10 persons who were in the labor force during 1968 were in it all year. Most men, once they embark upon a work career, are in the labor force year round, and more and more women are working year round.

The latest survey of the work experience of the population shows that 91½ million different individuals were in the civilian labor force at some time during 1968—about 10½ million more than in July, the peak month.<sup>1</sup> This article, based on information obtained in the survey, deals with the work experience of the men and women who were in the labor force at some time during the year and analyses their employment and unemployment patterns. The discussion includes key figures from the 1968 work experience survey, a report on the overall employment and unemployment situation, and an examination of selected groups whose work experience is typically characterized by stability or movement.

## Key numbers, 1968

Here, in summary form, are the major findings of the 1968 survey:

90¼ million persons 16 years old and over worked at some time during 1968—2.1 million more than in 1967. Two-thirds of the net increase was in full-time jobs.

52¼ million men and women worked year round full time—over half a million more than in 1967, although the proportion in both years was roughly 58 percent of all who worked.

As in other years, a smaller proportion of Negro than white male workers were employed all year at full-time jobs—70 percent and 63 percent respec-

tively in 1968. However, the gap between these two proportions has narrowed somewhat since 1966.

5.8 million men and women worked part time year round in 1968, about the same number as in 1967.

32 million men and women worked part year, compared with about 31 million in 1967; 4 of every 5 gave reasons other than unemployment as the main reason for working part year.

43 million heads of households worked during the year; 8 out of 10 worked year round full time.

22.2 million married women—one half of all married women—worked at some time during 1968; 4 out of every 10 who worked did so year round full time.

Almost 9½ million teenagers—2 out of every 3—worked at some time during 1968. A larger proportion of the white than of the Negro teenage population worked.

11.3 million persons, or 12.4 percent of the total working or looking for work had unemployment at some time during 1968; both the number and the proportion were somewhat lower than in 1967.

19.6 percent of the Negroes in the labor force had unemployment during the year compared with 11.5 percent of the whites.

2.4 million persons had unemployment totaling 15 weeks or more in 1968, 200,000 fewer than in 1967.

## Employment

Economic activity, very high in 1967, was even better in 1968, as evidenced by the smaller number of persons with unemployment during the year as well as the larger number with employment. The number of persons who worked at some time during 1968 was 2.1 million more than in 1967, largely as a result of population increases (table 1).

More than half of the net employment gain was among women, mostly full-time workers. The gains were greater among women 20 to 29 years old, among whom full-time workers increased by almost half a million.

Among men, too, the increase in the number who worked during 1968 was concentrated among full-time workers, with the gains preponderantly among the younger men.

Most of the additional women workers were employed in the service industries, particularly in medical and other health services; most of the additional men were employed in durable goods manufacturing and public administration.

Distribution of workers by number of weeks worked and by whether they worked full or part time was about the same as in 1967. About 90 percent of the men and 70 percent of the women with work experience during 1968 worked full time, as in 1967. In both years, 70 percent of the men who worked did so year round (50–52

**Table 1. Work experience of persons 16 years of age and over, by extent of employment and by sex, 1965–68**

Work experience	Both sexes				Male				Female			
	1968	1967	1966	1965	1968	1967	1966	1965	1968	1967	1966	1965
Number (in thousands)												
Total who worked during the year <sup>1</sup> .....	90,230	88,179	86,266	83,930	53,312	52,392	51,708	51,067	36,918	35,787	34,558	32,863
Full time <sup>2</sup> .....	73,266	71,909	70,140	68,433	47,313	46,658	45,909	45,353	25,953	25,251	24,231	23,080
50 to 52 weeks.....	52,285	51,705	50,049	48,383	37,014	36,621	36,191	35,293	15,271	15,084	13,858	13,090
27 to 49 weeks.....	11,115	10,702	10,647	11,157	6,111	6,051	5,802	6,297	5,004	4,651	4,845	4,860
1 to 26 weeks.....	9,866	9,502	9,444	8,893	4,188	3,986	3,916	3,763	5,678	5,516	5,528	5,130
Part time.....	16,964	16,270	16,126	15,497	5,999	5,734	5,799	5,714	10,965	10,536	10,327	9,783
50 to 52 weeks.....	5,769	5,641	5,407	4,940	2,237	2,096	2,091	1,969	3,532	3,545	3,316	2,971
27 to 49 weeks.....	3,720	3,430	3,380	3,068	1,227	1,202	1,162	1,088	2,493	2,228	2,218	1,980
1 to 26 weeks.....	7,475	7,199	7,339	7,489	2,535	2,436	2,546	2,657	4,940	4,763	4,793	4,832
Percent distribution												
Total who worked during the year <sup>1</sup> .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Full time <sup>2</sup> .....	81.2	81.5	81.3	81.5	88.7	89.1	88.8	88.8	70.3	70.6	70.1	70.2
50 to 52 weeks.....	57.9	58.6	58.0	57.6	69.4	69.9	70.0	69.1	41.4	42.1	40.1	39.8
27 to 49 weeks.....	12.3	12.2	13.3	12.3	11.5	11.5	11.2	12.3	13.6	13.0	14.0	14.8
1 to 26 weeks.....	10.9	10.7	10.9	10.6	7.9	7.6	7.6	7.4	15.4	15.5	16.0	15.6
Part time.....	18.8	18.5	18.7	18.5	11.3	10.9	11.2	11.2	29.7	29.4	29.9	29.8
50 to 52 weeks.....	6.4	6.4	6.3	5.9	4.2	4.0	4.0	3.9	9.6	9.9	9.6	9.0
27 to 49 weeks.....	4.1	4.0	3.9	3.7	2.3	2.3	2.2	2.1	6.8	6.2	6.4	6.0
1 to 26 weeks.....	8.3	8.2	8.5	8.9	4.8	4.6	4.9	5.2	13.4	13.3	13.9	14.7

<sup>1</sup> Time worked includes paid vacations and paid sick leave.

<sup>2</sup> Usually worked 35 hours or more per week.

Note: Because of rounding, sums of individual items may not equal totals.

weeks) full time, compared with 40 percent of the women.

The proportion of white men with work experience who worked year round full time continued higher than that of Negro men—70 percent compared with 63 percent. However, among youths under age 25, a smaller proportion of the white youths worked all year at full-time jobs, because relatively more of them were attending school and had to limit their work.

The proportion of women who worked year round full time was the same for Negro and white women (40 percent each). This was also true for those who worked part time (30 percent each).

A few figures sum up the variations in work experience by number of weeks worked during the year:

Employment in 1968	Percent of workers		
	All workers	Full-time	Part-time
Total.....	100	81	19
50-52 weeks.....	64	58	6
48-49 weeks.....	4	3	1
40-47 weeks.....	6	5	1
27-39 weeks.....	7	5	2
14-26 weeks.....	8	5	3
1-13 weeks.....	11	6	5

The distribution has been relatively stable over the sixties to date, except that the proportion of year-round full-time workers is now closer to 6 out of 10 of all workers than at the start of the decade, reflecting the steadily improving economic situation.

For part-year workers, the distribution by number of weeks worked shows no marked change over the period. Nonetheless, the very fact that there is such a range in the number of weeks worked gives strong indication of the flexible nature of the supply of labor. More than 32 million individuals worked less than 50 weeks in 1968, but fewer than 6 million of them said unemployment was the main reason they did not work a full year. The rest attributed their less than full-year work to personal circumstances rather than inability to find work. This is the element which gives flexibility to the supply of labor and, in the process, generates a large portion of the movement which characterizes the labor force.

## Unemployment

Out of a total 91.5 million persons who worked or looked for work during 1968, 11.3 million or

12.4 percent, had unemployment at some time during the year. In 1967, the total who worked or looked for work was 2 million smaller, but the number who had unemployment was almost a quarter million larger. The continuing increases in the demand for labor in an already tight labor market kept the number of persons with unemployment from rising, despite the 2 million growth in number of persons in the labor force during the course of the year (table 2).

While there were no sharp differences from 1967 in either numbers or proportions of persons with unemployment, whether the figures are examined with respect to sex, age, or color, the proportion of white men who had unemployment decreased 1 percentage point. For women and Negro workers, the proportions with unemployment were not significantly different from 1967.

Overall, the percentage with unemployment continued higher for women than for men, and for Negroes than for whites.

Most of the persons unemployed at some time during 1968 had also worked during the year. In both 1967 and 1968, about 1¼ million men and women had looked for work for 1 week or more but had not found jobs. Over half looked for work for fewer than 5 weeks. Among both whites and Negroes, the number of women who looked but did not find jobs was more than double the number of men.

## Married men

The group of workers from whom the labor force derives its greatest measure of stability is married men. The chances that an individual is in the labor force are highest when the individual is male and married. The married man is also the most likely to have worked continuously over the course of a year.

Practically all married men are household and family heads, with the major responsibility for meeting family financial needs. As a result, the work role dominates to a much greater extent for them than for any other population group. During 1968, 90 percent of the 44.3 million married men in the population were in the labor force at some time during the year. A measure of the stability which characterizes the group's labor force experience is the ratio of the total number of them in the labor force during the course of a year to their monthly average in the labor force. For 1968,



Table 2. Extent of unemployment of persons 16 years of age and over, by sex, 1966-68

Extent of unemployment	Both sexes			Men			Women		
	1968	1967	1966	1968	1967	1966	1968	1967	1966
	Number (in thousands)								
Total working or looking for work.....	91,480	89,432	87,540	53,677	52,788	52,103	37,803	36,644	35,437
Percent with unemployment.....	12.4	12.9	13.0	11.7	12.6	12.5	13.4	13.4	13.8
Total with unemployment.....	11,332	11,564	11,387	6,263	6,655	6,503	5,069	4,909	4,884
With work experience.....	10,082	10,311	10,113	5,898	6,259	6,108	4,184	4,052	4,005
Year-round workers <sup>1</sup> with 1 or 2 weeks of unemployment.....	1,285	1,381	1,269	900	1,002	923	385	379	346
Part-year workers <sup>2</sup> with unemployment, total.....	8,797	8,930	8,844	4,998	5,257	5,185	3,799	3,673	3,659
With unemployment of—									
1 to 4 weeks.....	3,632	3,357	3,348	1,875	1,743	1,727	1,757	1,614	1,621
5 to 10 weeks.....	1,989	2,073	2,038	1,215	1,310	1,286	774	763	752
11 to 14 weeks.....	1,036	1,177	1,047	647	759	707	389	418	340
15 to 26 weeks.....	1,406	1,520	1,567	870	979	972	536	541	595
27 weeks or more.....	734	803	844	391	466	493	343	337	351
Spells of unemployment									
1 spell.....	6,960	6,954	6,702	3,883	4,031	3,813	3,077	2,923	2,889
2 spells.....	1,471	1,503	1,465	901	908	900	570	595	565
3 spells or more.....	1,651	1,854	1,946	1,114	1,320	1,395	537	534	551
Did not work but looked for work, total.....	1,250	1,253	1,274	365	396	395	885	857	879
1 to 14 weeks.....	967	944	969	252	255	239	715	689	730
15 to 26 weeks.....	106	99	104	39	35	45	67	64	59
27 weeks or more.....	177	210	201	74	106	111	103	104	90
	Percent distribution								
Unemployed persons with work experience, total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Year-round workers <sup>1</sup> with 1 or 2 weeks of unemployment.....	12.7	13.4	12.5	15.3	16.0	15.1	9.2	9.4	8.6
Part-year workers <sup>2</sup> with unemployment, total.....	87.3	86.6	87.5	84.7	84.0	84.9	90.8	90.6	91.4
With unemployment of—									
1 to 4 weeks.....	36.0	32.6	33.1	31.8	27.8	28.3	42.0	39.8	40.5
5 to 10 weeks.....	19.7	20.1	20.2	20.6	20.9	21.1	18.5	18.8	18.8
11 to 14 weeks.....	10.3	11.4	10.4	11.0	12.1	11.6	9.3	10.3	8.5
15 to 26 weeks.....	13.9	14.7	15.5	14.8	15.6	15.9	12.8	13.4	14.9
27 weeks or more.....	7.3	7.8	8.3	6.6	7.4	8.1	8.2	8.3	8.8
Spells of unemployment									
1 spell.....	69.0	67.4	66.3	65.8	64.4	62.4	73.5	72.1	72.1
2 spells.....	14.6	14.6	14.5	15.3	14.5	14.7	13.6	14.7	14.1
3 spells or more.....	16.4	18.0	19.2	18.9	21.1	22.8	12.8	13.2	13.8
Unemployed persons who did not work but looked for work, total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 to 14 weeks.....	77.4	75.3	76.1	69.0	64.4	60.5	80.8	80.4	83.0
15 to 26 weeks.....	8.5	7.9	8.2	10.7	8.8	11.4	7.6	7.5	6.7
27 weeks or more.....	14.2	16.8	15.8	20.3	26.8	28.1	11.6	12.1	10.2

<sup>1</sup> Worked 50 weeks or more.  
<sup>2</sup> Worked less than 50 weeks.

NOTE: Because of rounding, sums of individual items may not equal totals.

this ratio was 103 percent. The ratio of the total number to the number in the labor force during the peak month of the year was 102 percent. These ratios, and more particularly the smallness of the difference between them, are among the simplest and most graphic indicators of the high degree of stability which typifies the married-man labor force. (See chart.) From these ratios, it is clear that the married men who are in the labor force at any given time in the year are also almost certain to be in the labor force at any other time in the year. For no other group of workers may this statement be made with so much certainty.

In contrast, the comparable ratios for the next most stable group—widowed, divorced, or separated men—were 114 percent and 110 percent, respectively. Fourteen percent more of this latter group were in the labor force during the course of the year than in an average month, and 10 percent more than in the peak month.

Married men's employment during the year also shows a high degree of stability. Roughly 80 percent of all those who worked at some time during 1968 worked year round full time. Further, of the 39½ million who had worked during the year, less than 10 percent had any unemployment. Among those who did, nearly one-half had been jobless for a total of 4 weeks or less. Moreover, about 2 out of 3 had only 1 period of unemployment.

The age distribution of married men has bearing on the labor force experience of the group as a whole relative to that of other men. Single men are heavily weighted in the younger ages in which the amounts of work experience and of tenure are low. Widowed, divorced, or separated men are more heavily weighted in the older ages, in which labor force participation is lower than in the middle years.

Other factors than the age differences are undoubtedly also relevant, since age for age,

married men tend to have higher labor force rates than other men. Marriage and labor force participation are selective processes. Physical or psychogenic handicaps may tend to lessen both the likelihood of marriage and of steady employment. Further, in our society, the married man who elects not to work, or to loaf periodically, is subject to greater criticism than are other men, so that his work orientation may be influenced.

Whatever the mixture of demographic, economic, psychological, and sociological factors and the relative importance of each, the labor force effects are clear. Married men typically are most likely of all population groups to be in the labor force, and to be employed year round full time. In sum, population change aside, married men constitute the portion of the supply of labor which is least subject to expansion or contraction. The patterns of their labor force, employment, and unemployment experience indicate that in proportion to their number, they account for only a small portion of the annual volume of movement.

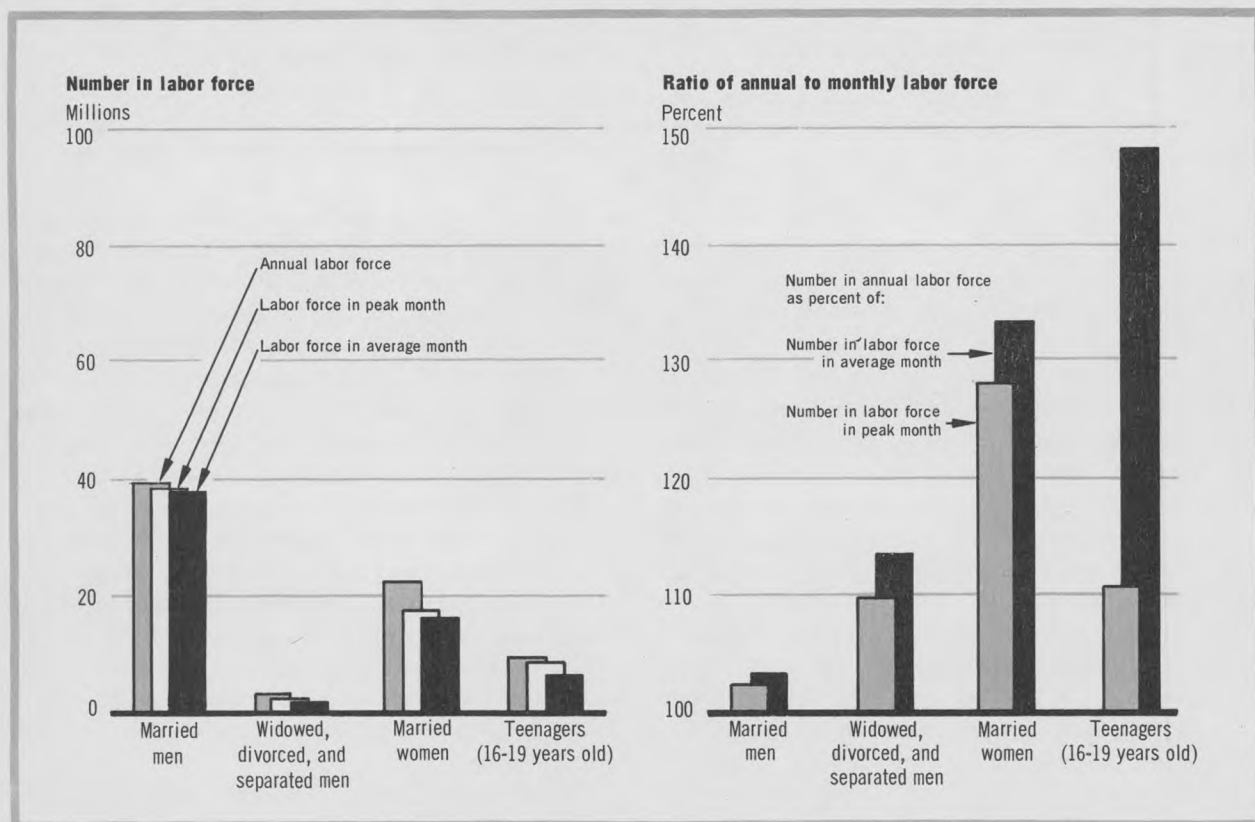
## Married women

The high degree of mobility, mixed with stability, in the married-women labor force is indicated by the variations in their labor force participation and work experience. In 1968, about half (22.6 million) of all married women were in the labor force at some time during the year—about one-third more than were in the labor force in an average month. Almost 6 million more married women worked or looked for work over the course of the year than during an average month.

The women who had work experience were almost equally divided between full-year and part-year workers. Of the 11.3 million women who worked the full year, a very large proportion (8 out of 10) worked full time. Whether they worked full time or part time, the year-round workers were a stable element in the labor force over the course of the year.

The 11 million wives who worked part-year and the 450,000 who looked for work but did not find jobs generated a considerable portion of the

Chart 1. Annual labor force compared with peak month and average month, selected groups, 1968



total volume of movement over the year. Over half of the part-year workers were in the labor force less than 27 weeks; of the nonworkers, more than 9 out of 10:

Weeks in labor force	Percent of workers		
	All workers	Part-year workers	Nonworkers who looked for work
Total.....	100	100	100
1-13 weeks.....	30	27	184
14-26 weeks.....	24	25	28
27-39 weeks.....	19	20	2
40-52 weeks.....	27	28	6
Number (in thousands).....	11,332	10,883	449

<sup>1</sup> Data are for interval of 1 to 14 weeks.

<sup>2</sup> Data are for interval of 15 to 26 weeks.

For most of these part-year workers, unemployment was not the major factor in their part-year work, and therefore, not the major factor in the expansion and contraction of the married-women labor force. About 80 percent had no unemployment during the year, and of those who did have any unemployment, almost half had 4 weeks or less. Undoubtedly, much of the unemployment was of the frictional kind which occurs upon entry to the labor force, since 7 out of 10 had only 1 spell of unemployment. So, while unemployment contributed to lessening the time they had worked, it was not the primary factor. A further indication is that, among all women who worked part year, only a small proportion (10 percent of the white and 16 percent of the Negro workers) said unemployment was the major reason for their part-year employment. Most women gave home and family responsibilities as the major reason for part-year work.

To repeat, unemployment is not the major factor here. It is, rather, a congruence of supply and demand factors which enables so large a proportion of married women to tailor their labor force participation to their needs and preferences.

In addition to the usual turnover in the labor force which arises from deaths and retirements, there are seasonal expansions and contractions in the demand for labor, such as those associated with agriculture, recreation activities, construction, and retail trade. The peak demands in retail trade, at Easter and Christmas, for example, create a requirement for temporary workers. During the year, many employers find it advantageous to increase their work force for peak hours, days, or seasons only. On the supply side, the need or desire of many married women to work only as

home and family responsibilities permit is made possible by these seasonal requirements. The intermittent work patterns of a significant proportion of women workers create vacancies for others to fill. The secretary who leaves her job because she is going to have a baby may be replaced by a woman who is reentering the labor force to help meet expenses of her college-age children.

### Teenagers

The movement of teenagers into the labor force at the annual school-closing for the summer and their subsequent withdrawal upon school-opening in the fall result in the widest short-term swings in the labor force during the course of a year. Almost 10 million teenagers (16 to 19 years) were in the labor force at some time during 1968. This was about 3¼ million, or 50 percent, more than in an average month, but only 900,000 more than in July, the peak month for their labor force strength.

This annually recurring phenomenon places a tremendous demand upon the economy for a large number of very short term jobs within a 3-month period. In 1968, the number of teenagers in the labor force increased by 2¼ million within the 30 days between May and June, and by another 600,000 within the next 30 days. By September, the number of teenagers in the labor force was back very close to its May level.

What is perhaps even more remarkable than the dimension of this mass movement into the labor force is that between May and June, teenage employment increased by more than half their labor force increase, and between June and July, by another 900,000. Thus, although unemployment increased, almost 2¼ million teenagers found employment within a 2-month period.

By September, the labor force, employment, and unemployment rate of teenagers were back to very nearly their May levels:

	Number (in thousands)				
	May	June	July	August	September
Civilian labor force.....	6,040	8,295	8,891	8,335	6,179
Change from preceding month.....	+139	+2,255	+596	-556	-2,156
Employed.....	5,424	6,697	7,589	7,512	5,438
Change from preceding month.....	+143	+1,273	+892	-77	-2,074
Unemployment rate (percent).....	10.2	19.3	14.6	9.9	12.0

Because of the propensity of young people generally to move into and out of the labor force,



and because so large a proportion of the teenagers in the labor force are enrolled in school, movement in the teenage labor force is high throughout the year, though not as great in volume as during the summer months. In February 1969, 70 percent of the 16- to 19-year-olds in the population were enrolled in school. Among the 9.8 million teenagers who had worked or looked for work at some time during 1968, 2 out of 3 were students. As is to be expected, a larger proportion of the out-of-school youths (81 percent) had been in the labor force at some time during 1968, but even among the students, the proportion was quite high (66 percent).

However, the differences between students and nonstudents were marked with respect to number of weeks worked and whether they usually worked full or part time. Among those who worked, over two-thirds of the students compared with one-fourth of the nonstudents had worked part time, and nearly half of the students compared with a fifth of the nonstudents had worked only 1 to 13 weeks. Among both students and nonstudents, the proportions who worked the full year were low—about one-fifth and one-third respectively.

In this teenage segment of the labor force, as in the married-woman segment, the length of time worked was more the result of the length of time they were available for work than of unemployment, though again, unemployment did play a considerable part in lessening the length of time worked.

### Nonworkers who looked for work

The group of persons who look for work at some time during the year but do not find jobs is relatively small during periods of economic prosperity. Nonetheless, these individuals account for a significant portion of the volume of movement in the labor force over the year. During 1968, the 1¼ million nonworkers who looked for work represented about 10 percent of the persons who had unemployment at some time during the year, and a little more than 1 percent of all persons in the labor force. Seventy percent of the nonworkers were women, of whom half were married. In terms of age, a third of all the group were teenagers. These proportions give yet another buttressing to the labor force truism that teenagers and married women are more highly represented in the

floating contingent of the labor force than are other groups in the working-age population. More than other groups, these two are given to sporadic labor force participation, as school and home responsibilities permit, and many of them stop looking for work if jobs do not materialize quickly. Often, as in the case of students, the period during which they can fit work into their schedules is itself relatively short, so their search for work is necessarily limited by the period for which they are available. Similarly, married women may try to find work that will fit in with their home responsibilities, or during seasonal periods such as the Christmas and Easter rush in stores, or the school vacation period when older children are at home to look after the younger ones. Because they are not the primary workers in their families, persons in these groups tend to leave the labor force if the search for work becomes too extended, and to reenter when it is convenient or the likelihood of a job seems good.

Of the nonworkers, about two-thirds of the married women had looked for work 4 weeks or less, and more than half the teenagers. In contrast, among the small number of men 25 years old and over, only 20 percent looked for 4 weeks or less, and about 40 percent for 40 weeks or more.

There are no data to indicate whether any appreciable proportion of these nonworkers had several periods of unemployment during the year. Even the minimal one-time entry and subsequent withdrawal from the labor force, however, would account for 2½ million gross changes in terms of entries and exits from the labor force, and an equal number of gross changes in unemployment entries and exits. In the Negro labor force, the nonworkers who looked for work were 15 percent of the total unemployed during the year; in the white labor force, the nonworker was 10 percent of the total who looked. In this group, married women were a smaller proportion of the Negro women than of the white women. Among both whites and Negroes, nonworkers were predominantly secondary workers.

THE VOLUME OF MOVEMENT in the labor force over the course of a year is indicative of a high degree of flexibility in labor supply and demand, which results from the interplay of economic and social factors, as well as geographic and occupational mobility. A preponderant portion of the

movement is the result of part-year and part-time work by persons who are not available for full-year full-time work.

The high degree of movement and flexibility notwithstanding, there is a broad base of stability in the labor force. Close to 2 out of every 3 persons who worked during 1968 did so year round. To the extent that it constitutes a medium for the fulfillment of both worker and employer needs,

the combination of flexibility and stability is a force for a dynamic and viable economy.

The degrees of stability and mobility differ considerably among various groups in the labor force. The group whose labor force experience is most stable is married men, particularly those who are white and in the central ages. Mobility is relatively high among teenagers, married women, and older workers. □

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—FOOTNOTES—

<sup>1</sup> Since the annual survey of the work experience of the population during a given year is made in February of the following year, the information obtained relates to the civilian work experience of those persons 16 years old and over in the civilian noninstitutional population as of the February date. Thus, the work experience of persons who were in the civilian labor force during 1968 but not in the civilian noninstitutional population as of February 1969 is not included; similarly, persons who died during the course of 1968 or in the 1969 period preceding the survey date are also not reflected in the figures. On the other hand, those persons who reached age 16 in January and February 1969 are included.

The data are from supplementary questions to the February 1969 monthly survey of the labor force, conducted for the Bureau of Labor Statistics by the Bureau of the Census through its Current Population Survey.

This is the tenth in a series of reports on this subject. The ninth in the series was published in the *Monthly Labor Review*, June 1969, and reprinted with additional tabular data and explanatory notes as Special Labor Force Report No. 107.

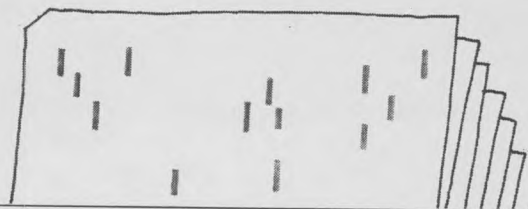
<sup>2</sup> Data for all persons other than white persons are used in this report to represent data for Negroes, since the latter constitute about 92 percent of all persons other than white in the United States.

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### A note on communications

The *Monthly Labor Review* welcomes communications that supplement, challenge, or expand on research published in its pages. To be considered for publication, communications should be factual and analytical, not polemical in tone. Communications should be addressed to the Editor-in-Chief, *Monthly Labor Review*, Bureau of Labor Statistics, U.S. Department of Labor, Washington, D.C. 20212.

## Research Summaries



### WAGES IN MANUFACTURING OF NONELECTRICAL MACHINERY

JOSEPH C. BUSH

AVERAGE STRAIGHT-TIME HOURLY EARNINGS of production and related workers in the nonelectrical machinery manufacturing industries increased 13.5 percent between mid-1966<sup>1</sup> and September–November 1968 in the 21 metropolitan areas surveyed by the Bureau of Labor Statistics. The annual rate of increase for the 21 areas combined was 5.7 percent; it ranged from 3.3 percent in Pittsburgh to 7.5 percent in St. Louis.

The September–November 1968 survey covered establishments employing two-fifths of the Nation's 1,950,000 workers in the nonelectrical machinery industries. Employment ranged fewer than 10,000 in Denver, Portland (Oreg.), and Worcester to 118,000 in Chicago. Other major areas of industry employment included Detroit (84,000), Los Angeles (69,000), and Milwaukee (63,000). Pay levels of production workers are shown in table 1.

Tool and die makers had the highest average hourly earnings among the occupations surveyed separately in each area. Men producing or maintaining tools and dies for use within the establishment (other than jobbing) averaged from \$5.12 an hour in San Francisco–Oakland to \$3.53 in Worcester; in 13 other areas, they averaged \$4 or more an hour. In most areas, averages for men producing tools and dies for sale (jobbing) were within 5 percent of the earnings levels for tool and die makers (other than jobbing).

Production machine-tool operators were the largest occupational group studied and, for survey purposes, were divided into three skill groups.

Operators who set up their own machines and perform a variety of machining operations to close tolerances averaged from \$4.40 an hour in San Francisco–Oakland to \$3.14 in Dallas; the corresponding range for the intermediate group of operators was \$3.68 in St. Louis to \$2.65 in Dallas. Averages for operators who perform routine repetitive operations and do not set up the machines were highest in Hartford (\$3.30) and lowest in Dallas (\$2.19).

Janitors were the lowest paid among the jobs studied in most of the selected areas. They averaged from \$3.07 in Detroit to \$2 in Dallas. Hourly averages for material-handling laborers, another relatively low-paying job, ranged from \$3.30 in Portland to \$2.16 in Dallas.

Work schedules of 40 hours a week applied to a majority of the production workers in each area. In all areas except Boston, Dallas, Newark and Jersey City, New York, and San Francisco–Oakland, 15 percent of the workers or more were employed on extra shifts. Extra shift workers usually received a cents-per-hour differential above day rates.

Paid holidays, usually 8 to 9 a year, and paid vacations were provided to production workers by nearly all the establishments studied. Typical provisions for paid vacations were 1 week after 1 year of service, 2 weeks after 2 or 3 years, and 3 weeks after 10 years. Provisions for 4 weeks of vacation pay after 20 or 25 years were reported in 13 areas. Approximately seven-eighths of the production workers were in establishments that provided life, hospitalization, and surgical insurance. Retirement pension benefits (other than social security) were also available to a majority of the workers in all areas.

The survey included establishments primarily engaged in manufacturing nonelectrical machinery. Omitted from the survey were (1) establishments with fewer than eight workers primarily manufacturing special dies, tools, jigs, and fixtures, or

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**Table 1. Relative area pay levels, nonelectrical machinery manufacturing, 21 selected areas, September–November 1968**

[Chicago=100]

Area	Pay levels <sup>1</sup>
San Francisco–Oakland.....	116
Portland (Oreg.–Wash.).....	112
Detroit.....	109
St. Louis.....	107
Milwaukee.....	103
Denver, Cleveland.....	101
Los Angeles–Long Beach and Anaheim–Santa Ana–Garden Grove, Chicago.....	100
Pittsburgh.....	99
Buffalo, Newark and Jersey City.....	97
Hartford, Houston.....	95
Minneapolis–St. Paul, Baltimore.....	94
Philadelphia, Boston.....	92
Worcester.....	91
New York.....	87
Dallas.....	79

<sup>1</sup> The averages for men in 10 jobs common to all areas were used in computing the relatives. To minimize interarea differences in occupational composition, weights expressing constant employment relationships based on total employment in the respective jobs in all 21 areas were used. Aggregates were computed for each area by multiplying the average straight-time hourly earnings for the jobs by these weights and totaling. The ratio of these aggregates formed the basis for the relatives.

machine-tool accessories, and (2) other nonelectrical machinery establishments employing fewer than 20 workers. Earnings data developed by the survey exclude premium pay for overtime and for work on weekends, holidays, and late shifts. A comprehensive report on the survey is expected to be issued this spring. Separate releases providing information on earnings and supplementary benefits for each area are available upon request to the Bureau of Labor Statistics or any of its regional offices. □

<sup>1</sup> For an account of the earlier survey, see *Monthly Labor Review*, August 1967, pp. 52–53. The mid-1966 survey was nationwide in scope but provided separate tabulations for the 21 areas studied in September–November 1968.

## WAGES IN WOOD HOUSEHOLD FURNITURE MANUFACTURING

MICHAEL J. TIGHE

STRAIGHT-TIME EARNINGS of production and related workers in the wood household furniture (except upholstered) manufacturing industry averaged \$2.07 an hour in October 1968. Men, nearly four-fifths of the 130,779 workers covered in the BLS survey of this industry, averaged \$2.13 an hour, compared with \$1.86 for women.

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More than nine-tenths of the workers earned between \$1.60 (the Federal minimum wage for manufacturing establishments) and \$3 an hour; earnings of the middle half of the workers fell between \$1.74 and \$2.28.

The overall level of wages in the industry in October 1968 was 21 percent above the average of \$1.71 recorded in a similar Bureau survey in May–June 1965.<sup>1</sup> During this period, average earnings rose about 25 percent in the New England, Middle Atlantic, Southeast, and Southwest regions, 19 percent in the Border States, 16 percent in the Great Lakes region, and 11 percent in the Pacific region. Employment changes between the two surveys also varied by region: Up 28 percent in the Pacific, 18 percent in the Southwest, 9 to 11 percent in the Border States, Southeast, and Great Lakes regions, and down about 8 percent in the New England and Middle Atlantic regions.

Average hourly earnings for the industry's production workers in October 1968 ranged from \$1.83 an hour in the Southwest and \$1.85 in the Border States to \$2.84 in the Pacific. Workers in the Southeast and Great Lakes region—almost three-fifths of the industry's work force—averaged \$1.87 and \$2.24, respectively. Production-worker averages also varied among the areas of industry concentration surveyed separately, as shown in table 1.

Nationwide, average earnings for production workers varied by size of community, size of establishment, and extent of union agreement coverage. Averages were higher in metropolitan areas than in smaller communities (\$2.27 compared with \$1.96) and higher in establishments with between 20 and 249 workers than in larger establishments (\$2.19 and \$1.98). The lower nationwide average for larger establishments reflects a disproportionate concentration of workers in these plants in the three lowest paying regions. The Southeast, the Southwest, and the Border States accounted for nearly four-fifths of the employment in establishments with 250 workers or more, but for only about a third of the employment in smaller establishments. Workers in establishments with union agreements covering a majority of their production workers averaged \$2.27 an hour—32 cents more than those in other establishments.

Furniture manufacturing plants with union

**Table 1. Number and straight-time average hourly earnings<sup>1</sup> of production workers in wood household furniture (except upholstered) manufacturing establishments, selected areas, October 1968**

Area	Number of production workers	Average hourly earnings
Chicago, Ill.	2,924	\$2.23
Evansville, Ind.-Ky.	1,494	1.99
Fort Smith, Ark.-Okla.	2,414	1.85
Gardner, Mass.	1,883	2.32
Grand Rapids, Mich.	2,181	2.33
Hickory-Statesville, N.C.	12,330	1.91
Jamestown, N.Y.	1,080	2.42
Los Angeles-Long Beach and Anaheim-Santa Ana-Garden Grove, Calif.	4,998	2.68
Louisville, Ky.-Ind.	1,551	2.82
Martinsville, Va.	7,791	1.84
Miami and Ft. Lauderdale-Hollywood, Fla.	1,140	2.12
Winston Salem-High Point, N.C.	8,155	1.92
State of Indiana	11,199	2.25

<sup>1</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

agreements covering a majority of their production workers constituted nearly two-fifths of the industry's work force—a somewhat lower proportion than in all manufacturing industries combined. The proportions of workers in union establishments were seven-tenths in the Pacific, two-thirds in the Middle Atlantic, about half in the Great Lakes, Southwest, and New England, and a fifth or less in the Border States and Southeast.

Slightly more than four-fifths of the production workers were paid time rates, usually determined on the basis of the individual worker's qualifications. Proportions of workers paid on an incentive basis ranged from two-fifths in the Great Lakes to less than one-fifth in the Border States, Southeast, Southwest, and Pacific regions.

Among the occupations studied separately, average hourly earnings ranged from \$1.85 for machine offbearers to \$2.39 for general utility maintenance men. Furniture assemblers (except chair assemblers), the occupation with the most workers, averaged \$2.13 an hour. Their earnings levels varied by type of assembly: \$2.20 for complete furniture pieces (case goods), \$2.14 for complete furniture pieces (other than case goods), and \$2.02 for subassemblies.

Paid holidays, most commonly 6 or 7 a year, and paid vacations were provided by establishments employing more than four-fifths of the industry's production workers. Typical vacation provisions were 1 week of vacation pay after 1 year of service and 2 weeks after 5 years. A fifth of the workers were in establishments providing 3 weeks after 10 years of service. Life, hospitalization, and surgical

insurance were available to more than nine-tenths of the production workers; medical insurance to about two-thirds; and sickness and accident, and accidental death and dismemberment, insurance to six-tenths. Retirement pension benefits (other than social security) applied to slightly more than half of the workers.

The BLS survey covered establishments with 20 workers or more primarily engaged in manufacturing wood household furniture (except upholstered) commonly used in dwellings. Earnings information developed by the survey excludes premium pay for overtime and for work on weekends, holidays, and late shifts. A comprehensive report on the survey is expected to be issued this spring. Separate releases for the areas listed in table 1 are available upon request to the Bureau of Labor Statistics or any of its regional offices. □

<sup>1</sup> See Frederick L. Bauer, "Earnings in Wood Household Furniture, May-June 1965," *Monthly Labor Review*, April 1966, pp. 398-400.

## PRODUCTIVITY IN CORRUGATED AND SOLID FIBER BOXES

CAROLYN S. FEHD

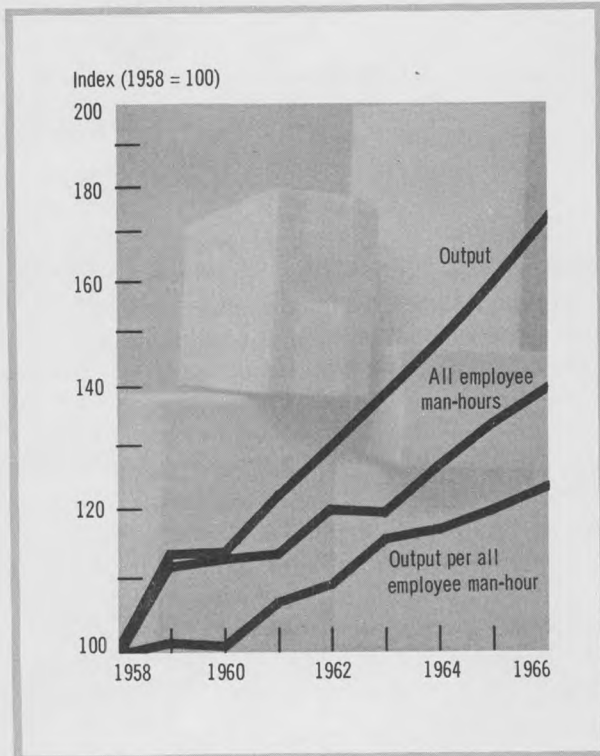
OUTPUT PER MAN-HOUR in the corrugated and solid fiber boxes industry increased 23 percent between 1958 and 1966, expanding at an average rate of 2.9 percent a year. This rate of increase was somewhat slower than the rate for all manufacturing over the same period, 3.8 percent a year.

*Indexes of Output Per Man-Hour, Corrugated and Solid Fiber Boxes, 1958-1966* (BLS Bulletin 1641, 1969) presents the first study of this industry's productivity. A part of the paper and allied products group, the corrugated and solid fiber boxes industry with more than 900 establishments employed 96,000 workers in 1966.

Productivity grew unevenly between 1958 and 1966 (chart 1). The largest annual change was an increase of 6.6 percent in 1963. A decrease of .4

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**Chart 1. Corrugated and solid fiber boxes industry: output per all employee man-hour, output, and all employee man-hours, 1958-66**



percent in 1960 marked the beginning of a recession; this was the only year in which output per man-hour failed to grow. Other increases ranged from 1.1 percent in 1964 to 5.6 percent in 1961 when the economy started upward again.

One of the more important factors in the increased productivity was the growth in output of 6.6 percent a year. Both the steady gains in total manufacturing output and new uses for corrugated containers and paperboard led to a higher demand for these products.

Changes in the manufacturing process contributed to the gain in productivity. Recent improvements in the handling of rolling stock and in gluing have made corrugators much faster. In addition, the linking and coordinating of machines involved in different parts of the production process have speeded up output.

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Since 1958, a portion of the increase in capital expenditures has gone for new plants, but there has been no marked effect on productivity. Future capital investment should cause greater increases in productivity as more advanced equipment, such as rotary steel dies that cut and crease the corrugated board, is adopted. □

## EMPLOYMENT AND EARNINGS IN KANSAS CITY

A report on employment, earnings, and living costs in the Kansas City metropolitan area has been published by the Mountain-Plains regional office of the Bureau of Labor Statistics.

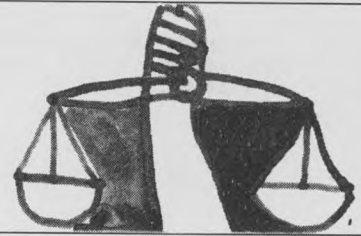
The study shows that the Kansas City area is similar to the United States as a whole in employment growth patterns, levels of earnings, and living costs. In spite of these similarities, employment growth rates for some industries, hourly wage rates and weekly salaries for individual occupations, and price changes for certain commodities vary from their national counterparts as a result of conditions peculiar to the locality.

In recent years, manufacturing has grown more rapidly in the Kansas City area than in the Nation, largely because of expansion in the manufacture of durable goods and because of the opening of many new plants. There is a relatively high proportion of employment in industries that are predominantly influenced by national markets; thus, national and local trends in compensation are generally similar. An unusually high proportion of jobs are in transportation, finance, and trade. Kansas City, like the Nation, has witnessed a rising level of living over the past 20 years, a reflection of increases in occupational earnings, and the upgrading of the labor force.

Single copies of *Employment, Earnings, and Living Costs in Kansas City* are available without charge from the Bureau's Kansas City regional office (see inside front cover for address). □



## Significant Decisions in Labor Cases



### Striking by public employees

Teachers in an Indiana community were in contempt of a court-imposed restraining order when they struck and picketed in support of their demands during contract negotiations; and the State's so-called "Little Norris-LaGuardia Act" prohibiting antilabor injunctions afforded them no refuge—it did not apply to public employees. Such was the ruling of the Indiana Supreme Court in *School City of Anderson*.<sup>1</sup>

The court's reasoning ran along the traditional lines of judicial decisions regarding stoppages by public servants: "The overwhelming weight of authority in the United States is that government employees may not engage in a strike for any purpose." The U.S. Supreme Court's decision in *United States v. United Mine Workers*<sup>2</sup> was cited as the bedrock of the Nation's judicial opinion on the issue. There the Court had ruled that government employees do not have the right to strike and can be enjoined from doing so. No fewer than 17 authoritative decisions of courts in various States were also cited by the Indiana court in support of its position.

Most remarkable, however, is the dissenting opinion. Much of the reasoning there is of broader applicability and encompasses the basic issues inherent in the employer-employee relationship in government service.

The dissent makes no frontal assault upon the vexing problem of sovereignty, although it heavily discounts the doctrine of sovereignty as a valid basis for banning antigovernment labor strikes. A major portion of it is concerned with the particular aspects of the case—the questions of whether the teachers' walkout was illegal and enjoined

as violative of the State's public policy, and whether the State's anti-injunction law denied protection to public employees. The answer to both questions was negative, the dissenting judges held.<sup>3</sup> Indiana had no such policy, the judicial pronouncements in other States were not the law in Indiana, and the State's Little Norris-LaGuardia Act's ban on antiunion injunctions contained nothing to indicate that it was not to be applied to public workers, the dissent maintained.

Turning to issues of concern to public workers everywhere, the dissenting judges noted recurrence of certain arguments in all the judicial decisions the majority cited as condemning antigovernment strikes. They repeated these arguments and rebutted them.

1. *Argument*: The terms of public employment are set by legislation and are not subject to bargaining or at the discretion of agencies. *Dissent*: In the case of teachers, the fact is that school boards have (as the board had in the present case) discretion in many areas of legislative intent, and arbitrary unfair board actions can be avoided only through effective means of pressure by teachers.

2. *Argument*: "To say that public employees can strike is to say that they can deny the authority of government."<sup>4</sup> *Dissent*: ". . . [L]ocal governing boards of school corporations have a great deal of discretion over the terms and conditions of employment of teachers. Any decision within this discretionary area is authorized by the government and, therefore, obviously does not deny the authority of government. The teachers seek to compel choices within that discretionary area [not] to destroy the body politic or pressure employers into violating their statutory duties."

3. *Argument*: "A strike by public employees is a strike against government itself, a situation so anomalous as to be unthinkable." *Dissent*: It is unthinkable that "any sovereign worthy of the name would strive to remain insulated from all

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Prepared by Eugene Skotzko of the Office of Publications, Bureau of Labor Statistics, in cooperation with the Office of the Solicitor of Labor.

pressures to act fairly and decently, without arbitrariness, towards its employees. The conflict of real social forces cannot be resolved by the invocation of magical phrases like 'sovereignty.' "

4. *Argument*: As agents of government, serving public purpose, public employees occupy "a status entirely different from [that of] private employees"; their strike contravenes public welfare and paralyzes society. *Dissent*: A distinction between private and public employees in this matter is violative of the equal protection clause of the Fourteenth Amendment, unless there is some "rational basis in light of the purpose of the no-strike prohibition."

Significantly, in belaboring the last argument, the dissenting judges stopped short of a demand for an absolute right for public employees to strike. Here, as throughout the length of their dissent, the judges seemed to say, or at least to imply, that some antigovernment strikes may not be permissible or even desirable, but that only a court should determine whether a public strike is justified. They said:

It is true that a strike by public employees may result in some amount of disruption of the agency for which they work. In the absence of legislative dealings with this subject we believe that it is a judicial function to determine whether the amount of the disruption of the service is so great that it warrants overriding the legitimate interests of the employees in having effective means to insure good faith bargaining by the employer. This is a minimum requirement before a court can declare a strike by government employees illegal.

Stressing that not all public strikes are disruptive, the dissenting judges said:

Does the majority [of the court] seriously believe that a strike by employees of municipal golf courses would result in anarchy? What of city parking lot attendants? What about janitors? What about referees of the high school basketball games? . . .

And again:

There is no difference in impact on the community between a strike by employees of a public utility and employees of a private utility; nor between employees of a municipal bus company and a privately owned bus company; nor between public school teachers and parochial school teachers. The form of ownership and management of the enterprise does not determine the amount of disruption caused by a strike. . . . [T]he form of ownership that is actually employed is often a political or historical accident. . . .

### Lockout before impasse

A fertilizer manufacturer shut down his plant before an impasse was reached in contract bargaining that had failed to resolve some difficult issues. The employer claimed that his action was dictated by business considerations: the busy season was approaching, and past experience as well the union's utterances at the bargaining table foreshadowed a strike "at a time of [the union's] own choosing"—undoubtedly with the arrival of the busy season, when it would cause the company much harm. Throughout the bargaining the employer made concessions and showed no antiunion attitude, nor was there a history of such an attitude on his part.

The union charged the company with unfair labor practices in violation of the Taft-Hartley Act's section 8(a)(1) and (3)—coercion of employees and discouragement of membership. The National Labor Relations Board found the company innocent of the charges, and a Federal court of appeals upheld the Board. (*Lane v. NLRB*)<sup>5</sup>

In reaching its decision, the appeals court traced the evolution of the U.S. Supreme Court's thinking on the subject of violations of the two provisions. First of all, it noted that, as the High Court had once acknowledged, "the basic issue at stake in these cases is the relative power to be accorded employers and unions in their economic battles." It then proceeded to show that the Supreme Court's attitude toward violations in this area has shifted from developing rules of "per se" violations (that is, violations which are such by their very nature regardless of any extenuating circumstances) to "ad hoc balancing of the competing interests of labor and management."

In the past, the appellate court said, the Supreme Court's position was that an unfair labor practice of an employer could be established only if the illegal purpose of his conduct could be proved or presumed. That is, the employer's conduct was illegal if it was "demonstrably so destructive of collective bargaining" that no evidence of illegal intent was needed (in a case involving coercion and violation of employee rights to organize and bargain, section 8(a)(1)); or was "inherently so prejudicial to union interests" that no evidence of antiunion animus was needed (in the case involving discouragement of membership, section 8(a)(3)).<sup>6</sup> Illegality of the employer's act could be

established in both instances by proving antiunion motivation on his part.

In 1967, two decisions marked a modification of the Supreme Court's position. In *Great Dane*,<sup>7</sup> the Court introduced a new category of illegal conduct: it ruled that an employer's act need have only a "comparatively slight" adverse effect on the employees' rights, to be considered as discouraging membership. A subsequent decision in *Fleetwood Trailers*<sup>8</sup> extended this new principle to coercion and interference with organizing and bargaining rights of employees (section 8(a)(1)).

To avoid illegality of conduct, an employer had to demonstrate that his acts had "legitimate and substantial business justification," with pronounced emphasis on the word "substantial." Only a proof of antiunion motivation could overcome the employer's business justification claim.

However, the new principle of "comparatively slight" adverse effect did not obviate the old. An employer was still in violation of the law if his conduct was inherently destructive of employees' rights, even if it was based on business consideration.

The appellate court ruled that the *Great Dane* principle of slight effect was applicable to the present case: the employer's lockout was of slight effect on the workers' rights, but the company had ample economic justification for its action. And there was no evidence of antiunion animus to overcome his claim of economic necessity.

Regarding the occurrence of the lockout prior to the impasse, the court's holding suggested that this fact was of no particular significance. As the Supreme Court clearly held in *Great Dane*, a lockout after impasse under similar circumstances would not be inherently destructive of the rights of employees.

### Court halts fruitless mediation

The National Mediation Board found it difficult to settle a dispute between the National Airlines and the Machinists Union. After 48 mediation sessions, which consumed 179 hours of talk, 97 issues remained unresolved and the positions of the parties had hardened. The Board remained silent when queried by both the union and a Federal district court as to what sustained its confidence that it would eventually resolve the dispute and why, in this obviously hopeless

situation, it was not seeking to induce the parties to arbitration, the final step in the procedure under the Railway Labor Act. Under these circumstances, the court granted the union's request for relief by ordering the Board to cease its mediation efforts and to strive for arbitration. (*International Association of Machinists v. National Mediation Board*)<sup>9</sup>

Paramount in the suit was the question of whether the court had the authority to issue such an order in a situation of this kind. The act grants the Board a great power in settling disputes in transportation industries, and full discretion in deciding at what point its mediation becomes ineffective and arbitration should be invoked. The Board challenged the court's authority to order termination of its efforts.

Citing judicial precedents,<sup>10</sup> the court held that although it cannot "substitute its judgment for the Board's" as regards the merits of the dispute, it has the duty, and the power, to inquire and determine "whether there has been a clear violation of the statute by reason of the Board's alleged arbitrary refusal to act." The court also recalled that the Administrative Procedure Act<sup>11</sup> enables a court to "'compel agency action unlawfully withheld or unreasonably delayed.'" "

The Board is powerful in dispute settlement, but it cannot abuse its power; it cannot behave in a way that could prevent the solution of a dispute. "It cannot invoke immunity from judicial scrutiny on the ground that it and it alone knows what is best under the circumstances," the court said.

### Foreign language ballots

Many years ago, the NLRB ruled that "[i]n election proceedings, it is the function of the Board to provide a 'laboratory' in which an experiment to determine the uninhibited desires of the employees may be conducted under conditions as nearly ideal as possible."<sup>12</sup> The statement came to haunt the Board in a recent case involving the nature of ballots used in a representation election it had conducted. An appeals court ruled: "An election in which one-third of the electorate has no access to ballots in language that it can understand necessarily falls below the minimum laboratory standards of fairness." (*Marriott In-Flite Services v. NLRB*)<sup>13</sup> For that particular election, the NLRB regional office provided ballots only in



English, even though it knew that a large proportion of the voters spoke and understood only Spanish.

The parties and the NLRB representative had agreed that the election would be held "in accordance with . . . the Board's rules and regulations, and the applicable procedures and policies of the Board." They also had agreed that election notices would be in English and Spanish, and the NLRB representative promised to provide ballots in Spanish if the Board's policy permitted them. Spanish language notices were subsequently furnished, but only English language ballots were printed. After the vote the employer filed objections, including one about the ballots used, and refused to recognize the winning union. The Board nevertheless certified the union, and the employer appealed.

The NLRB denied that providing foreign language ballots was one of its standard policies. The court, however, established that at least 18 of the 31 NLRB regional offices<sup>14</sup> either provided or, if need be, would provide such ballots, and that among the offices which had considered the issue, the one in question (Region 13, Chicago) alone did not make such ballots available. Further, the court cited a written statement of a high official of the Board that "election notices in a foreign language may be posted and in such cases, the foreign language . . . should also appear on the ballot," if the regional director deems it necessary. This evidence was adequate to show that there was such a Board policy. The Board was reminded that standards must be administered uniformly and may not be applied to some persons but withheld from others. Past judicial opinions to this effect were cited.

The Board argued that the ballots had been marked with English words "yes" and "no," which could not be mistaken even by those least proficient in the language, and that the bilingual

notices sufficed. The court replied that the ability to distinguish between "yes" and "no" does not preclude various complications in the exercise of voting rights by one whose knowledge of the language does not go much further. And the employees do not always read notices.

Also rejected was the Board's contention that voters in labor elections are not entitled to greater rights than those of the voters in political elections, in which only English language ballots are used. The court said that the two situations cannot be compared: "What comprises fairness to the majority in one case does not necessarily define fairness to the minority in the other." □

—FOOTNOTES—

<sup>1</sup> *Anderson Federation of Teachers, Local 519 v. School City of Anderson* (Sup. Ct.-Ind., October 1, 1969).

<sup>2</sup> 330 U.S. 258 (1947).

<sup>3</sup> The dissenting opinion was written by Chief Judge DeBruler; Judge J. Jackson concurred.

<sup>4</sup> Arguments are cited in the dissent opinion as quotations from unidentified decisions.

<sup>5</sup> C.A.-D.C., October 14, 1969.

<sup>6</sup> *American Ship Building Co. v. NLRB*, 380 U.S. 300 (1965).

<sup>7</sup> *NLRB v. Great Dane Trailers*, 388 U.S. 26 (1967).

<sup>8</sup> *NLRB v. Fleetwood Trailer Co.*, 389 U.S. 375 (1967).

<sup>9</sup> D.C.-D.C., August 7, 1969.

<sup>10</sup> With particular reliance on the appellate decision in *National Mediation Board v. Brotherhood of Railway Clerks*, 402 F.2d 196 (C.A.-D.C., 1968).

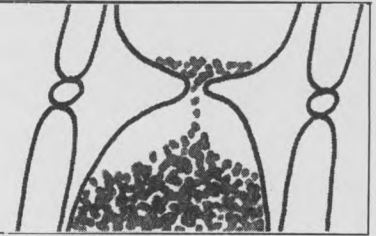
<sup>11</sup> 5 U.S.C.A., section 701-06.

<sup>12</sup> *General Shoe Corp.*, 77 NLRB No. 18 (1949).

<sup>13</sup> C.A. 5, October 7, 1969.

<sup>14</sup> At present, the NLRB has 31 regional and 3 subregional offices.

# Major Agreements Expiring Next Month



This list of collective bargaining agreements expiring in March was prepared in the Bureau's Office of Wages and Industrial Relations. The list includes agreements on file with the Bureau covering 1,000 workers or more in all industries except government.

Company and location	Industry	Union <sup>1</sup>	Number of workers
Alabama Dry Dock and Shipbuilding Co. (Mobile, Ala.).....	Transportation equipment.....	Marine and Shipbuilding Workers.....	2,500
Allen-Bradley Co. (Milwaukee, Wis.).....	Electrical products.....	Electrical Workers (UE) (Ind.).....	5,400
American Greetings Corp. (Cleveland, Ohio).....	Printing and publishing.....	International Association of Greeting Card Workers (Ind.).....	1,750
Associated General Contractors of America, Inc., Baltimore Builders Chapter (Maryland).....	Construction.....	Laborers.....	3,000
Associated General Contractors of America, Inc., Baltimore Builders Chapter (Maryland).....	Construction.....	Carpenters.....	2,100
Associated General Contractors of America, Inc., Evansville Chapter (Evansville, Ind.).....	Construction.....	Laborers.....	1,500
Associated General Contractors of America, Inc., Building and Heavy Construction (Wisconsin).....	Construction.....	Operating Engineers.....	1,200
Associated General Contractors of Jefferson County, Inc. (Texas).....	Construction.....	Carpenters.....	2,000
Builders' Assn., of Kansas City (Missouri and Kansas).....	Construction.....	Laborers.....	2,500
Campbell Soup Co. (Camden, N.J.).....	Food products.....	Meat Cutters.....	2,800
Cartage Agreement—Private Carriers <sup>2</sup> (Chicago, Ill.).....	Trucking.....	Chicago Truck Drivers (Ind.).....	6,000
Catskill Mountain Contractors Assn., Inc. (New York).....	Construction.....	Laborers.....	1,500
Central States Cement Haul <sup>2</sup> (Interstate).....	Trucking.....	Teamsters (Ind.).....	1,000
Chicago Coal Merchants Assn. (Chicago, Ill., and vicinity).....	Retail trade.....	Teamsters (Ind.).....	1,800
Chicago Downtown Hotels (Chicago, Ill.).....	Hotels.....	Hotel and Restaurant Employees.....	8,000
Cincinnati Gas & Electric Co.; The Union Light, Heat and Power Co. (Cincinnati, Ohio, and Kentucky).....	Utilities.....	Independent Utilities Union (Ind.).....	1,200
Dairies-Milk Cos. <sup>2</sup> (Massachusetts).....	Food products.....	Teamsters (Ind.).....	1,100
Dairy Employers' Labor Council (Seattle, Wash. and vicinity).....	Food products.....	Teamsters (Ind.).....	2,000
Dairy Industry Industrial Relations Assn., Master Office Agreement <sup>2</sup> (California).....	Food products.....	Teamsters (Ind.).....	1,000
Dairy Industry Industrial Relations Assn., Master Dairy Agreement (California).....	Food products.....	Teamsters (Ind.).....	8,000
Downtown Casinos and Hotels <sup>2</sup> (Las Vegas, Nev.).....	Hotels.....	Hotel and Restaurant Employees.....	1,700
Dried Fruit Industry <sup>2</sup> (Fresno County, Calif.).....	Food products.....	Teamsters (Ind.).....	4,500
Erwin Mills, Inc. (Cooleemee, N.C.).....	Textiles.....	United Textile Workers.....	1,300
General Dynamics Corp., General Dynamics/Electronics Division (Rochester, N.Y.).....	Electrical products.....	Rochester Independent Workers (Ind.).....	2,550
General Foods Corp., Maxwell House Division (Hoboken, N.J.).....	Food products.....	Meat Cutters.....	1,000
Great Western Sugar Co. (Interstate).....	Food products.....	Teamsters (Ind.).....	2,900
Hartford General Contractors Assn. (Connecticut).....	Construction.....	Laborers.....	2,300
Honeywell, Inc. (Gardena, Calif.).....	Instruments.....	Utility Workers.....	1,000
Local Cartage—Employers Assn. <sup>2</sup> (Chicago, Ill., area).....	Trucking.....	Chicago Truck Drivers (Ind.).....	5,000
Madison Employers Council, Building and Construction Contractors Division (Madison, Wis.).....	Construction.....	Carpenters.....	2,100
Madison Employers Council, Building and Construction Contractors Division (Wisconsin).....	Construction.....	Laborers.....	1,200
Masonite Corp. (Laurel, Miss.).....	Paper.....	Woodworkers.....	2,100
Mechanical Contractors Assn., of New Mexico, Inc. (New Mexico).....	Construction.....	Plumbers and Pipefitters.....	1,100
Milwaukee & Suburban Transport Corp. (Milwaukee, Wis.).....	Transit.....	Amalgamated Transit Union.....	1,500
Monroe International, Inc., Bristol Division (Bristol, Va.).....	Machinery.....	Machinists.....	1,200
Narragansett Electric Co. (Rhode Island).....	Utilities.....	Utility Workers of New England (Ind.).....	1,200
National Automatic Sprinkler and Fire Control Assn., Inc. (Interstate).....	Construction.....	Plumbers and Pipefitters.....	3,550
National Broadcasting Co., Inc., Master Agreement (Interstate).....	Communications.....	Broadcast Employees and Technicians.....	1,500
National Electrical Contractors Assn., Rocky Mountain Chapter (Colorado).....	Construction.....	Electrical Workers (IBEW).....	1,300
National Master Freight Agreement (Trucking Employers, Inc., Negotiator for employers) (Interstate).....	Trucking.....	Teamsters (Ind.).....	<sup>3</sup> 400,000
Nevada Industrial Council, Resort Hotels (Las Vegas, Nev.).....	Hotels.....	Hotel and Restaurant Employees.....	9,000
New England Road Builders' Assn., Massachusetts Labor Relations Division (Massachusetts).....	Construction.....	Laborers.....	10,000
New York Times Co. (New York, N.Y.).....	Printing and publishing.....	Newspaper Guild.....	2,500
News Syndicate Co., Inc. (New York, N.Y.).....	Printing and publishing.....	Newspaper Guild.....	1,100
Norfolk Shipbuilding & Drydock Corp. (Virginia).....	Transportation equipment.....	Boilermakers.....	1,800

Continued on next page.

## Major agreements expiring next month—Continued

Company and location	Industry	Union <sup>1</sup>	Number of workers
Outboard Marine Corp., Evinrude Motors Division (Milwaukee, Wis.).....	Machinery.....	Steelworkers.....	1,450
Painting and Decorating Contractors' Assn. (Cook and Lake Counties, Ill.)....	Construction.....	Painters.....	10,000
Printing Industries of Northern California (California).....	Printing and publishing.....	Bookbinders.....	1,600
Publishers' Assn., of New York City covering four newspaper companies (New York, N.Y.).....	Printing and publishing.....	Typographical Union.....	1,800
Publishers' Assn., of New York City (New York, N.Y.).....	Printing and publishing.....	Newspaper and Mail Deliverers' (Ind.).....	2,000
Puget Sound Power & Light Co. (Washington).....	Utilities.....	Electrical Workers (IBEW).....	1,350
Southern California Gas Co. (Los Angeles, Calif. area).....	Utilities.....	Utility Workers.....	3,000
Southern Counties Gas Co. of California (California).....	Utilities.....	Chemical Workers (Ind.).....	1,700
St. Joseph Lead Co. (Missouri).....	Mining.....	Steelworkers.....	1,350
United Airlines <sup>4</sup> Pilots (Interstate).....	Air Transportation.....	Airline Pilot's Association.....	5,500
United Metal Trades Association, Oregon District Foundry Operators (Washington and Oregon).....	Primary metals.....	Molders.....	1,150
United Parcel Service, Package Agreement (California).....	Trucking.....	Teamsters (Ind.).....	1,000
Virginia Electric and Power Co. (Virginia, West Virginia, and North Carolina).....	Utilities.....	Electrical Workers (IBEW).....	2,500
Wagner Electric Corp. (St. Louis, Mo.).....	Electrical products.....	Electrical Workers (IUE).....	4,000
Washington Metal Trades, Inc. (Puget Sound, Wash., area).....	Primary metals.....	Molders.....	1,000
Xerox Corp. (Rochester, N.Y.).....	Instruments.....	Clothing Workers.....	3,200

<sup>1</sup> Union affiliated with AFL-CIO except where noted as Independent (Ind.).  
<sup>2</sup> Industry area (group of companies signing same contract).

<sup>3</sup> Estimated.  
<sup>4</sup> Information is from newspaper account of settlement.

## Major collective bargaining settlements in 1969

Major contracts negotiated during 1969 provided a median wage and benefit package increase of 7.4 percent a year, as compared with 6.0 percent for the full year 1968 (assuming changes went into effect at equal intervals during the life of the contract). When actual timing of wage and benefit changes was taken into account, the median increase amounted to 8.2 percent a year, compared with 6.6 percent for 1968.

Considering wage rates separately from benefits, average annual increases during the entire life of the contract were 7.1 percent of straight-time average hourly earnings, compared with 5.2 percent for the full year 1968.

With continued emphasis on first-year changes, a median first-year adjustment of 8.2 percent of straight-time hourly earnings was shown for 1969, compared with 7.2 percent for the full year 1968.

Further details on these preliminary estimates by the Bureau of Labor Statistics are available from any of the regional offices listed on the inside front cover.



## Developments in Industrial Relations



### Shopcraft dispute

The December chapter in the dispute between four shopcraft unions<sup>1</sup> and the Nation's railroads unfolded with a strike threat, Government mediation, a tentative settlement, and its subsequent rejection. In November, the four unions rejected the recommendations of a Presidential Emergency Board created October 3 by President Nixon.<sup>2</sup> The board had proposed a 1-year pact with wage boosts of 2 percent retroactive to January 1, 1969, 3 percent July 1, 1969, and the establishment of a special rate for mechanics at least 20 cents an hour above the regular rate. (This special rate was to apply to from 15 to 25 percent of the mechanics.) The unions then issued a strike threat for December 3, the expiration date of a 60-day cooling-off period provided under the machinery of the Railway Labor Act.

On November 12, the U.S. Department of Labor entered the negotiations. Marathon bargaining sessions resulted in a December 4 settlement that provided the following wage increases: 2 percent retroactive to January 1; 3 percent retroactive to July 1; 10 cents September 1; 5 percent January 1, 1970; and 4 cents both April 1 and August 1, 1970. Highly skilled employees, who constitute about 84 percent of the workers, were to receive 5 cents an hour on top of the July 1 raise and a 7-cent boost effective on the date of ratification.

The agreement was rejected under the unions' "unit rule," which provides that none of the unions accept an agreement unless all accept it. Members of the Machinists, Electrical Workers (IBEW), and Boilermakers unions ratified the settlement; but the Sheet Metal Workers rejected it, fearing that jobs might be eventually eliminated because of a work rule change that permits workers in a particular craft to spend up to 50 percent of their time performing work in another craft. Carriers and unions announced that negotiations would resume on January 19

and that there would be no work stoppage prior to that date.

### Elections

After the most heated election campaign in the United Mine Workers (UMW) since 1920, W. A. (Tony) Boyle apparently defeated Joseph A. (Jock) Yablonski and retained the presidency of the 190,000-member union. The latest unofficial tally gave Mr. Boyle some 81,000 votes, compared with about 46,000 for Mr. Yablonski, a member of the union's international executive board. The bitterness engendered by the campaign promised to continue, however, as Mr. Yablonski termed the election results "fraudulent" and urged the U.S. Department of Labor to impound the ballots and begin "a prompt and thorough investigation." He claimed that Mr. Boyle's apparent victory was the result of "his embezzlement of millions of dollars from the UMW treasury for his campaign coffers." He also asserted that 500 regular union employees were illegally used as "campaign aides" and that 1,000 other people were added to the union's payroll to aid in Mr. Boyle's campaign.

A spokesman for Mr. Boyle termed the charges "categorical falsehood by a poor loser," adding "this was the cleanest, most honest and most peaceful election ever held in this organization." Several interesting patterns emerged from the relatively close election. (In 1964, Mr. Boyle defeated his opponent by a margin of 95,000 to 19,000.) Mr. Boyle generally had his best showings in districts with heavy concentrations of retired miners, possibly because the union had recently raised pensions to \$150 a month, from \$115.<sup>3</sup> Mr. Yablonski generally fared better in the "working" districts in West Virginia, Ohio, and southwestern Pennsylvania, where many miners have shown dissatisfaction with the results of recent collective bargaining settlements in the industry and the way the union is administered.

About 110,000 active miners and 80,000 retirees were eligible to vote in the election.

Less than 2 weeks before the balloting was scheduled to take place, the Department of Labor released its findings in an investigation of the union's finances. The report stated that Mr. Boyle had raised the salaries of union employees "without prior approval or subsequent ratification by the international executive board" as required by the union's constitution. The Department also asserted that there was inadequate reporting to the Government regarding a pension fund set up in 1960 for union officers, improper reporting of a \$1.4 million loan receivable, and loose handling of union expense accounts, as well as instances of nepotism. Mr. Boyle labeled the report a "smear job and open union busting." He said that "nothing was spelled out" in the report, and that "it was all allegations. There was not one specific charge of wrong-doing."

The Department of Labor did not intervene in the campaign, despite requests from Mr. Yablonski for a "continuing investigation" of alleged illegal activities by Mr. Boyle and his backers. The Department took the position that it is "long-established policy" to investigate election irregularities only after the voting is completed.

On January 5, Mr. Yablonski and his wife and daughter were found murdered in their Clarks-ville, Pa., home. The Department of Justice entered the case shortly thereafter.

Secretary of Labor Shultz announced, on January 8, receipt of a letter from the UMW General Counsel removing legal impediments to the immediate investigation of the December election, under Title IV of the Landrum-Griffin Act. By mid-January some 200 Labor Department investigators were at work in the coal fields checking into the election and the events preceding it.

The U.S. Department of Labor acted in another union election by requesting a Federal court to set aside the latest election of officers in the largest district of the Seafarers' International Union. The Department asked the U.S. District Court for the Eastern District of New York to require another election, under Labor Department auspices, contending that certain balloting procedures had violated Federal labor law. The request centered on the election of six top officials of the Seafarers' Atlantic, Gulf, Lakes and Inland Waters District during balloting in November

and December 1968. (The district includes an estimated 30,000 to 35,000 of the 80,000 members in the international union.) One of the six men is Paul Hall, president of the district and of the Seafarers' International Union. The suit was filed on October 15, following more than 6 weeks of negotiations between the Department of Labor and union officials. The suit charged that "members in good standing" of the district were denied "a reasonable opportunity to nominate, vote for, or otherwise support the candidates of their choice" in the 1968 elections. The suit also charged that "the imposition of unreasonable candidacy qualifications" denied members the right to be candidates.

The legal action was mentioned in an official report of the district's committee proposing an overhaul of its constitution to "limit its exposure to lawsuits by the Department of Labor." The committee accused the Labor Department of "nit-picking," claiming that the Department's suit was based on charges that, "at the most, appear to be harmless errors of members who participated in carrying out election procedures."

## Hospitals

In mid-December, trade unions which had won bargaining rights for nonprofessional hospital workers in Charleston, S.C., and Baltimore, Md.<sup>4</sup> met in New York to establish a national union. The aim of the new union will be to organize the estimated 2.5 million service and maintenance workers in private hospitals and nursing homes throughout the country. Currently about 10 percent of these workers are unionized. The new union will be known as the National Union of Hospital and Nursing Home Employees division of the Retail, Wholesale and Department Store Union (RWDSU). The prime organizer of the new union is the Drug and Hospital Union Local 1199 of the Retail and Wholesale organization, which now represents 42,500 workers in 200 hospitals and 2,000 drug stores in the New York Metropolitan area. Local 1199, with the support of the Southern Christian Leadership Conference, helped the Charleston Hospital workers win bargaining rights after a prolonged strike last summer.

On December 9, RWDSU Local 1199E negotiated an initial contract with the Johns Hopkins University Hospital, one of the Baltimore hospitals it recently organized. The 3-year pact,

which covered 1,500 nonprofessional employees, featured adoption of a modified union shop clause requiring 65 percent of the employees to be members of the union on the effective date of the agreement (December 1, 1969), and 75 percent to be members a year later. The union had been seeking a full union shop and had set two strike deadlines over the issue.

Wages were increased by 25 cents an hour on December 1 of both 1969 and 1970 and by 20 cents on December 1, 1971. A \$100-a-week minimum wage was also adopted, effective December 1, 1970. The hospital assumed the full cost of the pension plan, which had been partly financed by employees, and a union representative was added to the pension committee. A health and welfare plan was established, with the hospital paying an amount equal to 4 percent of wages effective December 1, increasing to 4.5 percent on December 1, 1970, and to 5 percent a year later. An additional paid holiday was also provided.

The union had won the right to represent the employees in an August 1969 election.<sup>5</sup>

About 4,000 nurses received a \$301 increase in annual salaries as a result of a November settlement between the New York State Nurses Association and New York City's Commissioner of Hospitals. The increase, which was retroactive to July 1, 1969, brought rate ranges to \$7,900-\$9,460 a year for staff nurses, \$8,600-\$10,400 for head nurses, and \$9,700-\$12,040 for supervisors of nurses and nurse midwives. The amount of the increase was determined by comparing pay in the 18 city-operated hospitals with the average for 20 voluntary, State, and Federal hospitals in the metropolitan area.

## Government

On December 5, the Michigan State Civil Service Commission approved wage increases for classified hourly and salaried employees. Raises for the 39,000 hourly workers ranged from 4.7 to 18 percent. Pay increases for salaried employees were from 5 to 6.6 percent. The overall average increase was 6.4 percent. The new wages are effective July 1, 1970. For hourly workers, the resulting rate range was \$2.34 to \$5.54. The commission also approved annual longevity payments of \$132 to \$660 for employees with at least 6 years of continuous service.

A strike which had kept the Providence, R.I., public schools closed for 12 days ended on December 12 when the city's 1,400 teachers ratified a 2-year contract. The pact, which became effective January 1, 1970, provided for 11-step salary schedules of \$6,850 to \$10,000 the first year, and \$7,000 to \$11,200 in the second year. The previous schedule was \$6,500 to \$10,000, also in 11 steps.

## Airlines

In November, the Machinists ratified a 3-year nationwide contract with Northwest Airlines, Inc., covering 3,500 ground service employees. Rates for mechanics at the top of the scale will rise, in steps, to \$5.62 an hour on May 1, 1971, from \$4.14. Shift differentials and license and line premiums were increased; the escalator clause was revised to provide adjustments of up to 7 cents an hour in January of 1970, 1971, and 1972. Under the previous agreement, the employees received maximum 3-cent-an-hour adjustments in January and September 1968. Other terms included improved holidays, vacations and pensions, and the establishment of a dental plan.

## Earnings index

The Bureau's index of average hourly earnings (excluding overtime and the effects of interindustry employment shifts.) of production workers in manufacturing rose 1.1 in September to 149.5. Data for prior periods are shown below.

	1968	Index (1957-59 =100)	1969	Index (1957-59 =100)	
September	-----	141.2	January	-----	144.4
October	-----	141.7	February	-----	144.9
November	-----	142.6	March	-----	145.2
December	-----	143.6	April	-----	146.0
			May	-----	146.6
			June	-----	146.9
			July	-----	147.8
			August	-----	148.4
			September	-----	149.5
Annual averages:					
	1967	-----			131.5
	1968	-----			139.5

BLS Bulletin 1616, *Summary of Manufacturing Production Workers Earnings Series, 1936-68*, contains monthly data from 1947 through 1968 and data for selected periods from 1939 to 1947.



## Stone, clay, and glass

About 5,000 workers at 16 plants in five States were covered by a November settlement between three refractories and the International Union of District 50, United Mine Workers of America.<sup>6</sup> The contract provided for a 27.5-cent-an-hour immediate wage increase, plus inequity adjustments, an average 25 cents in the second year, and a wage reopener in the final year. Supplementary benefit changes included an eighth paid holiday; an increase to \$6 a month in the pension for each year of credited service, effective in November 1970; sickness and accident benefits of \$70 a week for up to 52 weeks, instead of \$60 a week for 26 weeks; \$6,000 life and accidental death and dismemberment insurance, instead of \$5,000; and improved funeral leave and jury duty benefits. The union said that these terms were expected to be extended to several other firms.

## Stockbrokers

To counter profit cuts resulting from decreased trading volume and increased costs of doing business, a growing number of New York City brokerage firms have reduced the commission rates for their salesmen. In addition, some other firms were considering personnel reductions.

Cuts have averaged between 5 and 10 percent in terms of estimated dollar payments. To induce salesmen to raise the average size of individual sales transactions, and thus raise profits, the cuts were usually coupled with adoption of "quality bonuses" for large sales. At Shearson-Hammill & Co., the new basic commission scale was set at the following levels: 30 percent if gross annual fees are \$59,999 or less, 33 percent if fees are \$60,000 to \$99,999, and 35 percent if fees exceed \$100,000. In addition, a salesman grossing \$60,000 or more receives a quality bonus of 1 percentage point if his average gross fee per transaction is \$45 to \$49.99, 3 points if it is \$50 to \$54, and 5 points

if it is \$55 or more. Previously, scales ranged from 33½ percent to 50 percent, with no quality bonuses. At Shearson-Hammill and some other firms, the reductions in basic commissions were also partly offset by improvements in benefits such as profit sharing and medical and disability coverage.

The first public call for commission reductions came in a September speech by Leon Kendall, president of the Association of Stock Exchange Firms. Mr. Kendall referred to a study that showed that the dollar amount of salesmen's compensation increased 91 percent during 1958 to 1968, while profits to brokerage firm owners rose 29 percent.

## No-strike plan

In a move intended to aid Phoenix Steel Corp. in improving its financial condition, the Steelworkers have agreed not to engage in any strikes against the specialty steelmaker until August 1, 1974, or possibly later. Under the plan, which was announced in mid-December, the current collective bargaining agreement will be extended 3 years beyond its scheduled August 1, 1971, termination or until the termination date of the contract negotiated in 1971 at the major basic steel producers, whichever date comes sooner. Phoenix employees will receive all of the wage and benefit gains of the 1971 settlement in the industry but they will not participate in any walkout. The Steelworkers represent 3,000 Phoenix employees in Claymont, Del., and Phoenixville, Pa.

## Statistical summary

Strikes in November totaled 4,050,000 man-days or .29 percent of the total estimated working time,<sup>7</sup> compared to .17 percent the previous November and .22 percent in November 1967. The continuing strike of a coalition of 13 unions representing 147,000 workers at the General Electric Co. accounted for a large portion of the idleness. □

### —FOOTNOTES—

<sup>1</sup> Machinists, Electrical Workers (IBEW), Boilermakers, and Sheet Metal Workers.

<sup>2</sup> See *Monthly Labor Review*, December 1969, p. 69.

<sup>3</sup> See *Monthly Labor Review*, September 1969, p. 57.

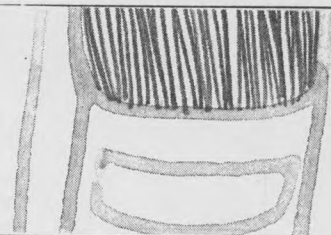
<sup>4</sup> See *Monthly Labor Review*, November 1969, p. 65.

<sup>5</sup> See *Monthly Labor Review*, November 1969, p. 76.

<sup>6</sup> The firms are General Refractories Co.; the Harbison-Walker Refractories Co., division of Dresser Industries Inc.; and Kaiser Industries Corp. The plants are in Alabama, Georgia, Maryland, Missouri, and Ohio.

<sup>7</sup> Data for 1969 are preliminary.

## Book Reviews and Notes



### Finding new perspectives

*The Crisis of Industrial Society.* By Norman Birnbaum. New York, Oxford University Press, 1969. 185 pp., bibliography. \$4.75.

The essential contribution of these three short essays on class, power, and culture lies in the field of speculative and critical sociology. The crisis dealt with by these essays is the dilemma that must inevitably arise in modern societies when "The active component of culture . . . has been allocated to science and technology [while the] meaningful one . . . which alone could make sense of this activity has been ascribed to those devoid of any practical competence." Here lies, according to our author, the true source of the absurdities and inhumanity shown by western societies in recent times. A new and humanistic industrial society demands new perspectives.

Toward this end, the author has provided us with a penetrating, shrewd, informed commentary on the contemporary western scene. These comments do not amount to a manifesto; there is nothing here that could reasonably be regarded as a theory; nor is there anything being said that has not been said before. The book's value lies in its highly relevant and acute insights about situations with which we are already familiar.

The trouble with works of this kind is the tension that must inevitably develop between abstract ideas such as class, power, and culture (as tools of analysis) and reality. Too often, the author gives the impression that the ideas he has abstracted are the cause of contemporary events. Of course they are not; causality is much more complex than that. This is where the title of the book is misleading. What we have here are reflections on *some* aspects of the crisis faced by industrial societies—however illuminating and valuable those reflections prove to be. Where Mr. Birnbaum tries to do more than this, he does so only with a stressing and straining that makes one wonder whether

the exercise was worthwhile. Moreover, when he concludes that ". . . industrial culture can be humanized if men again take power into their own hands," he leaves this reviewer wondering how this is to be done. Perhaps this is where Mr. Birnbaum's true value as a sociologist lies: not in providing answers, but in provoking the reader to ask the right questions.

—WILLIAM WOODRUFF  
Graduate Research Professor  
of Economics and History  
University of Florida

### Commitment and conflict

*An Occupation in Conflict: A Study of the Personnel Manager.* By George Ritzer and Harrison M. Trice. Ithaca, N. Y., Cornell University, New York State School of Industrial and Labor Relations, 1969. 127 pp. \$5.

It is odd that there are so few penetrating studies of the personnel manager and the personnel function, in view of their potential for significant influence on organizational behavior. This research report, based on competent theorizing and investigation, is therefore a welcome contribution to knowledge. It makes rewarding reading for the scholar in search of hypotheses, for the behavioral theorist interested in applications of the tools of behavioral science research, and for the student seeking to enlarge his knowledge of personnel administration. Although the authors address the book to researchers and theoreticians rather than practitioners, it is not so technical or esoteric as to prevent the latter from gaining useful insights.

The project was conducted at Cornell University and sponsored by the American Society for Personnel Administration. Most of the data were obtained from 530 questionnaires returned from a sample of 848 of the association's members. In addition, depth interviews were used in exploring conflict resolution, and a case study of a single

firm is presented. In appropriate appendices, the authors describe the evolution and use of the questionnaire, and present the questionnaire itself as well as the interview schedule.

This study demonstrates what can be achieved when a research design relates behavioral concepts to carefully conceptualized theoretical problems. Both the behavioral concepts and the research findings become more meaningful. The researchers used four concepts from occupational sociology to draw a focus on the personnel manager: professionalism, commitment, role conflict resolution, and occupational image. To this reader, the study was most successful in dealing with commitment and role conflict resolution, and least satisfactory in exploring the questions of professionalism and occupational image.

The findings on professionalization are not surprising: the personnel manager is not very far along enroute toward this goal. The development of the criteria for occupational and individual professionalization are rather pedestrian, and more space is devoted to the delineation of the criteria than is necessary.

The study concludes that personnel managers are almost as highly committed to their employing organizations as to their occupation. This appears to be a reversal of traditional commitment theory as represented by Howard Becker's concept of side bets. Side bets are the ways in which individuals acquire stakes in things outside the firm, such as stock investments or real estate. Hence, the greater the number of side bets, the greater the commitment to the organization. Measurements of several dimensions such as age, education, marriage, and children, which should affect the number of side bets, revealed correlation coefficients too low to support Becker's theory. The coexistence of occupational<sup>1</sup> and organizational commitment are explained by the coexistence of three ideologies in personnel administration: the trash-can (dumping ground) factor, the welfare orientation, and professionalism. These explanations seem plausible, but they do not rule out other explanations which might be tested in future research.

A third major effort of the study was to retest and supplement the theory of role conflict resolution advanced by Gross, Mason, and McEachern. A major finding was that the personnel manager is an independent actor. He behaves independently both in superior-subordinate relations and in other types of conflict situations. The authors

consider this to be at variance with the traditional occupational image of the personnel manager, which is supposed to derive from his staff advisory role. This latter role has been the subject of much analysis. The framework of occupational sociology does not seem to this reviewer to be the correct one by which to understand the decision behavior of the personnel executive.

The meticulous reader will note some minor flaws in this book. Several secondary sources are footnoted where original sources would be better. Textbooks are cited as authorities. Moreover, the book is uneven in structure and impact. One does not get a sense of cumulative development. Part of this problem lies in the methodologies used. The main questionnaire was used for ASPA members. The interview data were half from ASPA members and half from nonmembers. Therefore, there was a problem in comparing the interview and questionnaire data. Chapter 7 surprises the reader because it is a case study not mentioned in the introductory sections. It too does not seem to lend continuity to the discussion. There is much extraneous and superficial material in the early chapters, yet the book is comparatively short.

In spite of the limited nature of occupational theory as a window to organizational behavior, most readers will find this a stimulating and provocative piece of work.

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## Teacher insurance

*Benefit Plans in American Colleges.* By William C. Greenough and Francis P. King. New York, Columbia University Press, 1969. 481 pp. \$15.

Many lessons may be learned by the planners of employee benefits in private industry from the practical pioneering of our private colleges and universities. Much of their leadership stems from the Teachers Insurance and Annuity Association, whose chairman and research officer are the authors of this book and its predecessors. While they devote the most space to describing the prevalence and features of the health, insurance, and pension plans of the 1,200 public and private institutions responding to their questionnaire



(including five appendices summarizing the salient features of the retirement plans of each of these 1,200 institutions), the authors' explanation of the unique aspects of the teachers' insurance plans was of greatest interest to this reviewer.

While it is generally known that as early as 1952, the Teachers' Insurance and Annuity Association established an equity fund—College Retirement Equity Fund—to give retirees some continuing protection against price inflation and enable them to share in the rising standard of living, one of the most overlooked aspects of this fund is the timing of purchases for the retiree's account. Instead of purchasing a variable annuity out of pension fund accumulations at the time of retirement, or during the following year, members of the College Retirement Equity Fund purchase participation units in a portfolio of securities each year. This procedure automatically results in dollar-averaging over the employee's entire period of plan membership. Thus, the equity fund member is protected against purchasing all his shares in the fund in a year or two when the stock market was unusually high and also enables him to share over a longer period of time in the appreciation of the growth stocks his fund has acquired.

Another interesting feature of the Teachers Insurance and Annuity Association is that in order to give young employees with the largest families the most coverage, many institutions determine the amount of life insurance coverage on a money purchase basis, rather than as a function of salary. Thus, for example, the school may provide whatever insurance \$3 a month will buy. In 1968, this would purchase \$34,281 for employees who are 25 years old and \$1,932 for those 65. Since the amount provided older employees is regarded by many schools to be inadequate, declining plans are often combined with flat benefit plans or plans geared to salary. Decreasing life insurance has enabled the teachers' association to tailor its coverage more closely to its members' needs than the traditional survivor-income plans, such as those in the automobile industry. However, until noncontributory life insurance is more prevalent among its institutions, the Teachers Insurance and Annuity Association is probably justified in not offering such plans.

With the aid of a grant from the Ford Foundation, the teachers' association also pioneered in the

development of long-term disability insurance and of comprehensive major medical insurance. An important feature of the former is to supplement cash benefits by a "waiver of premium" benefit that continues both the employer and employee contributions to the pension fund. This feature permits the payment, after the disability benefits stop at age 65, of pension benefits based on the employee's entire career, including his years of disability, rather than just on his years of active service. While found in a few other plans, this is a fairly low-cost feature which should be more widely adopted by all long-term disability plans.

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### Business cycles

*The Business Cycle in a Changing World.* By Arthur F. Burns. New York, National Bureau of Economic Research, 1969. 368 pp. \$8.50, Columbia University Press, New York.

Interest in these 13 previously published essays derives from the reputation of the author more than the other way round. Most were written during the elder-statesman period of Burns' career between his resignation as Chairman of the Council of Economic Advisers in 1956 and his appointment as Chairman of the Federal Reserve Board in 1969. Ten were topical pieces on current issues of stabilization policy, two are reports on business cycle research, while the 13th is only loosely related to business cycles.

The book embodies the reflections of a wise and knowledgeable economist on the American scene. Those looking for clues as to what kind of man is now in charge of monetary policy will be reassured. There is no doctrinaire commitment to any particular policy or theory. What stands out is Burns' immense factual knowledge, his balanced judgment, and his appreciation of the complexities of economic life that get neglected in simplified models. Many, however, will object to Burns' emphasis on the evils of inflation as against the evils of unemployment. "There can be little doubt that poor people, or people of modest means generally, are the chief sufferers from inflation."

The essay of most enduring interest is "The Nature and Causes of Business Cycles." Although it is the general article on business cycles in the *International Encyclopedia of the Social Sciences*, it is dominated by Burns' own approach to the subject. It has virtually nothing on econometrics and little more on cyclical models. (The *Encyclopedia's* excellent companion piece on mathematical models by Haavelmo is primarily methodological and is no substitute for the discussion of the substantive contribution of models that belongs in Burns' general article. The entry on aggregate econometric models by Carl Christ, though including more substantive discussion, is subject to similar comments.) Though Burns pays some attention at the end of the article to the changing nature of the cycle, his emphasis on the cycle as self-generating is misleading for an era when government policy has come to dominate economic fluctuations. He barely mentions recent work directed toward redefining the cycle in terms of rates of change. The essay as a whole gives an obsolescent account of the business cycle.

Burns' contribution to the *International Encyclopedia* can be viewed as a final report on the research project described by Burns and Mitchell in *Measuring Business Cycles* (1946), a project begun by Mitchell at the National Bureau of Economic Research shortly after World War I and continued under Burns' direction after Mitchell's retirement and death. It was intended through an inductive approach to achieve a theory that would solve the riddle of the business cycle. It can be compared and contrasted with the model-building or deductive approach used by theorists too numerous to mention, with the historical approach advocated by a small number of scholars such as Slichter and R. A. Gordon, and with the econometric approach, which, pioneered by Tinbergen, dominates the field.

None of the other approaches has been much of a success in dealing with cycles. Slichter and Gordon each started a major research effort using the historical approach and then dropped it. The deductive approach resulted in a bewildering variety of theories, none with more than a few adherents—the business cycle is too complex, too sensitive to small, erratic quantitative changes, to lend itself to analysis through the kind of simplifying assumptions so illuminating in other parts of economics (e.g., the theory of comparative

cost). The econometric approach has come to the fore not by solving the problem of the business cycle but by bypassing it. At this writing, the last peak was in 1960. After the trough in 1961, there began an unprecedentedly long expansion. Since most of the peaks and troughs that had occurred in the previous quarter century were the result of government policy (a statement that almost surely will be true of any that occur in the future), and since econometric models perforce are based almost exclusively on data since World War II, they have not had to be concerned with self-generating cycles.

With the recent reorganization of the National Bureau under new leadership, the Burns-Mitchell research program on business cycles is virtually at an end. Like the other approaches, it yielded valuable results. The search for empirical regularities enriched our knowledge of what happens during cycles and yielded as a byproduct the leading indicator approach to forecasting. But as with the other approaches, the final outcome is a letdown. Burns' essay gives a skillful description of the business cycle blended with bits and pieces of explanation. But no theory.

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### Brief history

*The New Industrial Society.* By Bernard A. Weisberger. New York, John Wiley and Sons, Inc., 1969. 162 pp. \$6.50, clothbound; \$2.50, paperbound.

Historical works continue to roll from the press in profusion. Almost every academician these days is a contributor to some textbook series or collection of readings. It is hardly surprising, therefore, that the busy editors of the "Wiley American Republic Series" refer in their perfunctory preface to an entirely different volume and title than the one Professor Weisberger has written. His book in turn, it should be pointed out, covers much the same ground in briefer compass as his two volumes, *The Age of Steel and Steam* and *Reaching for Empire* in the *Life* history of the United States. There is less attention here to personalities and the illustrations, though adequate, are not equal to *Life's*

lavish standards. But the writing is lucid and even elegant—much beyond the usual text requirements.

What, then, is Professor Weisberger's contribution? As the title indicates, his book is another of many studies of American economic growth and attendant social problems. Although the cited time span is 1848 to 1900, the author ranges more widely over the 19th century and even looks ahead into the Progressive Era. Despite the argument for a pre-Civil War date, it seems clear from Weisberger's own exposition that the real beginnings of the new American industrial society belong in the last third of the 19th century. To contend, as he does, that the fur trade was a model for the organization of industry seems quixotic and is rebutted by his own emphasis on science and technology.

Among the growing number of short narratives of separate parts of American history—designed to supplant by cutting into smaller pieces the old survey texts—this book achieves a place as a concise, interesting, and valuable interpretive account. Economic forces are stressed, and social, cultural, and political changes are related to this foundation. The emphasis is upon consensus rather than conflict. Conservative leaders like Booker T. Washington and Samuel Gompers win praise because they "may have made the best bargain attainable at the time." Labor's role is treated briefly in the chapter, "A New American Population (1870–1910)." There is a highly selective bibliographical essay that discusses only some two dozen works distinguished partly by their critical view of the older Parrington–Matthew Josephson "great barbecue" and "robber baron" theses respecting American industrial progress. Thus the book, while *à la mode*, is definitely not New Left.

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## Black status

*The Circle of Discrimination: An Economic and Social Study of the Black Man in New York.*  
By Herman D. Bloch. New York, New York University Press, 1969. 274 pp. \$7.95.

This book examines in detail the historical development of the economic, social, and political factors contributing to the current status of the

black man in New York. The seemingly inevitable result of the interaction between these forces—the markedly inferior socioeconomic position for the black man—receives primary emphasis throughout. White attitudes arising from the slavery system coupled with the black man's high visibility and the successive waves of unskilled immigration to the United States led to the concentration of black workers in low-skill, dead-end jobs. This situation tended to perpetuate itself by removing both the incentive and the opportunity to achieve the higher levels of education and training necessary for economic advancement. The resulting inferior status of the black man served to reinforce the idea of inherent Negro inferiority.

Approximately one-half of the book is devoted to trade unionism and black political activity. At the national level, labor leaders, both past and present, seem genuinely opposed to color barriers. But they lack the power to translate their views into action at the local level where discriminatory practices exist. The political history of the New York black man before 1900 is portrayed as one of almost complete frustration. Initial disenfranchisement was followed by a period of political ineffectiveness, due both to the lack of black unity and to the unwillingness of the major parties to make significant concessions to gain the black vote. The political situation after 1900 was not specifically covered, but general comments relating to this period indicate that more success has been achieved in the passage of antidiscrimination laws than in their enforcement. The unavoidable difficulties in enforcement lead to the conclusion that "the law can only . . . fill a very small gap in the existing situation."

The author is at his best when dealing with carefully documented historical material and recent case histories drawn from a wealth of personal experience over the past three decades. But when brief attention is directed to empirical evidence relating to recent years, the presentation is weaker. Statistics are too frequently discussed without an adequate frame of reference. The data cited by the author to establish that the relative economic status of the black man did not improve from 1940 to 1960 is not convincing. The conclusion that little recent progress has been made in the ability of educated black men to obtain employment commensurate with their educational achievement is also inadequately



supported. In this case, the use of data covering all age groups biases the sample in favor of individuals whose education was completed and whose employment patterns were fixed long before the recent period being considered.

These difficulties do not affect the major portion of the book which provides an informative history of racial discrimination in New York.

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### Outline of systems

*Labor Relations and the Law in Belgium and the United States.* By Seyfarth, Shaw, Fairweather, and Geraldson. Ann Arbor, Mich., University of Michigan, 1969. 455 pp., bibliography. \$15.

This volume is the second in a series of comparative studies of labor relations in the United States and selected West European countries. The first volume considered the United Kingdom and subsequent publications are planned for West Germany, France, Italy, and Spain.

Research for this book was undertaken by eight large international companies with headquarters in the United States and the entire project was "directed and coordinated" by the well-known labor law firm of Seyfarth, Shaw, Fairweather, and Geraldson. The study was designed to assist the project companies in "comprehending what the differences in the labor relations systems of the various countries are, in understanding the origins of these differences, and in perceiving their operational consequences."

Unfortunately, the authors have not done well in terms of their self-imposed objectives. There is no analysis of the social and cultural factors which have influenced the development of these two labor relations systems. The book lacks a sense of history that a person needs to understand and to work effectively in a foreign system or culture. We have Ugly Americans, not because of technical incompetence, but because of a false sense of superiority resulting from an ignorance of the traditions, beliefs, and value systems of other human beings. In addition, "operational consequences" may have been determined in private management councils but they certainly are not discussed in this published volume. The book, at

best, provides a sketchy outline of certain labor relations features in the United States and Belgium: collective bargaining law, forms and methods of compensation, management control, and personnel practices.

The authors have attempted a comparative fact collection and listing. Possibly because so many areas are covered, the facts on any one subject are necessarily incomplete and therefore subject to argument and to misinterpretation. The authors claim, for example, that "the typical U.S. labor agreement has become a complete labor relations code" and that, whereas a permanent arbitrator "normally evidences a genuine desire to render sound decisions . . . the same degree of responsibility cannot be expected from an ad hoc arbitrator." They also suggest, on the basis of the report of one Belgian plant, "that there is less reluctance to cross a picket line in Belgium than in the United States." On page 188, the authors, after comparing the relative wage levels of U.S. and Belgian workers, conclude correctly that these statistics are inconclusive until subjected to a comparative analysis of such things as output per man-hour, unit costs, bargaining policies, and government economic policies. Yet no such analysis is made in the subsequent 150 pages devoted to wages. In terms of style, the fact compilations make for uninspiring reading, many quotations are not footnoted, and a perusal of the earlier "Labor Relations and the Law in the United Kingdom and the United States" indicates a striking similarity in the content of the sections on U.S. labor relations.

The authors reach no general conclusions concerning the two labor relations systems. (The "Conclusion" section appears almost verbatim in the two volumes produced so far.) The authors maintain that the management participants were the primary beneficiaries of this project because these companies worked on "specific problems" and engaged "in a process of direct communication." This is probably so, but that makes it only more difficult to justify the publication of this work by an outstanding business school at this selling price.

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### Primary source

*The Truth about Boulwarism: Trying to Do Right Voluntarily.* By Lemuel R. Boulware. Washington, Bureau of National Affairs, Inc., 1969. 180 pp. \$7.50, clothbound; \$2.85, paperbound.

Lemuel Boulware, the retired vice president for Employee and Community Relations of the General Electric Co., has written a spirited defense of "Boulwarism," his approach to collective bargaining, and still practiced at GE and other companies. Shortly after publication, a prolonged major strike impaired production at General Electric and at about the same time the Second Circuit Court of Appeals ruled that the company's use of the tactics espoused by Boulware in the 1960 bargaining negotiations had violated the National Labor Relations Act. After 23 years, Boulwarism remains at best a controversial method of handling employee relations.

The book opens with Boulware, the marketing consultant and general management expert, being named to the brand new post of vice president for Employee and Community Relations, with little to guide him but the conviction that General Electric's industrial relations were less than perfect. Using techniques borrowed from marketing, he studied the worker's needs, then determined a nine-point program to meet them, a program he says that was merely a more emphatic and formal statement of what the company had been doing all along. To the program was added a method of communicating a basic offer to the unions which represent many of the employees and communicating the same offer to the press, employees, management personnel, and anyone else who might care to know. To the successive entreaties of the unions to offer more, or at least a different mix, the Boulware approach turns a virtually deaf ear; this is designed to block the union tactic of showing up the employer while depicting themselves as necessary to force equitable treatment from otherwise unyielding adversaries. Unions have so far successfully challenged this as a refusal to bargain.

A lot is said about all of this. But the most glaring flaw to this polemic is the complete and utter conviction that the Boulware approach is correct, and not only for General Electric but for society as well. There is no analysis of possible

error despite the fact that Boulwarism has resulted in controversy, strife, and adverse judicial decisions. Boulware is strong medicine. He lashes out against those who fail to agree with him, or whose views do not coincide with his own. Thus, he rails against the unions, union leaders (never by name), the Courts, the New Deal and its successors, the press, the Federal Mediation and Conciliation Service, socialists, and the public.

Because the book ends its coverage with the events of the 1950's, it may prove unsatisfying to those concerned with a more contemporary view of the scene. Similarly, it is sometimes only vaguely chronological. But for anyone who wants to understand modern collective bargaining, or is concerned with the labor-management struggle in this country, this book is important. It is not often a man's name comes to connote a basic bargaining response, and when the man himself tries to explain what he meant, few can deny the importance of the work.

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### Administering manpower programs

*Federal Training and Work Programs in the Sixties.*

By Sar A. Levitan and Garth L. Mangum. Ann Arbor, Mich., University of Michigan and Wayne State University, Institute of Labor and Industrial Relations, 1969. 465 pp. \$9.50, clothbound; \$6.50, paperbound.

The two authors of this book, both of whom are long-time observers of the manpower scene at first-hand, have brought together in one useful package a number of their previously published papers on federally supported manpower programs. The papers review the legislative history, program objectives, administrative and other problems, and evidence of success and failure of seven programs: The Manpower Development and Training Act, Vocational Education, the Job Corps, the Neighborhood Youth Corps, the Work Experience and Training Program, Vocational Rehabilitation, and the Employment Service. In addition, the authors include an updated, as of 1968, overall assessment of the Federal manpower system.

In their introduction, the authors point out the change in the magnitude of the Federal Govern-

ment's commitment to manpower training during the 1960's. From 1961, when the Area Redevelopment Act with its retraining program was passed, to 1968, when such newer measures as the Manpower Development and Training Act and the Economic Opportunity Act were in full swing, Federal manpower allocations rose from less than a quarter billion dollars to nearly 2.2 billion dollars, an increase of 9 times. The authors show how Federal policy shifted from its traditional concern with putting the best man into an existing job to training and developing the employability of the unemployed and disadvantaged.

The individual papers bring out the problems of administration and operation of the major programs that transformed manpower policy during the 1960's. Although the reader might prefer a systematic comparison of the different programs in regard to social needs, there is much to be gained from the separate analyses of the seven they discuss in detail. The evaluations are primarily in terms of the program's own objectives, although the authors point out that evidence for evaluation is often inadequate, and sometimes nonexistent. In general, they are careful to avoid quick judgments based upon either lack of data or arbitrary criteria, such as cost-benefit ratios, which they believe can be misleading.

In their concluding section, the authors are principally concerned with the complex problems of intergovernmental relations which the piecemeal creation of manpower programs produced. Only 1 of every 10 Federal manpower dollars is spent on programs operated by the Federal Government; the rest are grants and contracts to State and local governments and to private organizations. As a new approach, the authors like the idea of local centers of manpower services and propose a new department of manpower that would coordinate all programs at the Federal level. Perhaps they are too optimistic in hoping that such a system could resolve problems of gaps and overlaps among specific programs and straighten out present relationships with States and local agencies, but their arguments should be given serious attention.

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# Current Labor Statistics



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## 1. Employment status of the noninstitutional population, 16 years and over, 1947 to date

[In thousands]

Year	Total non-institutional population	Total labor force		Civilian labor force							Not in labor force
		Number	Percent of population	Total	Employed			Unemployed			
					Total	Agriculture	Nonagri-cultural industries	Number	Percent of labor force		
1947	103,418	60,941	58.9	59,350	57,039	7,891	49,148	2,311	3.9	42,477	
1948	104,527	62,080	59.4	60,621	58,344	7,629	50,713	2,276	3.8	42,447	
1949	105,611	62,903	59.6	61,286	57,649	7,656	49,990	3,637	5.9	42,708	
1950	106,645	63,858	59.9	62,208	58,920	7,160	51,760	3,288	5.3	42,787	
1951	107,721	65,117	60.4	62,017	59,962	6,726	53,239	2,055	3.3	42,604	
1952	108,823	65,730	60.4	62,138	60,254	6,501	53,753	1,883	3.0	43,093	
1953	110,601	66,560	60.2	63,015	61,181	6,261	54,922	1,834	2.9	44,041	
1954	111,671	66,993	60.0	63,643	60,110	6,206	53,903	3,532	5.5	44,678	
1955	112,732	68,072	60.4	65,023	62,171	6,449	55,724	2,852	4.4	44,660	
1956	113,811	69,409	61.0	66,552	63,802	6,283	57,517	2,750	4.1	44,402	
1957	115,065	69,729	60.6	66,929	64,071	5,947	58,123	2,859	4.3	45,336	
1958	116,363	70,275	60.4	67,639	63,036	5,586	57,450	4,602	6.8	46,088	
1959	117,881	70,921	60.2	68,369	64,630	5,565	59,065	3,740	5.5	46,960	
1960	119,759	72,142	60.2	69,628	65,778	5,458	60,318	3,852	5.5	47,617	
1961	121,343	73,031	60.2	70,459	65,746	5,200	60,546	4,714	6.7	48,312	
1962	122,981	73,442	59.7	70,614	66,702	4,944	61,759	3,911	5.5	49,539	
1963	125,154	74,571	59.6	71,833	67,762	4,687	63,076	4,070	5.7	50,583	
1964	127,224	75,830	59.6	73,091	69,305	4,523	64,782	3,786	5.2	51,394	
1965	129,236	77,178	59.7	74,455	71,088	4,361	66,726	3,366	4.5	52,058	
1966	131,180	78,893	60.1	75,770	72,895	3,979	68,915	2,875	3.8	52,288	
1967	133,319	80,793	60.6	77,347	74,372	3,844	70,527	2,975	3.8	52,527	
1968	135,562	82,272	60.7	78,737	75,920	3,817	72,103	2,817	3.6	53,291	
1969	137,841	84,239	61.1	80,733	77,902	3,606	74,296	2,831	3.5	53,602	

## 2. Employment status, by color, sex and age, seasonally adjusted, quarterly averages

[In thousands]

Characteristic	1969				1968				1967				1966	Annual average	
	4th	3d	2d	1st	4th	3d	2d	1st	4th	3d	2d	1st	4th	1969	1968
<b>WHITE</b>															
Civilian labor force	72,468	71,927	71,388	71,421	70,388	70,016	69,813	69,668	69,432	68,915	68,170	68,301	67,936	71,779	69,977
Men, 20 years and over	41,961	41,851	41,612	41,705	41,428	41,365	41,222	41,250	41,178	40,963	40,645	40,630	40,376	41,772	41,318
Women, 20 years and over	24,172	23,941	23,624	23,601	23,138	22,830	22,701	22,593	22,640	22,265	21,749	21,735	21,635	23,839	22,821
Both sexes, 16-19 years	6,335	6,136	6,152	6,115	5,822	5,821	5,890	5,825	5,614	5,687	5,776	5,936	5,925	6,168	5,839
Employed	70,098	69,529	69,185	69,285	68,271	67,753	67,578	67,403	67,034	66,526	65,850	66,052	65,734	69,518	67,751
Men, 20 years and over	41,091	40,996	40,844	40,982	40,678	40,540	40,392	40,403	40,300	40,087	39,745	39,802	39,525	40,978	40,503
Women, 20 years and over	23,350	23,096	22,837	22,833	22,394	22,043	21,951	21,807	21,781	21,394	20,942	20,930	20,922	23,032	22,052
Both sexes, 16-19 years	5,656	5,437	5,504	5,470	5,199	5,170	5,235	5,193	4,953	5,045	5,163	5,320	5,287	5,508	5,195
Unemployed	2,371	2,398	2,202	2,137	2,117	2,263	2,235	2,265	2,398	2,389	2,320	2,249	2,202	2,261	2,226
Men, 20 years and over	870	855	768	723	750	825	830	847	878	876	900	828	851	794	814
Women, 20 years and over	822	844	787	768	744	787	750	786	859	871	807	805	713	806	768
Both sexes, 16-19 years	679	699	648	645	623	651	655	632	661	642	613	616	638	660	644
Unemployment rate	3.3	3.3	3.1	3.0	3.0	3.2	3.2	3.3	3.5	3.5	3.4	3.3	3.2	3.1	3.2
Men, 20 years and over	2.1	2.0	1.8	1.7	1.8	2.0	2.0	2.1	2.1	2.2	2.0	2.1	1.9	1.9	2.0
Women, 20 years and over	3.4	3.5	3.3	3.3	3.2	3.4	3.3	3.5	3.8	3.9	3.7	3.7	3.3	3.4	3.4
Both sexes, 16-19 years	10.7	11.4	10.5	10.5	10.7	11.2	11.1	10.8	11.8	11.3	10.6	10.4	10.8	10.7	11.0
<b>NEGRO AND OTHER</b>															
Civilian labor force	9,041	8,984	8,854	8,947	8,724	8,706	8,818	8,782	8,727	8,634	8,624	8,614	8,538	8,954	8,760
Men, 20 years and over	4,615	4,598	4,545	4,563	4,507	4,520	4,561	4,548	4,492	4,509	4,503	4,504	4,492	4,579	4,535
Women, 20 years and over	3,616	3,592	3,525	3,568	3,467	3,416	3,456	3,442	3,444	3,349	3,338	3,371	3,322	3,574	3,446
Both sexes, 16-19 years	810	794	784	816	750	770	801	792	791	776	783	739	724	801	779
Employed	8,480	8,391	8,251	8,418	8,147	8,133	8,219	8,181	8,062	8,005	7,974	8,001	7,916	8,384	8,169
Men, 20 years and over	4,438	4,420	4,375	4,408	4,329	4,350	4,385	4,359	4,301	4,329	4,300	4,305	4,268	4,410	4,356
Women, 20 years and over	3,427	3,359	3,300	3,375	3,262	3,200	3,238	3,215	3,190	3,107	3,108	3,132	3,097	3,365	3,229
Both sexes, 16-19 years	616	612	575	635	556	583	596	607	571	569	566	564	551	609	585
Unemployed	561	593	603	529	577	573	599	601	665	629	650	613	622	570	590
Men, 20 years and over	178	178	169	155	178	170	176	189	191	180	203	199	224	168	179
Women, 20 years and over	189	232	225	193	205	216	218	227	254	242	230	239	225	209	217
Both sexes, 16-19 years	194	182	209	181	194	187	205	185	220	207	217	175	173	193	195
Unemployment rate	6.2	6.6	6.8	5.9	6.6	6.6	6.8	6.8	7.6	7.3	7.5	7.1	7.3	6.4	6.7
Men, 20 years and over	3.9	3.9	3.7	3.4	3.9	3.8	3.9	4.2	4.3	4.0	4.5	4.4	5.0	3.7	3.9
Women, 20 years and over	5.2	6.5	6.4	5.4	5.9	6.3	6.3	6.6	7.4	7.2	6.9	7.1	6.8	5.8	6.3
Both sexes, 16-19 years	24.0	22.9	26.7	22.2	25.9	24.3	25.6	23.4	27.8	26.7	27.7	23.7	23.9	24.0	25.0

## 3. Full- and part-time status of the civilian labor force

[In thousands—not seasonally adjusted]

Employment status	1969												1968	Annual average		
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1969	1968	
<b>FULL TIME</b>																
Civilian labor force.....	69,204	69,296	69,491	70,350	73,713	73,514	72,365	67,818	67,921	67,799	67,700	67,233	67,610	69,700	68,332	
Employed:																
Full-time schedules <sup>1</sup> .....	65,302	67,433	65,594	66,206	68,854	68,471	67,011	64,346	64,244	63,778	63,588	63,126	64,073	65,503	64,225	
Part-time for economic reasons.....	1,998	2,061	1,955	2,069	2,607	2,456	2,522	1,672	1,704	1,961	1,906	1,897	1,871	2,055	1,970	
Unemployed, looking for full-time work.....	1,904	1,864	1,942	2,075	2,251	2,587	2,831	1,799	1,973	2,060	2,206	2,211	1,667	2,142	2,138	
Unemployment rate.....	2.8	2.7	2.8	2.9	3.1	3.5	3.9	2.7	2.9	3.0	3.3	3.3	2.5	3.1	3.1	
<b>PART TIME</b>																
Civilian labor force.....	12,212	12,131	12,019	10,634	8,803	9,283	9,991	11,745	11,699	11,467	11,404	11,000	11,508	11,032	10,405	
Employed (voluntary part-time).....	11,488	11,284	11,122	9,751	8,185	8,688	9,422	11,245	11,130	10,781	10,687	10,335	10,757	10,343	9,726	
Unemployed, looking for part-time work.....	724	847	898	883	618	594	568	500	569	686	717	665	752	689	679	
Unemployment rate.....	5.9	7.0	7.5	8.3	7.0	6.4	5.7	4.3	4.9	6.0	6.3	6.0	6.5	6.2	6.5	

<sup>1</sup> Employed persons with a job but not at work are distributed proportionately among the full- and part-time employed categories.

## 4. Employment and unemployment, by age and sex, seasonally adjusted

[In thousands]

Employment status	1969												1968	Annual average		
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1969	1968	
<b>TOTAL</b>																
Total labor force.....	85,029	84,788	85,014	84,902	84,584	84,277	83,957	83,593	83,966	83,999	83,831	83,351	82,868	84,239	82,272	
Civilian labor force.....	81,589	81,295	81,486	81,359	81,054	80,756	80,433	80,071	80,450	80,495	80,356	79,874	79,368	80,733	78,737	
Employed.....	78,779	78,497	78,325	78,127	78,187	77,874	77,671	77,265	77,605	77,767	77,729	77,229	76,765	77,902	75,920	
Agriculture.....	3,505	3,429	3,332	3,458	3,634	3,551	3,705	3,805	3,664	3,732	3,881	3,752	3,842	3,606	3,817	
Nonagriculture.....	75,274	75,068	74,993	74,669	74,553	74,323	73,966	73,460	73,941	74,035	73,848	73,477	72,923	74,296	72,103	
Unemployed.....	2,810	2,798	3,161	3,232	2,867	2,882	2,762	2,806	2,845	2,728	2,627	2,645	2,603	2,831	2,817	
<b>MEN, 20 YEARS AND OVER</b>																
Total labor force.....	49,574	49,502	49,595	49,563	49,552	49,389	49,304	49,267	49,286	49,378	49,336	49,189	49,132	49,406	48,834	
Civilian labor force.....	46,618	46,489	46,552	46,568	46,507	46,322	46,206	46,171	46,195	46,297	46,280	46,131	46,093	50,221	45,852	
Employed.....	45,607	45,487	45,424	45,442	45,551	45,293	45,260	45,227	45,285	45,422	45,422	45,231	45,254	48,818	44,859	
Agriculture.....	2,510	2,479	2,531	2,570	2,693	2,646	2,676	2,731	2,681	2,706	2,732	2,680	2,763	2,963	2,816	
Nonagriculture.....	43,097	43,008	42,893	42,872	42,858	42,647	42,584	42,496	42,604	42,716	42,690	42,551	42,491	45,854	42,043	
Unemployed.....	1,011	1,002	1,128	1,126	956	1,029	946	944	910	875	858	900	839	1,403	993	
<b>WOMEN, 20 YEARS AND OVER</b>																
Civilian labor force.....	27,892	27,660	27,817	27,686	27,677	27,511	27,262	27,049	27,205	27,189	27,230	26,950	26,737	30,512	26,266	
Employed.....	26,932	26,695	26,711	26,519	26,622	26,505	26,251	26,046	26,169	26,228	26,264	25,999	25,802	29,084	25,281	
Agriculture.....	646	562	514	511	578	540	617	627	609	638	731	691	722	643	606	
Nonagriculture.....	26,286	26,133	26,197	26,008	26,044	25,965	25,634	25,419	25,560	25,590	25,533	25,308	25,080	28,441	24,675	
Unemployed.....	960	965	1,106	1,167	1,055	1,006	1,011	1,003	1,036	961	966	951	935	1,428	985	
<b>BOTH SEXES, 16-19 YEARS</b>																
Civilian labor force.....	7,079	7,146	7,117	7,105	6,870	6,923	6,965	6,851	7,050	7,009	6,846	6,793	6,538	6,970	6,618	
Employed.....	6,240	6,315	6,190	6,166	6,014	6,076	6,160	5,992	6,151	6,117	6,043	5,999	5,709	6,117	5,780	
Agriculture.....	349	388	287	377	363	365	412	447	374	388	418	381	357	377	394	
Nonagriculture.....	5,891	5,927	5,903	5,789	5,651	5,711	5,748	5,545	5,777	5,729	5,625	5,618	5,352	5,739	5,385	
Unemployed.....	839	831	927	939	856	847	805	859	899	892	803	794	829	853	839	



## 5. Employment totals, by occupation, with unemployment rates, seasonally adjusted, quarterly averages

Characteristic	1969				1968				1967				1966	Annual average	
	4th	3d	2d	1st	4th	3d	2d	1st	4th	3d	2d	1st	4th	1969	1968
<b>EMPLOYMENT (in thousands)</b>															
White-collar workers.....	37,509	36,959	36,700	36,217	35,906	35,756	35,445	35,109	34,882	34,481	33,955	33,616	33,686	36,844	35,551
Professional and technical Managers, officials, and proprietors.....	10,914	10,765	10,775	10,628	10,452	10,393	10,326	10,142	10,057	9,953	9,784	9,731	9,596	10,769	10,325
Clerical workers.....	8,143	7,992	7,985	7,828	7,900	7,838	7,661	7,706	7,639	7,640	7,445	7,254	7,429	7,987	7,776
Sales workers.....	13,669	13,483	13,277	13,158	12,889	12,828	12,808	12,685	12,619	12,351	12,245	12,115	12,158	13,397	12,803
Blue-collar workers.....	4,782	4,719	4,662	4,603	4,665	4,697	4,650	4,576	4,567	4,537	4,481	4,516	4,503	4,692	4,647
Craftsmen and foremen.....	28,369	28,445	27,875	28,255	27,756	27,509	27,466	27,342	27,273	27,356	27,140	27,276	26,962	28,237	27,524
Operatives.....	10,276	10,144	10,020	10,334	10,158	9,953	9,979	9,964	9,840	9,774	9,321	9,942	9,709	10,193	10,015
Nonfarm laborers.....	14,393	14,628	14,170	14,293	14,032	13,943	13,928	13,915	13,904	14,022	13,773	13,836	13,826	14,372	13,955
Farm laborers.....	3,700	3,673	3,685	3,629	3,566	3,613	3,559	3,463	3,529	3,560	3,536	3,498	3,427	3,672	3,555
Service workers.....	9,604	9,467	9,466	9,575	9,427	9,367	9,392	9,343	9,334	9,264	9,275	9,426	9,408	9,528	9,381
Farmworkers.....	3,051	3,229	3,447	3,479	3,307	3,401	3,536	3,683	3,620	3,556	3,472	3,610	3,585	3,292	3,464
<b>Unemployment rate</b>															
White-collar workers.....	2.2	2.2	1.9	1.9	1.9	2.0	2.0	2.0	2.3	2.3	2.0	2.1	2.0	2.1	2.0
Professional and technical Managers, officials, and proprietors.....	1.5	1.4	1.3	1.0	1.2	1.3	1.2	1.1	1.3	1.3	1.4	1.3	1.3	1.3	1.2
Clerical workers.....	1.0	1.0	.9	1.0	1.0	1.1	.9	.9	1.0	.9	.9	.9	.9	.9	1.0
Sales workers.....	3.2	3.3	2.8	2.9	2.8	3.0	2.9	3.1	3.4	3.4	2.7	3.0	3.0	3.0	3.0
Blue-collar workers.....	2.8	3.0	2.9	2.9	2.9	2.6	2.6	2.9	3.2	3.2	3.6	2.9	3.2	2.9	2.8
Craftsmen and foremen.....	4.3	4.0	3.8	3.7	3.8	4.2	4.0	4.4	4.5	4.5	4.6	4.2	4.1	3.9	4.1
Operatives.....	2.2	2.2	2.1	2.1	2.1	2.4	2.4	2.6	2.4	2.3	2.8	2.4	2.8	2.2	2.4
Nonfarm laborers.....	4.9	4.4	4.3	4.1	4.3	4.5	4.3	4.8	5.1	5.1	5.0	4.8	4.2	4.4	4.5
Farm laborers.....	7.0	7.4	6.4	6.4	6.7	7.6	6.9	7.6	7.8	7.8	7.9	7.1	7.5	6.7	7.2
Service workers.....	4.0	4.6	4.4	3.9	4.4	4.5	4.6	4.3	4.9	4.5	4.2	4.5	4.5	4.2	4.4
Farmworkers.....	1.8	2.3	1.9	1.6	1.7	2.4	2.3	1.9	2.3	2.5	2.4	2.2	2.0	1.9	2.1

## 6. Unemployed persons, by reason for unemployment

[In thousands—not seasonally adjusted]

Reason for unemployment, age, and sex	1969												1968	Annual average	
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1969	1968
<b>Total, 16 years and over.....</b>	2,628	2,710	2,839	2,958	2,869	3,182	3,400	2,299	2,542	2,746	2,923	2,876	2,419	2,831	2,817
Lost last job.....	1,133	939	882	823	894	979	875	892	1,088	1,186	1,245	1,266	914	1,017	1,070
Left last job.....	378	421	451	586	507	459	448	325	394	391	409	463	339	436	431
Reentered labor force.....	825	1,011	1,093	1,105	997	1,010	1,275	796	770	869	947	881	822	965	909
Never worked before.....	292	339	414	445	471	734	802	286	290	301	323	265	343	413	407
<b>Male, 20 years and over.....</b>	1,052	909	906	914	888	945	905	810	901	1,048	1,134	1,142	873	963	993
Lost last job.....	693	524	458	440	469	534	427	438	575	686	707	721	512	556	599
Left last job.....	150	141	141	209	192	170	183	148	145	139	167	179	129	164	167
Reentered labor force.....	188	226	267	235	200	195	262	204	164	203	232	212	211	216	205
Never worked before.....	20	18	40	30	24	46	33	19	17	19	28	29	21	27	22
<b>Female, 20 years and over.....</b>	840	994	1,097	1,202	1,119	987	1,058	867	967	964	1,061	1,031	818	1,015	985
Lost last job.....	303	309	314	288	310	307	336	344	374	353	394	385	286	335	341
Left last job.....	138	183	209	237	196	184	172	107	159	144	153	168	132	171	167
Reentered labor force.....	354	457	501	596	549	434	480	377	399	414	457	438	360	455	422
Never worked before.....	46	45	72	81	64	62	69	39	35	52	57	41	40	55	55
<b>Both sexes, 16 to 19 years.....</b>	736	807	836	842	865	1,250	1,437	623	674	734	729	703	728	853	839
Lost last job.....	137	106	110	95	115	138	112	110	139	147	145	160	116	126	130
Left last job.....	90	97	101	140	119	105	93	70	90	107	89	116	78	101	97
Reentered labor force.....	283	328	324	274	248	380	533	214	207	252	257	232	251	294	281
Never worked before.....	226	276	301	334	383	627	699	228	238	229	238	195	283	331	330

## 7. Unemployment rates, by age and sex, seasonally adjusted

Age and sex	1969												1968	Annual average	
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1969	1968
<b>TOTAL</b>															
16 years and over.....	3.4	3.4	3.9	4.0	3.5	3.6	3.4	3.5	3.5	3.4	3.3	3.3	3.3	3.5	3.6
16 to 19 years.....	11.9	11.6	13.0	13.2	12.5	12.2	11.6	12.5	12.8	12.7	11.7	11.7	12.7	12.2	12.7
16 and 17 years.....	13.9	14.2	16.8	16.7	16.1	14.7	13.4	13.8	14.5	14.0	13.1	13.5	15.0	14.5	14.7
18 and 19 years.....	10.1	9.0	10.6	10.8	9.9	10.4	10.0	11.8	11.5	11.6	11.1	10.5	10.9	10.5	11.2
20 to 24 years.....	5.6	5.9	6.5	6.7	5.4	5.9	5.3	5.4	5.7	5.3	5.5	5.2	5.3	5.7	5.8
25 years and over.....	2.2	2.2	2.4	2.5	2.3	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2.0	2.2	2.3
25 to 54 years.....	2.2	2.4	2.4	2.5	2.4	2.3	2.3	2.3	2.3	2.2	2.0	2.2	2.0	2.3	2.3
55 years and over.....	2.2	2.0	2.4	2.3	2.0	2.1	2.0	1.7	2.0	1.9	2.0	1.9	2.1	2.0	2.2
<b>MALE</b>															
16 years and over.....	2.9	2.9	3.2	3.2	2.7	3.0	2.7	2.7	2.7	2.6	2.6	2.7	2.6	2.8	2.9
16 to 19 years.....	11.1	11.5	12.2	12.1	11.1	12.0	10.4	11.0	11.4	11.5	11.0	11.8	11.6	11.4	11.6
16 and 17 years.....	13.2	14.0	15.1	15.0	15.7	14.7	12.7	13.9	12.6	12.9	12.5	13.2	14.2	13.8	13.9
18 and 19 years.....	9.3	8.6	10.0	9.6	7.6	10.0	8.3	8.8	10.4	10.2	9.5	10.6	9.5	9.4	9.7
20 to 24 years.....	5.2	5.3	6.5	6.3	4.5	5.5	4.8	4.8	4.7	4.5	4.9	5.0	4.2	5.1	5.1
25 years and over.....	1.8	1.8	1.9	1.9	1.7	1.8	1.6	1.7	1.6	1.6	1.5	1.6	1.5	1.7	1.8
25 to 54 years.....	1.6	1.8	1.8	1.8	1.7	1.7	1.6	1.8	1.6	1.5	1.4	1.5	1.4	1.6	1.7
55 years and over.....	2.3	2.0	2.2	2.0	2.0	2.0	1.8	1.6	1.7	1.8	1.7	1.9	1.9	1.9	2.1
<b>FEMALE</b>															
16 years and over.....	4.4	4.3	5.0	5.3	4.9	4.6	4.7	4.8	4.9	4.6	4.5	4.3	4.5	4.7	4.8
16 to 19 years.....	12.8	11.8	14.0	14.6	14.1	12.5	12.9	14.5	14.5	14.3	12.7	11.6	14.1	13.3	14.0
16 and 17 years.....	14.9	14.5	19.0	19.2	16.7	14.8	14.3	13.5	16.9	15.6	13.9	14.0	16.2	15.5	15.9
18 and 19 years.....	11.1	9.5	11.2	12.1	12.3	10.8	11.9	15.2	12.7	13.3	13.0	10.4	12.6	11.8	12.9
20 to 24 years.....	6.0	6.6	6.5	7.1	6.4	6.3	5.9	6.1	6.8	6.3	6.1	5.5	6.5	6.3	6.7
25 years and over.....	2.9	3.0	3.4	3.5	3.3	3.2	3.3	3.1	3.2	3.0	3.1	3.2	2.9	3.2	3.2
25 to 54 years.....	3.3	3.4	3.6	3.7	3.6	3.5	3.6	3.4	3.6	3.3	3.2	3.4	3.1	3.5	3.4
55 years and over.....	2.0	2.0	2.6	2.7	2.1	2.3	2.3	1.8	2.4	1.9	2.5	1.9	2.4	2.2	2.3

## 8. Unemployment indicators, seasonally adjusted

[In percent]

Selected categories	1969												1968	Annual average	
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1969	1968
<b>Total (all civilian workers)</b> .....	3.4	3.4	3.9	4.0	3.5	3.6	3.4	3.5	3.5	3.4	3.3	3.3	3.3	3.5	3.6
Men, 20 years and over.....	2.2	2.2	2.4	2.4	2.1	2.2	2.0	2.0	2.0	1.9	1.9	2.0	1.8	2.1	2.2
Women, 20 years and over.....	3.4	3.5	4.0	4.2	3.8	3.7	3.7	3.7	3.8	3.5	3.5	3.5	3.5	3.7	3.8
Both sexes, 16-19 years.....	11.9	11.6	13.0	13.2	12.5	12.2	11.6	12.5	12.8	12.7	11.7	11.7	12.7	12.2	12.7
White.....	3.2	3.1	3.5	3.6	3.2	3.2	3.0	3.1	3.1	3.1	2.9	3.0	3.0	3.1	3.2
Negro and other.....	5.5	6.2	6.9	6.8	6.5	6.4	7.0	6.5	6.9	6.0	5.7	6.0	6.0	6.4	6.7
Married men.....	1.6	1.5	1.7	1.7	1.5	1.6	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.5	1.6
Full-time workers.....	3.1	3.0	3.2	3.4	3.1	3.1	3.1	3.1	3.2	2.9	2.8	2.9	2.7	3.1	3.1
Unemployed 15 weeks and over <sup>1</sup> .....	.5	.5	.5	.5	.5	.5	.5	.5	.5	.4	.4	.4	.4	.5	.5
State insured <sup>2</sup> .....	2.4	2.4	2.2	2.2	2.1	2.2	2.1	2.0	2.1	2.1	2.2	2.1	2.0	2.2	2.2
Labor force time lost <sup>3</sup> .....	3.8	4.0	4.4	4.4	4.1	4.1	3.9	3.5	3.7	3.7	3.6	3.6	3.6	3.9	4.0
<b>OCCUPATION</b>															
White-collar workers.....	2.1	2.1	2.4	2.2	2.2	2.2	2.1	1.9	1.8	2.0	1.9	1.9	1.9	2.1	2.0
Professional and managerial.....	1.4	1.1	1.4	1.3	1.2	1.2	1.2	1.2	1.0	1.0	1.0	1.0	1.0	1.2	1.1
Clerical workers.....	2.8	3.5	3.3	3.3	3.3	3.2	3.0	2.8	2.4	3.1	2.7	3.0	2.7	3.0	3.0
Sales workers.....	2.6	2.2	3.6	2.8	2.9	3.3	2.9	2.6	3.3	2.9	3.3	2.6	2.9	2.9	2.8
Blue-collar workers.....	4.3	4.2	4.3	4.4	3.8	3.8	3.7	3.8	4.1	3.7	3.6	3.8	3.6	3.9	4.1
Craftsmen and foremen.....	2.1	2.2	2.4	2.6	2.2	1.9	1.9	2.4	2.2	2.2	2.1	2.1	1.9	2.2	2.4
Operatives.....	5.0	4.9	5.0	4.8	4.1	4.2	4.3	4.0	4.6	3.9	4.2	4.2	4.2	4.4	4.5
Nonfarm laborers.....	7.2	7.0	6.8	7.7	6.9	7.5	5.9	6.4	6.8	7.0	5.5	6.6	6.1	6.7	7.2
Service workers.....	3.6	3.9	4.4	4.9	4.5	4.3	4.5	4.2	4.5	3.8	3.8	4.2	4.2	4.2	4.4
<b>INDUSTRY</b>															
Nonagricultural private wage and salary workers <sup>4</sup> .....	3.5	3.6	3.8	4.0	3.6	3.6	3.5	3.5	3.6	3.4	3.3	3.4	3.3	3.5	3.6
Construction.....	5.6	5.6	7.3	7.6	7.4	5.7	5.0	5.5	6.2	6.2	5.5	5.5	5.4	6.0	6.9
Manufacturing.....	3.7	3.8	3.7	3.7	2.9	3.2	3.3	3.1	3.2	3.1	2.9	3.2	2.8	3.3	3.3
Durable goods.....	3.7	3.7	3.3	3.3	2.3	3.2	3.3	2.9	3.0	2.7	2.4	2.7	2.6	3.0	3.0
Nondurable goods.....	3.8	3.8	4.2	4.4	3.8	3.2	3.3	3.4	3.4	3.7	3.6	3.9	3.3	3.7	3.7
Transportation and public utilities.....	2.4	2.4	2.8	2.0	2.0	1.9	1.9	2.8	2.3	2.4	1.8	1.8	1.6	2.2	2.0
Wholesale and retail trade.....	3.9	3.9	4.3	4.7	4.4	4.1	4.2	3.9	4.2	3.8	3.9	3.8	4.1	4.1	4.0
Finance and service industries.....	2.8	3.1	3.2	3.5	3.5	3.7	3.2	3.4	3.3	2.9	3.1	3.1	3.2	3.2	3.4
Government wage and salary workers.....	2.0	2.1	2.5	1.9	1.9	1.9	1.8	1.7	1.6	1.6	1.7	1.8	1.7	1.9	1.8
Agricultural wage and salary workers.....	6.3	5.0	6.6	7.4	7.0	9.1	5.5	4.9	5.7	5.9	4.1	5.8	5.7	6.0	6.3

<sup>1</sup> Unemployment rate calculated as a percent of civilian labor force.<sup>2</sup> Insured unemployment under State programs as a percent of average covered employment.<sup>3</sup> Man-hours lost by the unemployed and persons on part time for economic reasons as a percent of potentially available labor force man-hours.<sup>4</sup> Includes mining, not shown separately.

## 9. Duration of unemployment, seasonally adjusted

[In thousands]

Period	1969												1968	Annual average	
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1969	1968
Less than 5 weeks.....	1,436	1,564	1,857	1,818	1,636	1,677	1,591	1,777	1,724	1,646	1,436	1,476	1,363	1,629	1,594
5 to 14 weeks.....	910	910	948	1,000	861	830	813	629	737	757	829	741	825	827	810
15 weeks and over.....	382	384	370	389	382	419	383	409	393	355	346	316	322	375	412
15 to 26 weeks.....	262	244	240	233	244	244	258	278	254	237	237	193	177	242	256
27 weeks and over.....	120	140	130	156	138	175	125	131	139	118	109	123	145	133	156
15 weeks and over as a percent of civilian labor force.....	.5	.5	.5	.5	.5	.5	.5	.5	.5	.4	.4	.4	.4	.5	.5



10. Unemployment insurance and employment service operations <sup>1</sup>

[All items except average benefits amounts are in thousands]

Item	1969											1968	
	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.
<b>Employment service:</b> <sup>2</sup>													
New applications for work.....	711	763	801	750	874	822	850	822	745	794	849	608	687
Nonfarm placements.....	372	463	503	471	469	454	437	454	397	373	392	360	426
<b>Rate unemployment insurance programs:</b>													
Initial claims <sup>3,4</sup> .....	866	745	655	731	1,105	710	613	756	709	890	1,240	1,161	788
Insured unemployment <sup>5</sup> (average weekly volume) <sup>6</sup> .....	1,030	864	840	948	1,021	852	906	1,090	1,300	1,459	1,491	1,172	913
Rate of insured un employment <sup>7</sup> .....	2.0	1.6	1.6	1.8	2.0	1.7	1.8	2.2	26	2.9	3.0	2.3	1.8
Weeks of unemployment compensated.....	3,054	3,156	3,104	3,496	3,626	3,123	3,519	4,496	4,998	5,159	5,547	3,896	2,853
Average weekly benefit amount for total unemployment.....	\$46.47	\$46.25	\$45.70	\$46.16	\$45.30	\$44.88	\$45.14	\$46.03	\$46.71	\$46.80	\$46.16	\$45.34	\$44.72
Total benefits paid.....	\$136,585	\$139,536	\$136,182	\$156,707	\$159,161	\$135,004	\$152,966	\$200,052	\$226,516	\$234,199	\$246,117	\$170,340	\$122,494
<b>Unemployment compensation for ex-servicemen:</b> <sup>8,9</sup>													
Initial claims <sup>8,9</sup> .....	30	29	26	27	32	26	20	2.2	24	27	32	29	26
Insured unemployment <sup>8</sup> (average weekly volume).....	38	32	32	37	36	30	29	35	40	43	44	38	32
Weeks of unemployment compensated.....	126	<sup>3</sup> 127	133	148	143	114	122	155	163	169	191	151	111
Total benefits paid.....	\$6,240	\$6,256	\$6,514	\$7,156	\$6,946	\$5,511	\$5,847	\$7,425	\$7,794	\$7,997	\$9,046	\$7,218	\$5,305
<b>Unemployment compensation for Federal civilian employees:</b> <sup>9,10</sup>													
Initial claims <sup>9</sup> .....	13	11	10	8	11	10	8	8	8	9	13	10	9
Insured unemployment <sup>9</sup> (average weekly volume).....	22	18	17	18	19	18	17	20	23	24	24	22	21
Weeks of unemployment compensated.....	75	76	74	76	78	69	72	88	94	97	102	95	81
Total benefits paid.....	\$3,465	\$3,494	\$3,163	\$3,497	\$3,597	\$3,155	\$3,318	\$4,038	\$4,265	\$4,362	\$4,595	\$4,246	\$3,637
<b>Railroad unemployment insurance:</b>													
Applications <sup>11</sup> .....	5	10	6	7	17	11	11	5	5	6	12	11	6
Insured unemployment (average weekly volume).....	14	15	13	13	13	10	18	17	21	23	24	19	18
<b>Number of payments</b> <sup>12</sup> .....	28	36	28	28	26	25	39	41	46	47	54	42	39
Average amount of benefit payment <sup>13</sup> .....	\$96.28	\$89.31	\$93.64	\$94.12	\$91.74	\$90.69	\$75.65	\$88.32	\$91.06	\$92.20	\$91.23	\$87.90	\$91.89
Total benefit paid <sup>14</sup> .....	\$2,513	\$2,918	\$2,478	\$2,375	\$2,113	\$2,043	\$2,804	\$3,386	\$4,056	\$4,251	\$4,797	\$3,590	\$3,404
<b>All programs:</b> <sup>15</sup>													
Insured unemployment <sup>15</sup> .....	\$1,105	929	902	1,015	1,088	911	970	1,162	1,384	1,550	1,584	1,252	984

<sup>1</sup> Includes data for Puerto Rico.<sup>2</sup> Includes Guam and the Virgin Islands.<sup>3</sup> Preliminary.<sup>4</sup> Initial claims are notices filed by workers to indicate they are starting periods of unemployment. Excludes transition claims under State programs.<sup>5</sup> Includes interstate claims for the Virgin Islands.<sup>6</sup> Number of workers reporting the completion of at least 1 week of unemployment.<sup>7</sup> Initial claims and State insured unemployment include data under the program for Puerto Rican sugarcane workers.<sup>8</sup> The rate is the number of insured unemployed expressed as a percent of the average covered employment in a 12-month period.<sup>9</sup> Excludes data on claims and payments made jointly with other programs.<sup>10</sup> Includes the Virgin Islands.<sup>11</sup> Excludes data on claims and payments made jointly with State programs.<sup>12</sup> An application for benefits is filed by a railroad worker at the beginning of his first period of unemployment in a benefit year; no application is required for subsequent periods in the same year.<sup>13</sup> Payments are for unemployment in 14-day registration periods.<sup>14</sup> The average amount is an average for all compensable periods, not adjusted for recovery of overpayments or settlement of underpayments.<sup>15</sup> Adjusted for recovery of overpayments and settlement of underpayments.<sup>16</sup> Represents an unduplicated count of insured unemployment under the State, Ex-servicemen and UCFE programs and the Railroad Unemployment Insurance Act.

SOURCE: U.S. Department of Labor, Office of Manpower Management Data Systems for all items except railroad unemployment insurance which is prepared by the U.S. Railroad Retirement Board. Data for latest month are subject to revision.

11. Employees<sup>1</sup> on nonagricultural payrolls, by industry division, 1947 to date

[In thousands]

Year	TOTAL	Mining	Contract construction	Manufacturing	Transportation and public utilities	Wholesale and retail trade			Finance, insurance, and real estate	Services	Government		
						Total	Wholesale trade	Retail trade			Total	Federal	State and local
1947	43,881	955	1,982	15,545	4,166	8,955	2,361	6,595	1,754	5,050	5,474	1,892	3,582
1948	44,891	994	2,169	15,582	4,189	9,272	2,489	6,783	1,829	5,206	5,650	1,863	3,787
1949	43,778	930	2,165	14,441	4,001	9,264	2,487	6,778	1,857	5,264	5,856	1,908	3,948
1950	45,222	901	2,333	15,241	4,034	9,386	2,518	6,868	1,919	5,382	6,026	1,928	4,098
1951	47,849	929	2,603	16,393	4,226	9,742	2,606	7,136	1,991	5,576	6,389	2,302	4,087
1952	48,825	898	2,634	16,632	4,248	10,004	2,687	7,317	2,069	5,730	6,609	2,420	4,188
1953	50,232	866	2,623	17,549	4,290	10,247	2,727	7,520	2,146	5,867	6,645	2,305	4,340
1954	49,022	791	2,612	16,314	4,084	10,235	2,739	7,496	2,234	6,002	6,751	2,188	4,563
1955	50,675	792	2,802	16,882	4,141	10,535	2,796	7,740	2,335	6,274	6,914	2,187	4,727
1956	52,408	822	2,999	17,243	4,244	10,858	2,884	7,974	2,429	6,536	7,277	2,209	5,069
1957	52,894	828	2,923	17,174	4,241	10,886	2,887	7,992	2,477	6,749	7,616	2,217	5,399
1958	51,363	751	2,778	15,945	3,976	10,750	2,848	7,902	2,519	6,806	7,839	2,191	5,648
1959 <sup>2</sup>	53,313	732	2,960	16,675	4,011	11,127	2,946	8,182	2,594	7,130	8,083	2,233	5,850
1960	54,234	712	2,885	16,796	4,004	11,391	3,004	8,388	2,669	7,423	8,353	2,270	6,083
1961	54,042	672	2,816	16,326	3,903	11,337	2,993	8,344	2,731	7,664	8,594	2,279	6,315
1962	55,596	650	2,902	16,853	3,906	11,566	3,056	8,511	2,800	8,028	8,890	2,340	6,550
1963	56,702	635	2,963	16,995	3,903	11,778	3,104	8,675	2,877	8,325	9,225	2,358	6,868
1964	58,331	634	3,050	17,274	3,951	12,160	3,189	8,971	2,957	8,709	9,596	2,348	7,248
1965	60,815	632	3,186	18,062	4,036	12,716	3,312	9,404	3,023	9,087	10,074	2,378	7,696
1966	63,955	627	3,275	19,214	4,151	13,245	3,437	9,808	3,100	9,551	10,792	2,564	8,227
1967	65,857	613	3,208	19,447	4,261	13,606	3,525	10,081	3,225	10,099	11,398	2,719	8,679
1968	67,860	610	3,267	19,768	4,313	14,081	3,618	10,464	3,383	10,592	11,846	2,737	9,109

<sup>1</sup> The industry series have been adjusted to March 1968 benchmarks (comprehensive counts of employment) and data are not comparable with those published in issues prior to August 1969. For comparable back data, see Employment and Earnings, United States, 1909-69 (BLS Bulletin 1312-7) to be released this fall.

These series are based upon establishment reports which cover all full- and part-time employees in nonagricultural establishments who worked during, or received pay for any part of the pay period which includes the 12th of the month. Therefore, persons who

worked in more than one establishment during the reporting period are counted more than once. Proprietors, self-employed persons, unpaid family workers, and domestic servants are excluded.

<sup>2</sup> Data include Alaska and Hawaii beginning 1959. This inclusion has resulted in an increase of 212,000 (0.4 percent) in the nonagricultural total for the March 1959 benchmark month.

## 12. Employees on nonagricultural payrolls, by State

[In thousands]

State	Nov. 1969	Oct. 1969	Nov. 1968	State	Nov. 1969	Oct. 1969	Nov. 1968
Alabama	990.5	989.8	969.4	Montana <sup>1</sup>	197.2	199.8	195.4
Alaska	83.8	87.6	78.9	Nebraska	481.2	481.8	469.3
Arizona	532.7	525.1	491.4	Nevada	192.5	193.7	182.1
Arkansas	532.2	536.4	516.8	New Hampshire	254.2	258.5	250.9
California <sup>1</sup>	7,009.9	7,011.4	6,778.1	New Jersey	2,575.8	2,574.2	2,525.9
Colorado	( <sup>2</sup> )	( <sup>2</sup> )	701.6	New Mexico	291.2	289.3	281.3
Connecticut	1,187.7	1,179.3	1,177.3	New York	7,207.7	7,207.4	7,083.0
Delaware	212.0	211.4	209.0	North Carolina	1,709.4	1,705.2	1,681.0
District of Columbia	( <sup>2</sup> )	681.3	676.0	North Dakota	159.8	160.5	156.8
Florida	2,064.3	2,028.3	1,983.9	Ohio	3,950.3	3,964.1	3,837.2
Georgia	1,515.4	1,508.0	1,463.0	Oklahoma	759.4	756.6	740.6
Hawaii	273.0	271.1	257.7	Oregon <sup>1</sup>	711.3	717.1	691.5
Idaho	201.6	203.4	195.9	Pennsylvania	4,358.9	4,347.5	4,298.3
Illinois	4,423.9	4,415.4	4,363.1	Rhode Island	343.7	346.1	349.8
Indiana	1,880.2	1,892.1	1,850.8	South Carolina	793.2	792.5	781.1
Iowa	885.6	885.9	871.7	South Dakota <sup>1</sup>	172.7	174.1	168.2
Kansas	690.5	690.5	681.4	Tennessee	1,320.2	1,319.4	1,299.5
Kentucky	881.9	900.4	892.8	Texas	3,632.4	3,610.4	3,497.5
Louisiana	1,071.8	1,068.8	1,060.6	Utah	352.9	353.8	348.3
Maine	328.2	330.2	328.0	Vermont	145.5	148.5	140.0
Maryland	1,307.1	1,301.9	1,256.5	Virginia	1,438.1	1,438.1	1,413.7
Massachusetts	2,246.7	2,258.7	2,231.5	Washington	1,137.5	1,145.2	1,119.3
Michigan	3,130.9	3,115.1	3,065.6	West Virginia	514.3	513.7	514.1
Minnesota	1,315.3	1,312.2	1,268.7	Wisconsin	1,530.5	1,537.5	1,506.1
Mississippi	567.4	570.2	560.2	Wyoming	106.0	108.2	102.9
Missouri	1,665.1	1,660.9	1,649.0				

<sup>1</sup> Revised series; not strictly comparable with previously published data.

<sup>2</sup> Not available.

NOTE: Data for the current month are preliminary.

SOURCE: State agencies in cooperation with U.S. Department of Labor, Bureau of Labor Statistics. More detailed industry data are available from the State agencies. For addresses, see inside back cover of Employment and Earnings.

13. Employees<sup>1</sup> on nonagricultural payrolls, by industry division and major manufacturing group

[In thousands]

Industry division and group	1969												1968	Annual average	
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1968	1967
<b>TOTAL</b> .....	71,588	71,244	71,198	70,814	70,607	70,347	70,980	69,929	69,462	68,894	68,403	68,196	69,805	67,860	65,857
<b>MINING</b> .....	632	631	632	639	647	645	638	624	619	610	610	611	619	610	613
<b>CONTRACT CONSTRUCTION</b> .....	3,360	3,529	3,623	3,663	3,707	3,681	3,601	3,404	3,255	3,077	2,999	3,024	3,247	3,267	3,208
<b>MANUFACTURING</b> .....	20,039	20,156	20,339	20,421	20,435	20,114	20,336	19,982	19,952	19,978	19,891	19,803	20,008	19,768	19,447
Production workers <sup>2</sup> .....	14,645	14,750	14,918	14,997	14,971	14,665	14,923	14,624	14,604	14,644	14,584	14,509	14,701	14,505	14,308
Durable goods.....	11,780	11,833	11,991	12,014	11,976	11,874	12,036	11,846	11,835	11,841	11,785	11,760	11,793	11,624	11,439
Production workers <sup>2</sup> .....	8,546	8,588	8,733	8,755	8,691	8,600	8,781	8,615	8,612	8,623	8,585	8,555	8,595	8,456	8,364
Ordnance and accessories.....	298.7	306.9	307.7	315.1	323.4	331.7	335.3	338.7	341.2	345.5	346.8	350.3	352.0	341.5	317.2
Lumber and wood products.....	585.0	588.8	593.9	605.3	617.8	616.3	624.4	604.1	593.4	594.2	590.1	587.8	598.0	597.8	596.8
Furniture and fixtures.....	493.2	493.5	496.9	495.9	497.9	485.0	496.0	489.6	490.7	490.6	491.1	488.5	490.1	474.2	455.4
Stone, clay, and glass products.....	657.0	667.0	669.6	674.2	679.1	676.2	676.1	657.2	654.8	646.6	639.2	639.2	650.1	637.0	628.3
Primary metal industries.....	1,357.9	1,358.0	1,355.9	1,365.5	1,367.9	1,366.7	1,375.6	1,346.1	1,336.8	1,333.3	1,326.0	1,311.9	1,302.5	1,314.3	1,322.1
Fabricated metal products.....	1,471.8	1,471.5	1,468.0	1,472.5	1,461.9	1,441.7	1,469.1	1,445.5	1,441.6	1,441.1	1,435.4	1,432.5	1,437.2	1,393.7	1,363.1
Machinery, except electrical.....	2,017.3	2,006.7	2,011.9	2,009.7	1,999.3	2,009.3	2,025.6	2,000.9	2,007.0	2,005.2	2,002.6	1,983.4	1,965.3	1,960.5	1,969.6
Electrical equipment.....	1,977.2	1,979.5	2,094.9	2,083.1	2,074.2	2,047.7	2,058.7	2,035.8	2,027.7	2,025.9	2,026.1	2,019.1	2,019.6	1,981.9	1,958.9
Transportation equipment.....	2,002.4	2,028.6	2,054.8	2,063.8	2,023.4	1,991.0	2,053.7	2,018.9	2,037.3	2,057.8	2,037.8	2,061.3	2,069.3	2,028.4	1,948.5
Instruments and related products.....	467.5	470.7	469.2	469.8	475.7	470.9	474.1	470.3	469.6	469.3	467.1	465.0	467.5	459.9	450.8
Miscellaneous manufacturing.....	451.7	462.1	467.7	458.9	455.8	437.5	447.6	439.2	435.3	431.0	422.7	421.1	441.6	434.6	428.4
Nondurable goods.....	8,259	8,323	8,348	8,407	8,459	8,240	8,300	8,136	8,117	8,137	8,106	8,043	8,215	8,144	8,008
Production workers <sup>2</sup> .....	6,099	6,162	6,185	6,242	6,280	6,065	6,142	6,009	5,992	6,021	5,999	5,954	6,106	6,049	5,944
Food and kindred products.....	1,774.6	1,831.0	1,860.4	1,920.2	1,932.0	1,827.6	1,785.3	1,725.3	1,710.8	1,706.7	1,710.9	1,720.3	1,776.7	1,780.8	1,786.3
Tobacco manufactures.....	83.3	85.0	91.3	93.9	90.0	71.9	72.1	71.3	71.6	75.6	79.3	83.1	88.0	83.8	86.5
Textile mill products.....	981.9	984.6	982.3	984.7	988.1	980.7	1,000.9	984.7	988.4	992.1	990.8	987.5	997.7	990.6	958.5
Apparel and other textile products.....	1,415.9	1,422.1	1,428.6	1,427.3	1,433.3	1,375.8	1,440.1	1,419.1	1,411.2	1,426.5	1,414.7	1,397.1	1,411.0	1,407.9	1,397.5
Paper and allied products.....	725.3	725.2	720.6	722.2	726.8	719.8	725.0	707.6	703.5	707.3	706.2	703.5	708.5	692.5	679.1
Printing and publishing.....	1,106.7	1,106.0	1,100.5	1,091.6	1,091.1	1,085.4	1,085.0	1,071.1	1,077.3	1,077.0	1,073.6	1,070.1	1,079.9	1,063.1	1,047.8
Chemicals and allied products.....	1,051.2	1,048.8	1,046.2	1,052.2	1,064.4	1,064.5	1,060.9	1,045.1	1,046.9	1,043.2	1,036.9	1,030.9	1,035.1	1,026.1	1,001.4
Petroleum and coal products.....	191.7	191.8	192.7	192.9	196.0	196.3	193.7	188.9	187.8	183.9	166.3	124.8	186.1	187.0	183.2
Rubber and plastics products, nec.....	586.1	587.2	587.2	585.8	586.2	576.1	586.2	577.0	575.7	575.8	574.9	572.3	576.2	557.1	516.4
Leather and leather products.....	342.6	341.2	338.3	336.2	351.0	341.4	350.3	345.5	343.8	348.5	352.2	352.9	356.0	355.5	350.9
<b>TRANSPORTATION AND PUBLIC UTILITIES</b> .....	4,502	4,510	4,502	4,529	4,533	4,528	4,512	4,431	4,403	4,346	4,303	4,288	4,370	4,313	4,261
<b>WHOLESALE AND RETAIL TRADE</b> .....	15,655	15,077	14,847	14,702	14,660	14,662	14,717	14,517	14,398	14,201	14,097	14,189	15,113	14,081	13,606
Wholesale trade.....	3,875	3,851	3,834	3,806	3,821	3,818	3,793	3,709	3,688	3,678	3,666	3,671	3,715	3,618	3,525
Retail trade.....	11,780	11,226	11,013	10,896	10,839	10,844	10,924	10,808	10,710	10,523	10,431	10,518	11,398	10,464	10,081
<b>FINANCE, INSURANCE, AND REAL ESTATE</b> .....	3,601	3,596	3,591	3,597	3,642	3,629	3,585	3,534	3,517	3,490	3,467	3,448	3,449	3,383	3,225
<b>SERVICES</b> .....	11,220	11,231	11,255	11,183	11,253	11,266	11,243	11,131	11,044	10,913	10,792	10,693	10,773	10,592	10,099
Hotels and other lodging places.....	690.3	696.7	718.8	743.5	825.9	829.2	763.0	727.4	714.6	691.7	681.2	669.8	675.3	719.4	695.7
Personal services.....	1,018.7	1,026.1	1,028.0	1,021.8	1,023.0	1,036.0	1,042.2	1,031.1	1,025.4	1,016.6	1,012.7	1,017.6	1,037.0	1,031.3	1,027.8
Medical and other health services.....	2,949.1	2,935.7	2,913.7	2,893.8	2,891.0	2,889.3	2,866.6	2,816.9	2,804.3	2,789.5	2,772.1	2,748.2	2,728.9	2,637.7	2,434.3
Educational services.....	1,175.8	1,174.4	1,155.4	1,053.4	951.1	967.2	1,062.5	1,158.3	1,159.8	1,164.7	1,157.6	1,127.5	1,144.3	1,065.9	1,008.4
<b>GOVERNMENT</b> .....	12,579	12,514	12,409	12,080	11,730	11,822	12,348	12,306	12,274	12,279	12,244	12,140	12,226	11,846	11,398
Federal <sup>3</sup> .....	2,749	2,705	2,715	2,732	2,804	2,841	2,832	2,740	2,747	2,737	2,739	2,735	2,769	2,737	3,719
State and Local.....	9,830	9,809	9,694	9,347	8,926	8,981	9,516	9,566	9,527	9,542	9,505	9,405	9,457	9,109	8,679

<sup>1</sup> For comparability of data with those published in issues prior to August 1969, and coverage of these series, see footnote 1, table 11.

<sup>2</sup> Production workers include working foremen and all nonsupervisory workers (including leadmen and trainees) engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packing, warehousing, shipping, maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), and recordkeeping and other services closely associated with the above production operations.

<sup>3</sup> Beginning January 1969, Federal employment includes approximately 39,000 civilian technicians of the National Guard, who were transferred from State to Federal status in accordance with Public Law 90-486.

NOTE: Data for the 2 most recent months are preliminary.



14. Employees<sup>1</sup> on nonagricultural payrolls, by industry division and major manufacturing group, seasonally adjusted

[In thousands]

Industry division and group	1969												1968
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.
<b>TOTAL</b> .....	70,639	70,653	70,651	70,390	70,500	70,247	70,300	70,013	69,789	69,710	69,487	69,199	68,875
<b>MINING</b> .....	636	632	631	631	631	629	622	622	624	626	628	626	623
<b>CONTRACT CONSTRUCTION</b> .....	3,446	3,460	3,418	3,420	3,410	3,434	3,466	3,407	3,363	3,374	3,366	3,338	3,330
<b>MANUFACTURING</b> .....	19,988	20,018	20,156	20,197	20,334	20,164	20,198	20,118	20,111	20,122	20,061	19,999	19,958
Production workers <sup>2</sup> .....	14,582	14,603	14,732	14,772	14,922	14,772	14,811	14,740	14,739	14,771	14,731	14,684	14,635
<b>Durable goods</b> .....	11,732	11,758	11,932	11,965	12,081	11,912	11,931	11,874	11,868	11,881	11,839	11,819	11,744
Production workers <sup>2</sup> .....	8,491	8,509	8,674	8,701	8,823	8,668	8,687	8,630	8,634	8,654	8,628	8,606	8,536
Ordnance and accessories.....	298	304	306	314	325	332	337	342	343	346	346	349	351
Lumber and wood products.....	590	590	589	595	598	600	607	610	604	608	607	606	603
Furniture and fixtures.....	488	487	491	492	493	491	496	496	496	494	494	490	485
Stone, clay, and glass products.....	665	664	662	660	659	658	662	656	658	664	666	664	658
<b>Primary metal industries</b> .....	1,369	1,379	1,381	1,378	1,361	1,348	1,347	1,333	1,326	1,332	1,330	1,321	1,313
Fabricated metal products.....	1,460	1,457	1,456	1,468	1,465	1,456	1,456	1,453	1,450	1,451	1,444	1,437	1,426
Machinery, except electrical.....	2,023	2,015	2,030	2,020	2,005	2,007	2,010	1,999	1,999	1,993	1,997	1,981	1,971
Electrical equipment.....	1,954	1,956	2,076	2,075	2,076	2,070	2,063	2,058	2,046	2,036	2,026	2,013	1,996
Transportation equipment.....	1,965	1,997	2,030	2,054	2,183	2,032	2,035	2,009	2,029	2,042	2,020	2,045	2,031
Instruments and related products.....	465	469	469	469	473	471	473	474	472	470	468	466	465
Miscellaneous manufacturing.....	455	440	442	440	443	447	445	444	445	445	441	447	445
<b>Nondurable goods</b> .....	8,256	8,260	8,224	8,232	8,253	8,252	8,267	8,244	8,243	8,241	8,222	8,180	8,214
Production workers <sup>2</sup> .....	6,091	6,094	6,058	6,071	6,099	6,104	6,124	6,110	6,105	6,117	6,103	6,078	6,099
Food and kindred products.....	1,787	1,806	1,777	1,791	1,797	1,787	1,789	1,793	1,795	1,793	1,801	1,792	1,789
Tobacco manufactures.....	77	78	78	80	83	81	81	82	81	83	82	84	81
Textile mill products.....	982	979	977	979	979	988	990	987	991	995	999	1,000	998
Apparel and other textile products.....	1,417	1,408	1,410	1,412	1,414	1,423	1,429	1,426	1,425	1,417	1,409	1,424	1,412
Paper and allied products.....	722	722	720	718	718	716	717	714	710	714	713	709	706
Printing and publishing.....	1,100	1,103	1,099	1,093	1,089	1,084	1,083	1,075	1,078	1,078	1,077	1,076	1,074
Chemicals and allied products.....	1,056	1,054	1,050	1,051	1,052	1,054	1,055	1,046	1,044	1,045	1,044	1,040	1,040
Petroleum and coal products.....	194	192	191	189	190	191	191	190	190	187	170	128	189
Rubber and plastics products, nec.....	580	580	583	583	586	585	584	581	579	579	577	573	571
Leather and leather products.....	341	338	339	336	345	343	348	350	350	350	350	354	354
<b>TRANSPORTATION AND PUBLIC UTILITIES</b> .....	4,493	4,488	4,480	4,480	4,484	4,483	4,467	4,444	4,439	4,399	4,373	4,353	4,360
<b>WHOLESALE AND RETAIL TRADE</b> .....	14,785	14,823	14,809	14,716	14,702	14,671	14,665	14,609	14,533	14,508	14,468	14,412	14,271
Wholesale trade.....	3,837	3,817	3,807	3,787	3,776	3,773	3,774	3,758	3,737	3,726	3,714	3,701	3,678
Retail trade.....	10,948	11,006	11,002	10,929	10,926	10,898	10,891	10,851	10,796	10,782	10,754	10,711	10,593
<b>FINANCE, INSURANCE, AND REAL ESTATE</b> .....	3,615	3,610	3,595	3,586	3,581	3,568	3,557	3,541	3,531	3,515	3,502	3,490	3,463
<b>SERVICES</b> .....	11,288	11,265	11,244	11,150	11,120	11,067	11,066	11,065	11,044	11,034	10,967	10,900	10,838
Hotels and other lodging places.....	745	743	740	721	704	706	724	730	741	745	733	733	729
Personal services.....	1,014	1,022	1,025	1,026	1,026	1,030	1,026	1,025	1,024	1,026	1,027	1,028	1,032
Medical and other health services.....	2,958	2,936	2,917	2,897	2,874	2,861	2,850	2,831	2,813	2,795	2,778	2,762	2,737
Educational services.....	1,126	1,117	1,113	1,092	1,094	1,099	1,102	1,120	1,119	1,117	1,112	1,090	1,096
<b>GOVERNMENT</b> .....	12,388	12,357	12,318	12,210	12,238	12,231	12,259	12,207	12,144	12,132	12,122	12,081	12,032
Federal <sup>3</sup> .....	2,713	2,721	2,729	2,749	2,752	2,777	2,790	2,754	2,758	2,759	2,767	2,760	2,724
State and local.....	9,675	9,636	9,589	9,461	9,486	9,454	9,469	9,453	9,386	9,373	9,355	9,321	9,308

<sup>1</sup> For comparability of data with those published in issues prior to August 1969, and coverage of these series, see footnote 1, table 11.

<sup>2</sup> For definition of production workers, see footnote 2, table 13.

<sup>3</sup> See footnote 3, table 13.

NOTE: Data for the 2 most recent months are preliminary.

15. Labor turnover rates in manufacturing, 1959 to date <sup>1</sup>

[Per 100 employees]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
<b>Total accessions</b>													
1959	3.8	3.7	4.1	4.1	4.2	5.4	4.4	5.2	5.1	3.9	3.4	3.6	4.2
1960	4.0	3.5	3.3	3.4	3.9	4.7	3.9	4.9	4.8	3.5	2.9	2.3	3.8
1961	3.7	3.2	4.0	4.0	4.3	5.0	4.4	5.3	4.7	4.3	3.4	2.6	4.1
1962	4.1	3.6	3.8	4.0	4.3	5.0	4.6	5.1	4.9	3.9	3.0	2.4	4.1
1963	3.6	3.3	3.5	3.9	3.9	4.8	4.3	4.8	4.8	3.9	2.9	2.5	3.9
1964	3.6	3.4	3.7	3.8	3.9	5.1	4.4	5.1	4.8	4.0	3.2	2.6	4.0
1965	3.8	3.5	4.0	3.8	4.1	5.6	4.5	5.4	5.5	4.5	3.9	3.1	4.3
1966	4.6	4.2	4.9	4.6	5.1	6.7	5.1	6.4	6.1	5.1	3.9	2.9	5.0
1967	4.3	3.6	3.9	3.9	4.6	5.9	4.7	5.5	5.3	4.7	3.7	2.8	4.4
1968	4.2	3.8	3.9	4.3	4.6	5.9	5.0	5.7	5.7	5.0	3.8	3.0	4.6
1969	4.6	3.9	4.4	4.5	4.8	6.6	5.1	5.6	5.9	4.9	3.6	-----	-----
<b>New hires</b>													
1959	2.0	2.1	2.4	2.5	3.7	2.7	3.0	3.5	3.5	2.6	1.9	1.5	2.6
1960	2.2	2.2	2.0	2.0	2.3	3.0	2.4	2.9	2.8	2.1	1.5	1.0	2.2
1961	1.5	1.4	1.6	1.8	2.1	2.9	2.5	3.1	3.0	2.7	2.0	1.4	2.2
1962	2.2	2.1	2.2	2.4	2.8	3.5	2.9	3.2	3.1	2.5	1.8	1.2	2.5
1963	1.9	1.8	2.0	2.3	2.5	3.3	2.7	3.2	3.2	2.6	1.8	1.4	2.4
1964	2.0	2.0	2.2	2.4	2.5	3.6	2.9	3.4	3.5	2.8	2.2	1.6	2.6
1965	2.4	2.4	2.8	2.6	3.0	4.3	3.2	3.9	4.0	3.5	2.9	2.2	3.1
1966	3.2	3.1	3.7	3.6	4.1	5.6	3.9	4.8	4.7	4.2	3.1	2.1	3.8
1967	3.0	2.7	2.8	2.8	3.3	4.6	3.3	4.0	4.1	3.7	2.8	2.0	3.3
1968	3.0	2.7	2.9	3.2	3.6	4.7	3.7	4.3	4.5	4.0	2.9	2.2	3.5
1969	3.3	3.0	3.4	3.5	3.8	5.4	3.9	4.3	4.8	4.0	2.8	-----	-----
<b>Total separations</b>													
1959	3.7	3.1	3.3	3.6	3.5	3.6	4.0	4.6	5.3	5.5	4.7	3.9	4.1
1960	3.6	3.5	4.0	4.2	3.9	4.0	4.4	4.8	5.3	4.7	4.5	4.8	4.3
1961	4.7	3.9	3.8	3.4	3.5	3.6	4.1	4.2	5.1	4.2	4.0	4.0	4.0
1962	3.9	3.4	3.6	3.6	3.8	3.8	4.4	5.1	5.0	4.4	4.0	3.8	4.1
1963	4.0	3.2	3.5	3.6	3.6	3.4	4.1	4.8	4.9	4.1	3.9	3.7	3.9
1964	4.0	3.3	3.5	3.5	3.6	3.5	4.4	4.3	5.1	4.2	3.6	3.7	3.9
1965	3.7	3.1	3.4	3.7	3.6	3.6	4.3	5.1	5.6	4.5	3.9	4.1	4.1
1966	4.0	3.6	4.1	4.3	4.3	4.4	5.3	5.8	6.6	4.8	4.3	4.2	4.6
1967	4.5	4.0	4.6	4.3	4.2	4.3	4.8	5.3	6.2	4.7	4.0	3.9	4.6
1968	4.4	3.9	4.1	4.1	4.3	4.1	5.0	6.0	6.3	4.9	4.1	3.8	4.6
1969	4.5	4.0	4.4	4.5	4.6	4.5	5.3	6.2	6.6	5.3	4.3	-----	-----
<b>Quits</b>													
1959	1.1	1.0	1.2	1.4	1.5	1.5	1.6	2.1	2.6	1.7	1.2	1.0	1.5
1960	1.2	1.2	1.2	1.4	1.3	1.4	1.4	1.8	2.3	1.3	.9	.7	1.3
1961	.9	.8	.9	1.0	1.1	1.2	1.2	1.7	2.3	1.4	1.1	.9	1.2
1962	1.1	1.1	1.2	1.3	1.5	1.5	1.4	2.1	2.4	1.5	1.1	.8	1.4
1963	1.1	1.0	1.2	1.3	1.4	1.4	1.4	2.1	2.4	1.5	1.1	.8	1.4
1964	1.2	1.1	1.2	1.3	1.5	1.4	1.5	2.1	2.7	1.7	1.2	1.0	1.5
1965	1.4	1.3	1.5	1.7	1.7	1.7	1.8	2.6	3.5	2.2	1.7	1.4	1.9
1966	1.9	1.8	2.3	2.5	2.5	2.5	2.5	3.6	4.5	2.8	2.1	1.7	2.6
1967	2.1	1.9	2.1	2.2	2.2	2.3	2.1	3.2	4.0	2.5	1.9	1.5	2.3
1968	2.0	1.9	2.1	2.2	2.4	2.2	2.3	3.7	4.1	2.8	2.1	1.6	2.5
1969	2.3	2.1	2.4	2.6	2.7	2.6	2.6	4.0	4.4	2.9	2.1	-----	-----
<b>Layoffs</b>													
1959	2.1	1.5	1.6	1.6	1.4	1.4	1.8	1.8	2.0	3.2	2.9	2.4	2.0
1960	1.8	1.7	2.2	2.2	1.9	2.0	2.4	2.4	2.4	2.8	3.1	3.6	2.4
1961	3.2	2.6	2.3	1.9	1.8	1.8	2.3	1.8	2.1	2.0	2.2	2.6	2.2
1962	2.1	1.7	1.6	1.6	1.6	1.6	2.2	2.2	1.9	2.2	2.3	2.5	2.0
1963	2.2	1.6	1.7	1.6	1.5	1.4	2.0	1.9	1.8	1.9	2.1	2.3	1.8
1964	2.0	1.6	1.6	1.4	1.4	1.3	2.1	1.4	1.5	1.8	1.7	2.1	1.7
1965	1.6	1.2	1.2	1.3	1.1	1.1	1.8	1.6	1.3	1.4	1.5	1.9	1.4
1966	1.3	1.0	1.0	1.0	.9	1.0	2.0	1.1	1.0	1.1	1.3	1.7	1.2
1967	1.5	1.3	1.5	1.3	1.1	1.1	1.9	1.2	1.2	1.3	1.3	1.4	1.4
1968	1.5	1.2	1.1	1.0	1.0	.9	1.7	1.2	1.1	1.2	1.2	1.6	1.2
1969	1.2	1.0	1.0	.9	.9	.9	1.6	1.1	1.1	1.3	1.4	-----	-----

<sup>1</sup> For comparability of data with those published in issues prior to August 1969, see footnote 1, table 11.

Month-to-month changes in total employment in manufacturing and nonmanufacturing industries as indicated by labor turnover rates are not comparable with the changes shown by the Bureau's employment series for the following reasons: (1) The

labor turnover series measures changes during the calendar month, while the employment series measures changes from midmonth to midmonth and (2) the turnover series excludes personnel changes caused by strikes, but the employment series reflects the influence of such stoppages.

NOTE: Data for the current month are preliminary.

16. Labor turnover rates<sup>1</sup> in manufacturing, by major industry group

[Per 100 employees]

Major industry group	Accession rates						Separation rates								
	Total			New hires			Total			Quits			Layoffs		
	Nov. 1969	Oct. 1969	Nov. 1968	Nov. 1969	Oct. 1969	Nov. 1968	Nov. 1969	Oct. 1969	Nov. 1968	Nov. 1969	Oct. 1969	Nov. 1968	Nov. 1969	Oct. 1969	Nov. 1968
<b>MANUFACTURING</b> .....	3.6	4.9	3.8	2.8	4.0	2.9	4.3	5.3	4.1	2.1	2.9	2.1	1.4	1.3	1.2
Seasonally adjusted.....	4.4	4.7	4.6	3.4	3.6	3.5	4.8	5.0	4.5	2.6	2.7	2.6	1.3	1.3	1.1
<b>Durable goods</b> .....	3.2	4.5	3.6	2.6	3.6	2.8	4.0	5.0	3.7	1.9	2.6	1.9	1.2	1.2	.9
Ordnance and accessories.....	1.2	2.3	2.4	.8	1.5	1.9	3.7	3.8	2.6	1.2	1.7	1.4	1.8	1.4	.6
Lumber and wood products.....	4.6	5.8	4.8	4.0	5.2	4.2	6.2	6.9	5.7	3.5	4.5	3.5	1.9	1.3	1.4
Furniture and fixtures.....	4.6	7.0	5.4	4.2	6.3	4.9	5.7	6.9	5.1	3.4	4.8	3.5	1.2	.6	.6
Stone, clay, and glass products.....	3.4	5.1	3.7	2.8	4.2	3.0	4.2	5.5	4.3	2.1	3.3	2.3	1.4	1.0	1.1
Primary metal industries.....	2.8	3.9	3.7	2.2	3.1	2.1	3.0	4.1	2.9	1.4	2.1	1.3	.6	.8	.7
Fabricated metal products.....	4.1	5.5	4.4	3.6	4.7	3.8	4.7	6.0	4.5	2.4	3.3	2.4	1.2	1.3	1.1
Machinery, except electrical.....	2.9	3.8	3.0	2.3	3.1	2.3	2.6	3.8	2.6	1.3	1.9	1.3	.5	.9	.5
Electrical equipment.....	3.0	4.2	3.2	2.2	3.3	2.4	3.6	4.6	3.4	1.8	2.5	1.7	.9	1.0	.7
Transportation equipment.....	2.9	4.3	3.5	1.9	2.8	2.3	4.0	4.9	3.7	1.3	1.9	1.4	1.9	1.9	1.4
Instruments and related products.....	2.7	3.4	2.8	2.1	2.9	2.4	2.8	3.8	2.5	1.4	2.4	1.5	.7	.6	.4
Miscellaneous manufacturing.....	4.6	6.7	4.4	3.9	5.8	3.7	8.3	6.9	6.5	3.0	4.4	3.0	3.9	1.2	2.4
<b>Nondurable goods</b> .....	4.0	5.5	4.1	3.1	4.4	3.1	4.8	5.9	4.6	2.4	3.4	2.4	1.6	1.6	1.5
Food and kindred products.....	5.5	8.1	5.6	4.0	6.2	3.9	7.5	9.3	7.3	3.2	4.5	3.1	3.5	3.8	3.4
Tobacco manufactures.....	3.8	4.9	4.8	2.3	4.0	2.5	7.9	6.3	7.7	1.8	2.9	1.7	5.3	2.2	5.5
Textile mill products.....	4.6	6.0	4.5	3.6	4.9	3.7	4.9	6.1	4.5	3.2	4.3	3.1	.8	.7	.5
Apparel and other textile products.....	4.1	5.5	4.4	2.9	3.9	3.1	5.3	5.8	4.9	2.4	3.2	2.4	2.3	1.7	1.8
Paper and allied products.....	3.2	4.8	3.5	2.8	4.3	3.0	3.4	4.7	3.4	1.9	3.0	2.1	.6	.6	.4
Printing and publishing.....	3.2	4.1	3.2	2.7	3.7	2.7	2.9	4.0	3.0	1.8	2.6	1.8	.5	.6	.5
Chemicals and allied products.....	2.0	2.5	2.1	1.7	2.1	1.8	2.1	2.7	2.1	1.0	1.4	1.0	.5	.5	.5
Petroleum and coal products.....	1.6	2.7	1.6	1.4	2.5	1.4	2.3	2.6	2.3	.9	1.4	1.0	.8	.4	.7
Rubber and plastics products, n.e.c.....	4.4	6.2	4.4	3.7	5.4	3.7	5.2	6.3	4.8	2.8	4.0	2.6	1.3	.9	1.1
Leather and leather products.....	5.2	7.0	5.3	3.8	4.9	4.0	5.1	7.2	5.0	3.1	4.4	3.1	1.1	1.7	.9

<sup>1</sup> For comparability of data with those published in issues prior to August 1969, see footnote 1, table 11. For relationship to employment series see footnote 1, table 15.

NOTE: Data for the current month are preliminary. For additional detail see Employment and Earnings, table D-2.



17. Gross hours and earnings of production and nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by industry division, 1947 to date

Year	Averages			Averages			Averages			Averages		
	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings
	Total private			Manufacturing			Durable goods			Nondurable goods		
1947	\$45.58	40.3	\$1.131	\$49.17	40.4	\$1.217	\$51.76	40.5	\$1.278	\$46.03	40.2	\$1.145
1948	49.00	40.0	1.225	53.12	40.0	1.328	56.36	40.4	1.395	49.50	39.6	1.250
1949	50.24	39.4	1.275	53.88	39.1	1.378	57.25	39.4	1.453	50.38	38.9	1.295
1950	53.13	39.8	1.335	58.32	40.5	1.440	62.43	41.1	1.519	53.48	39.7	1.347
1951	57.86	39.9	1.45	63.34	40.6	1.56	68.48	41.5	1.65	56.88	39.5	1.44
1952	60.65	39.9	1.52	67.16	40.7	1.65	72.63	41.5	1.75	59.95	39.7	1.51
1953	63.76	39.6	1.61	70.47	40.5	1.74	76.63	41.2	1.86	62.57	39.6	1.58
1954	64.52	39.1	1.65	70.49	39.6	1.78	76.19	40.1	1.90	63.18	39.0	1.62
1955	67.72	39.6	1.71	75.70	40.7	1.86	82.19	41.3	1.99	66.63	39.9	1.67
1956	70.74	39.3	1.80	78.78	40.4	1.95	85.28	41.0	2.08	70.09	39.6	1.77
1957	73.33	38.8	1.89	81.59	39.8	2.05	88.26	40.3	2.19	72.52	39.2	1.85
1958	75.08	38.5	1.95	82.71	39.2	2.11	89.27	39.5	2.26	74.11	38.8	1.91
1959 <sup>2</sup>	78.78	39.0	2.02	88.26	40.3	2.19	96.05	40.7	2.36	78.61	38.7	1.98
1960	80.67	38.6	2.09	89.72	39.7	2.26	97.44	40.1	2.43	80.36	39.2	2.05
1961	82.60	38.6	2.14	92.34	39.8	2.32	100.35	40.3	2.49	82.92	39.3	2.11
1962	85.91	38.7	2.22	96.56	40.4	2.39	104.70	40.9	2.56	85.93	39.6	2.17
1963	88.46	38.8	2.28	99.63	40.5	2.46	108.09	41.1	2.63	87.91	39.6	2.22
1964	91.33	38.7	2.36	102.97	40.7	2.53	112.19	41.4	2.71	90.91	39.7	2.29
1965	95.06	38.8	2.45	107.53	41.2	2.61	117.18	42.0	2.79	94.64	40.1	2.36
1966	98.82	38.6	2.56	112.34	41.3	2.72	122.09	42.1	2.90	98.49	40.2	2.45
1967	101.84	38.0	2.68	114.90	40.6	2.83	123.60	41.2	3.00	102.03	39.7	2.57
1968	107.73	37.8	2.85	122.51	40.7	3.01	132.07	41.4	3.19	109.05	39.8	2.74
Year	Averages			Averages			Averages			Averages		
	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings
	Mining			Contract construction			Wholesale and retail trade			Finance, insurance, and real estate		
1947	\$59.94	40.8	\$1.469	\$58.87	38.2	\$1.541	\$38.07	40.5	\$0.940	\$43.21	37.9	\$1.140
1948	65.56	39.4	1.664	65.27	38.1	1.713	40.80	40.4	1.010	45.48	37.9	1.200
1949	62.33	36.3	1.717	67.56	37.7	1.792	42.93	40.5	1.060	47.63	37.8	1.260
1950	67.16	37.9	1.772	69.68	37.4	1.863	44.55	40.5	1.100	50.52	37.7	1.340
1951	74.11	38.4	1.93	76.96	38.1	2.02	47.79	40.5	1.18	54.67	37.7	1.45
1952	77.59	38.6	2.01	82.86	38.9	2.13	49.20	40.0	1.23	57.08	37.8	1.51
1953	83.03	38.8	2.14	86.41	37.9	2.28	51.35	39.5	1.30	59.57	37.7	1.58
1954	82.60	38.6	2.14	88.91	37.2	2.39	53.33	39.5	1.35	62.04	37.6	1.65
1955	89.54	40.7	2.20	90.90	37.1	2.45	55.16	39.4	1.40	63.92	37.6	1.70
1956	95.06	40.8	2.33	96.38	37.5	2.57	57.48	39.1	1.47	65.68	36.9	1.78
1957	98.65	40.1	2.46	100.27	37.0	2.71	59.60	38.7	1.54	67.53	36.7	1.84
1958	96.08	38.9	2.47	103.78	36.8	2.82	61.76	38.6	1.60	70.12	37.1	1.89
1959 <sup>2</sup>	103.68	40.5	2.56	108.41	37.0	2.93	64.41	38.8	1.66	72.74	37.3	1.95
1960	105.44	40.4	2.61	113.04	36.7	3.08	66.01	38.6	1.71	75.14	37.2	2.02
1961	106.92	40.5	2.64	118.08	36.9	3.20	67.41	38.3	1.76	77.12	36.9	2.09
1962	110.43	40.9	2.70	122.47	37.0	3.31	69.91	38.2	1.83	80.94	37.3	2.17
1963	114.40	41.6	2.75	127.19	37.3	3.41	72.01	38.1	1.89	84.38	37.5	2.25
1964	117.74	41.9	2.81	132.06	37.2	3.55	74.28	37.9	1.96	85.79	37.3	2.30
1965	123.52	42.3	2.92	138.38	37.4	3.70	76.53	37.7	2.03	88.91	37.2	2.39
1966	130.24	42.7	3.05	146.26	37.6	3.89	79.02	37.1	2.13	92.13	37.3	2.47
1967	135.89	42.6	3.19	154.95	37.7	4.11	81.76	36.5	2.24	95.46	37.0	2.58
1968	143.05	42.7	3.35	164.56	37.4	4.40	86.40	36.0	2.40	101.75	37.0	2.75

<sup>1</sup> For comparability of data with those published in issues prior to August 1969, see footnote 1, table 11.

Data relate to production workers in mining and manufacturing; to construction workers in contract construction, and to nonsupervisory workers in wholesale and related trade, finance, insurance, and real estate; transportation and public utilities and services. These groups account for approximately four-fifths of the total employ-

ment on private nonagricultural payrolls. Transportation and public utilities, and services are included in total private but are not shown separately in this table.

<sup>2</sup> Data include Alaska and Hawaii beginning 1959.

NOTE: For additional detail see Employment and Earnings, table C-1.

**18. Gross average weekly hours of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls, by industry division and major manufacturing group**

Industry division and group	1969												1968	Annual average	
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1968	1967
<b>TOTAL PRIVATE</b> .....	37.7	37.5	37.7	38.0	38.2	38.1	38.0	37.7	37.5	37.6	37.2	37.5	37.8	37.8	38.0
<b>MINING</b> .....	43.6	43.0	43.4	43.5	43.7	43.1	42.5	43.5	43.6	42.2	42.5	42.9	43.3	42.7	42.6
<b>CONTRACT CONSTRUCTION</b> .....	37.7	37.1	38.4	39.3	39.2	38.8	38.5	38.2	37.6	37.2	36.6	36.7	37.1	37.4	37.7
<b>MANUFACTURING</b> .....	40.9	40.6	40.7	41.0	40.6	40.5	40.9	40.7	40.5	40.7	40.0	40.4	41.1	40.7	40.6
Overtime hours.....	3.5	3.6	3.7	4.0	3.7	3.5	3.7	3.6	3.5	3.5	3.3	3.6	3.9	3.6	3.4
<b>Durable Goods</b> .....	41.6	41.2	41.4	41.7	41.1	40.9	41.5	41.4	41.2	41.4	40.8	41.1	41.7	41.4	41.2
Overtime hours.....	3.6	3.7	3.9	4.2	3.8	3.6	3.9	3.7	3.6	3.7	3.6	3.7	4.1	3.8	3.5
<b>Ordinance and accessories</b> .....	40.8	40.8	40.3	40.6	40.2	39.8	40.8	40.6	40.5	40.6	40.1	40.4	41.8	41.5	41.7
<b>Lumber and wood products</b> .....	40.6	39.9	40.4	40.4	40.2	39.7	40.7	40.7	40.2	40.7	40.0	39.6	40.9	40.6	40.2
<b>Furniture and fixtures</b> .....	40.9	40.3	40.6	40.7	40.8	39.7	40.8	40.4	40.1	40.4	39.7	40.0	41.3	40.6	40.4
<b>Stone, clay, and glass products</b> .....	41.9	42.1	42.2	42.6	42.6	41.9	42.4	42.4	41.9	41.7	41.3	41.1	41.9	41.8	41.6
<b>Primary metal industries</b> .....	41.5	41.4	41.7	42.1	41.8	41.6	42.0	41.9	42.1	42.0	41.5	41.8	41.6	41.6	41.1
<b>Fabricated metal products</b> .....	42.1	41.6	41.7	42.1	41.7	41.2	42.0	41.7	41.4	41.6	40.8	41.4	42.0	41.7	41.5
<b>Machinery, except electrical</b> .....	43.0	42.4	42.4	42.7	42.0	41.8	42.6	42.6	42.6	43.0	42.4	42.4	42.7	42.1	42.6
<b>Electrical equipment and supplies</b> .....	40.8	40.5	40.4	40.7	40.3	39.8	40.7	40.5	40.3	40.6	39.7	40.3	40.8	40.3	40.2
<b>Transportation equipment</b> .....	41.7	41.4	41.9	42.3	40.5	41.6	41.6	41.3	41.0	41.2	41.0	41.5	42.6	42.2	41.4
<b>Instruments and related products</b> .....	42.1	41.2	40.9	41.2	40.7	40.5	41.0	40.7	40.5	40.7	39.7	40.5	40.9	40.5	41.3
<b>Miscellaneous manufacturing industries</b> .....	39.0	39.2	39.3	39.2	39.1	38.4	39.2	39.0	39.1	39.1	37.7	38.7	39.2	3.93	39.4
<b>Nondurable goods</b> .....	40.0	39.7	39.7	40.0	39.9	39.8	39.9	39.7	39.4	39.7	38.9	39.4	40.1	39.8	39.7
Overtime hours.....	3.4	3.4	3.5	3.7	3.5	3.4	3.4	3.3	3.2	3.2	3.0	3.3	3.5	3.3	3.1
<b>Food and kindred products</b> .....	40.8	40.9	40.7	41.8	41.4	41.2	40.9	40.6	40.1	40.3	40.0	40.3	41.1	40.8	40.9
<b>Tobacco manufactures</b> .....	37.4	37.4	38.4	38.9	37.5	37.7	39.9	37.6	35.8	35.6	36.2	36.2	37.7	37.8	38.6
<b>Textile mill products</b> .....	41.4	41.1	40.9	41.0	41.0	40.7	41.4	40.9	40.4	40.9	39.9	40.4	41.6	41.2	40.9
<b>Apparel and other textile products</b> .....	36.1	35.8	35.8	35.8	36.3	35.9	36.3	36.1	35.9	36.3	35.2	35.7	36.0	36.1	36.0
<b>Paper and allied products</b> .....	43.1	43.0	43.0	43.2	43.0	43.0	43.0	42.9	43.0	43.0	42.1	42.9	43.6	42.9	42.8
<b>Printing and publishing</b> .....	39.2	38.3	38.4	38.6	38.6	38.4	38.4	38.3	38.1	38.3	37.7	37.9	38.9	38.3	38.4
<b>Chemicals and allied products</b> .....	42.1	41.9	41.7	41.7	41.7	41.7	41.8	41.9	41.9	41.7	41.5	41.6	42.1	41.8	41.6
<b>Petroleum and coal products</b> .....	42.3	42.7	42.7	42.6	42.9	43.6	42.5	43.3	43.2	42.7	41.7	41.3	42.1	42.5	42.7
<b>Rubber and plastics products, nec.</b> .....	41.5	41.1	41.3	41.5	41.0	40.8	41.3	41.2	41.0	41.1	40.3	41.3	41.9	41.5	41.4
<b>Leather and leather products</b> .....	38.1	37.4	37.0	36.8	37.1	37.4	37.8	37.3	36.5	37.3	35.7	37.7	38.4	38.3	38.1
<b>WHOLESALE AND RETAIL TRADE</b> .....	35.6	35.2	35.3	35.7	36.6	36.5	35.9	35.4	35.3	35.4	35.3	35.5	35.9	36.0	36.5
<b>Wholesale trade</b> .....	40.5	40.2	40.3	40.3	40.5	40.3	40.1	40.0	40.0	40.0	39.9	40.0	40.3	40.1	40.3
<b>Retail trade</b> .....	34.2	33.6	33.7	34.2	35.3	35.2	34.5	33.9	33.8	33.9	33.8	34.0	34.6	34.7	35.3
<b>FINANCE, INSURANCE, AND REAL ESTATE</b> .....	37.0	37.2	37.1	37.0	37.0	37.1	37.1	37.0	37.1	37.1	37.1	37.2	37.1	37.0	37.0

<sup>1</sup> For comparability of data with those published in issues prior to August 1969, see footnote 1, table 11. For employees covered, see footnote 1, table 17.

NOTE: Data for the 2 most recent months are preliminary. For additional detail, see Employment and Earnings, table C-2

**19. Gross average weekly hours of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls, by industry division and major manufacturing group, seasonally adjusted**

Industry division and group	1969											1968	
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Dec.	Nov.
<b>TOTAL PRIVATE</b> .....	37.5	37.6	37.6	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.5	37.6	37.6
<b>MINING</b> .....	43.6	43.4	42.9	43.2	43.2	42.6	42.0	43.4	43.8	42.8	43.3	43.3	43.2
<b>CONTRACT CONSTRUCTION</b> .....	38.2	38.2	37.5	38.1	37.9	37.5	37.6	38.1	38.0	37.9	38.0	37.6	36.2
<b>MANUFACTURING</b> .....	40.6	40.5	40.5	40.8	40.6	40.7	40.7	40.7	40.8	40.9	40.1	40.8	40.8
Overtime hours.....	3.4	3.5	3.5	3.7	3.7	3.6	3.6	3.6	3.7	3.7	3.5	3.7	3.8
<b>Durable Goods</b> .....	41.2	41.1	41.2	41.5	41.3	41.2	41.3	41.4	41.4	41.5	40.9	41.3	41.6
Overtime hours.....	3.4	3.5	3.7	3.9	3.8	3.8	3.9	3.8	3.8	3.9	3.8	3.9	4.0
Ordnance and accessories.....	40.3	40.5	40.1	40.4	40.4	40.2	40.9	40.6	40.9	40.8	40.3	41.3	41.4
Lumber and wood products.....	40.8	40.3	40.0	40.1	39.8	39.7	40.2	40.3	40.2	40.9	40.8	41.1	40.6
Furniture and fixtures.....	40.1	39.9	39.9	40.1	40.3	40.1	40.7	40.9	40.9	40.7	40.1	40.5	40.5
Stone, clay, and glass products.....	42.0	42.1	41.7	42.1	42.1	41.7	41.9	42.1	42.0	42.3	42.2	42.0	41.8
Primary metal industries.....	41.5	41.6	42.2	42.2	42.0	41.5	41.7	41.7	41.8	41.9	41.6	41.6	41.4
Fabricated metal products.....	41.8	41.4	41.4	41.5	41.6	41.6	41.8	41.6	41.8	41.9	41.2	41.7	42.1
Machinery, except electrical.....	42.5	42.4	42.4	42.7	42.6	42.2	42.5	42.6	42.6	42.7	42.3	42.2	42.3
Electrical equipment and supplies.....	40.2	40.1	40.2	40.5	40.4	40.3	40.6	40.6	40.9	40.7	39.7	40.2	40.3
Transportation equipment.....	41.0	40.5	41.3	41.8	41.2	42.3	41.6	41.1	41.5	41.6	41.6	41.8	42.3
Instruments and related products.....	41.7	41.0	40.7	41.0	40.9	40.9	40.9	40.8	40.8	40.7	39.7	40.5	40.7
Miscellaneous manufacturing industries.....	38.8	38.8	38.8	39.0	39.0	39.1	39.2	39.1	39.5	39.0	37.6	39.0	39.2
<b>Nondurable Goods</b> .....	39.8	39.5	39.5	39.7	39.6	39.7	39.8	39.8	39.8	39.9	39.1	39.9	39.7
Overtime hours.....	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.4	3.4	3.4	3.2	3.4	3.4
Food and kindred products.....	40.6	40.7	40.5	41.0	40.9	40.6	40.7	40.8	40.9	40.9	40.7	40.9	40.6
Tobacco manufactures.....	36.8	37.4	37.2	37.4	37.2	38.2	39.5	38.1	36.4	36.5	36.6	37.1	37.5
Textile mill products.....	41.0	40.8	40.6	40.8	40.9	41.2	41.2	41.0	41.1	40.9	39.9	41.2	41.1
Apparel and other textile products.....	36.2	35.8	35.7	35.8	35.9	36.0	36.2	36.1	36.0	36.0	35.2	36.1	36.0
Paper and allied products.....	42.7	42.8	42.7	42.8	42.8	43.0	42.9	43.0	43.4	43.2	42.5	43.2	43.0
Printing and publishing.....	38.8	38.3	38.3	38.3	38.4	38.5	38.4	38.4	38.3	38.3	37.9	38.5	38.4
Chemicals and allied products.....	41.9	41.8	41.7	41.6	41.9	41.9	41.8	41.8	41.6	41.7	41.7	41.9	41.9
Petroleum and coal products.....	42.9	42.7	42.6	42.0	42.8	42.9	42.2	43.0	42.9	43.2	42.6	42.7	42.6
Rubber and plastics products, nec.....	41.1	40.8	40.9	41.0	40.9	41.2	41.3	41.4	41.4	41.4	40.7	41.5	41.4
Leather and leather products.....	37.5	37.4	37.3	37.1	36.8	37.0	37.4	37.6	37.7	37.6	35.3	37.8	37.9
<b>WHOLESALE AND RETAIL TRADE</b> .....	35.4	35.5	35.5	35.7	35.8	35.7	35.7	35.7	35.6	35.7	35.7	35.7	35.8
<b>Wholesale Trade</b> .....	40.3	40.2	40.3	40.3	40.3	40.0	40.0	40.1	40.2	40.1	40.1	40.0	40.0
<b>Retail trade</b> .....	33.9	34.0	33.9	34.2	34.3	34.2	34.2	34.3	34.1	34.3	34.2	34.3	34.5
<b>FINANCE, INSURANCE, AND REAL ESTATE</b> .....	36.9	37.2	37.1	37.1	37.0	37.0	37.2	37.0	37.1	37.1	37.1	37.0	36.9

<sup>1</sup> For comparability of data with those published in issues prior to August, 1969, see footnote 1, table 11. For employees covered, see footnote 1, table 17.

NOTE: Data for the 2 most recent months are preliminary.



20. Gross average hourly earnings of production or nonsupervisory workers <sup>1</sup> on private nonagricultural payrolls, by industry division and major manufacturing group

Industry and division group	1969												1968	Annual average	
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1968	1967
<b>TOTAL PRIVATE</b> .....	\$3.11	\$3.12	\$3.11	\$3.10	\$3.05	\$3.04	\$3.03	\$3.01	\$2.98	\$2.97	\$2.96	\$2.94	\$2.92	\$2.85	\$2.68
<b>MINING</b> .....	3.70	3.69	3.68	3.63	3.59	3.58	3.55	3.57	3.55	3.52	3.52	3.50	3.49	3.35	3.19
<b>CONTRACT CONSTRUCTION</b> .....	4.99	4.95	4.95	4.91	4.79	4.74	4.71	4.71	4.64	4.62	4.56	4.58	4.55	4.40	4.11
<b>MANUFACTURING</b> .....	3.28	3.26	3.24	3.24	3.19	3.19	3.17	3.16	3.15	3.13	3.12	3.12	3.11	3.01	2.83
<b>Durable Goods</b> .....	3.48	3.45	3.44	3.44	3.39	3.37	3.36	3.35	3.33	3.32	3.31	3.31	3.30	3.19	3.00
Ordnance and accessories.....	3.54	3.54	3.50	3.49	3.46	3.44	3.45	3.42	3.41	3.38	3.38	3.36	3.38	3.27	3.18
Lumber and wood products.....	2.81	2.84	2.82	2.83	2.78	2.74	2.71	2.68	2.64	2.65	2.61	2.59	2.62	2.57	2.37
Furniture and fixtures.....	2.71	2.70	2.68	2.68	2.64	2.62	2.62	2.60	2.58	2.56	2.54	2.54	2.55	2.47	2.33
Stone, clay, and glass products.....	3.26	3.28	3.26	3.25	3.21	3.18	3.17	3.17	3.14	3.10	3.06	3.05	3.06	2.99	2.82
<b>Primary metal industries</b> .....	3.87	3.85	3.85	3.87	3.84	3.79	3.76	3.75	3.74	3.71	3.69	3.70	3.67	3.55	3.34
Fabricated metal products.....	3.43	3.40	3.39	3.39	3.33	3.32	3.33	3.31	3.29	3.28	3.26	3.26	3.25	3.16	2.98
Machinery, except electrical.....	3.70	3.67	3.67	3.63	3.57	3.55	3.56	3.56	3.54	3.52	3.51	3.48	3.47	3.36	3.19
Electrical equipment and supplies.....	3.17	3.12	3.13	3.13	3.09	3.09	3.08	3.07	3.05	3.04	3.04	3.04	3.03	2.93	2.77
Transportation equipment.....	4.03	3.98	3.96	3.95	3.93	3.91	3.86	3.83	3.84	3.82	3.83	3.86	3.87	3.69	3.44
Instruments and related products.....	3.29	3.24	3.22	3.20	3.16	3.14	3.15	3.13	3.11	3.10	3.10	3.08	3.08	2.98	2.85
Miscellaneous manufacturing industries.....	2.75	2.71	2.68	2.67	2.64	2.64	2.65	2.64	2.62	2.61	2.61	2.60	2.58	2.50	2.35
<b>Nondurable Goods</b> .....	2.99	2.97	2.96	2.95	2.92	2.92	2.89	2.88	2.87	2.85	2.84	2.83	2.82	2.74	2.57
Food and kindred products.....	3.04	3.00	2.97	2.96	2.93	2.97	2.94	2.95	2.94	2.93	2.91	2.91	2.87	2.80	2.64
Tobacco manufactures.....	2.69	2.64	2.52	2.54	2.52	2.77	2.79	2.74	2.68	2.66	2.63	2.57	2.55	2.49	2.27
Textile mill products.....	2.42	2.42	2.41	2.41	2.39	2.35	2.31	2.30	2.30	2.29	2.27	2.28	2.28	2.21	2.06
Apparel and other textile products.....	2.35	2.35	2.34	2.35	2.31	2.29	2.30	2.29	2.28	2.29	2.27	2.28	2.26	2.21	2.03
Paper and allied products.....	3.32	3.32	3.31	3.31	3.28	3.26	3.22	3.19	3.17	3.15	3.14	3.15	3.14	3.05	2.87
Printing and publishing.....	3.81	3.78	3.77	3.75	3.70	3.68	3.68	3.66	3.64	3.63	3.61	3.59	3.59	3.48	3.28
Chemicals and allied products.....	3.58	3.55	3.54	3.52	3.49	3.49	3.46	3.43	3.40	3.38	3.37	3.37	3.36	3.26	3.10
Petroleum and coal products.....	4.04	4.08	4.06	4.04	4.00	4.04	4.00	4.03	4.03	3.95	3.87	3.69	3.79	3.75	3.58
Rubber and plastics products, nec.....	3.14	3.13	3.13	3.13	3.09	3.09	3.05	3.04	3.02	3.00	3.01	3.02	3.01	2.92	2.74
Leather and leather products.....	2.43	2.43	2.40	2.38	2.35	2.34	2.35	2.35	2.35	2.34	2.33	2.32	2.30	2.23	2.07
<b>WHOLESALE AND RETAIL TRADE</b> .....	2.60	2.63	2.61	2.59	2.56	2.55	2.55	2.54	2.52	2.51	2.51	2.49	2.45	2.40	2.24
Wholesale trade.....	3.34	3.33	3.29	3.29	3.24	3.23	3.24	3.20	3.18	3.16	3.16	3.12	3.12	3.05	2.88
Retail trade.....	2.33	2.36	2.35	2.33	2.30	2.30	2.30	2.29	2.27	2.26	2.26	2.24	2.21	2.16	2.01
<b>FINANCE, INSURANCE, AND REAL ESTATE</b> .....	2.97	2.98	2.94	2.93	2.92	2.91	2.93	2.90	2.88	2.89	2.90	2.87	2.83	2.75	2.58

<sup>1</sup> For comparability of data with those published in issues prior to August 1969, see footnote 1, table 11. For employees covered, see footnote 1, table 17.

NOTE: Data for the 2 most recent months are preliminary. For additional detail see Employment and Earnings, table C-2.

**21. Gross average weekly earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls, by industry division and major manufacturing group**

Industry division and group	1969												1968	Annual average	
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1968	1967
<b>TOTAL PRIVATE</b> .....	\$117.25	\$117.00	\$117.25	\$117.80	\$116.51	\$115.82	\$115.14	\$113.48	\$111.75	\$111.67	\$110.11	\$110.25	\$110.38	\$107.73	\$101.84
<b>MINING</b> .....	161.32	158.67	159.71	157.91	156.88	154.30	150.88	155.30	154.78	148.54	149.60	150.15	151.12	143.05	135.89
<b>CONTRACT CONSTRUCTION</b> .....	188.12	183.65	190.08	192.96	187.77	183.91	181.34	179.92	174.46	171.86	166.90	168.09	168.81	164.56	154.95
<b>MANUFACTURING</b> .....	134.15	132.36	131.87	132.84	129.51	129.20	129.65	128.61	127.58	127.39	124.80	126.05	127.82	122.51	114.90
Durable goods.....	144.77	142.14	142.42	143.45	139.33	137.83	139.44	138.69	137.20	137.45	135.05	136.04	137.61	132.07	123.60
Ordnance and accessories.....	144.43	144.43	141.05	141.69	139.09	136.91	140.76	138.85	138.11	137.23	135.54	135.74	141.28	135.71	132.61
Lumber and wood products.....	114.09	113.32	113.93	114.33	111.76	108.78	110.30	109.08	106.13	107.86	104.40	102.56	107.16	104.34	95.27
Furniture and fixtures.....	110.84	108.81	108.81	109.08	107.71	104.01	106.90	105.04	103.46	103.42	100.84	101.60	105.32	100.28	94.13
Stone, clay, and glass products.....	136.59	138.09	137.57	138.45	136.75	133.24	134.41	134.41	131.57	129.27	126.38	125.36	128.21	124.98	117.31
Primary metal industries.....	160.61	159.39	160.55	162.93	160.51	157.66	157.92	157.13	157.45	155.82	153.14	154.66	152.67	147.68	137.27
Fabricated metal products.....	144.40	141.44	141.36	142.72	138.86	136.78	139.86	138.03	136.21	136.45	133.01	134.96	136.50	131.77	123.67
Machinery, except electrical.....	159.10	155.61	155.61	155.00	149.94	148.39	151.66	151.66	150.80	151.36	148.82	147.55	148.17	141.46	135.89
Electrical equipment and supplies.....	129.34	126.36	126.45	127.39	124.53	122.98	125.36	124.34	122.92	123.42	120.69	122.51	123.62	118.08	111.35
Transportation equipment.....	168.05	164.77	165.92	167.09	159.17	162.66	160.58	158.18	157.44	157.38	157.03	160.19	164.86	155.72	142.42
Instruments and related products.....	138.51	133.49	131.70	131.84	128.61	127.17	129.15	127.39	125.96	126.17	123.07	124.74	125.97	120.69	117.71
Miscellaneous manufacturing industries.....	107.25	106.23	105.32	104.66	103.22	101.38	103.88	102.96	102.44	102.05	98.40	100.62	101.14	98.25	92.59
Nondurable goods.....	119.60	117.91	117.51	118.00	116.51	116.22	115.31	114.34	113.08	113.15	110.48	111.50	113.08	109.05	102.03
Food and kindred products.....	124.03	122.70	120.88	123.73	121.30	122.36	120.25	119.77	117.89	118.08	116.40	117.27	117.96	114.24	107.98
Tobacco manufactures.....	100.61	98.74	96.77	98.81	94.50	104.43	111.32	103.02	95.94	94.70	95.21	93.03	96.14	94.12	87.62
Textile mill products.....	100.19	99.46	98.57	98.81	97.99	95.65	95.63	94.07	92.92	93.66	90.57	92.11	94.85	91.05	84.25
Apparel and other textile products.....	84.84	84.13	83.77	84.13	83.85	82.21	83.49	82.67	81.85	83.13	79.90	81.40	81.36	79.78	73.08
Paper and allied products.....	143.09	142.76	142.33	142.99	141.04	140.18	138.46	137.17	135.99	135.45	132.19	135.14	136.90	130.85	122.84
Printing and publishing.....	149.35	144.77	144.77	144.75	142.82	141.31	141.31	140.18	138.68	139.03	136.10	136.06	139.65	133.28	125.95
Chemicals and allied products.....	150.72	148.75	147.62	146.78	145.53	145.53	144.63	143.72	142.46	140.95	139.86	140.19	141.46	136.27	128.96
Petroleum and coal products.....	170.89	174.22	173.36	172.10	171.60	176.14	170.00	174.50	174.10	168.67	161.38	152.40	159.56	159.38	152.87
Rubber and plastics products, n e c.....	130.31	128.64	129.27	129.90	126.69	126.07	125.97	125.25	123.82	123.30	121.30	124.73	126.12	121.18	113.44
Leather and leather products.....	92.58	90.88	88.80	87.58	87.19	87.52	88.83	87.66	85.78	87.28	83.18	87.46	88.32	85.41	78.87
<b>WHOLESALE AND RETAIL TRADE</b> .....	92.56	92.58	92.13	92.46	93.70	93.08	91.55	89.92	88.96	88.85	88.60	88.40	87.96	86.40	81.76
Wholesale trade.....	135.27	133.87	132.59	132.59	131.22	130.17	129.92	128.00	127.20	126.40	126.08	124.80	125.74	122.31	116.06
Retail trade.....	79.69	79.30	79.20	79.69	81.19	80.96	79.35	77.63	76.73	76.61	76.39	76.16	76.47	74.95	70.95
<b>FINANCE, INSURANCE, AND REAL ESTATE</b> .....	109.89	110.86	109.07	108.41	108.04	107.96	108.70	107.30	106.85	107.22	107.59	106.76	104.99	101.75	95.46

<sup>1</sup> For comparability of data with those published in issues prior to August 1969, see footnote 1, table 11. For employees covered, see footnote 1, table 17.

NOTE: Data for the 2 most recent months are preliminary. For additional detail see Employment and Earnings, table C-2.

**22. Gross and spendable average weekly earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls, in current and 1957-59 dollars, 1960 to date**

Year and month	Total private						Manufacturing					
	Gross average weekly earnings		Spendable average weekly earnings				Gross average weekly earnings		Spendable average weekly earnings			
			Worker with no dependents		Worker with 3 dependents				Worker with no dependents		Worker with 3 dependents	
	Current dollars	1957-59 dollars	Current dollars	1957-59 dollars	Current dollars	1957-59 dollars	Current dollars	1957-59 dollars	Current dollars	1957-59 dollars	Current dollars	1957-59 dollars
1960.....	\$80.67	\$78.24	\$65.95	\$63.62	\$72.96	\$70.77	\$89.72	\$87.02	\$72.57	\$70.39	\$80.11	\$77.70
1961.....	82.60	79.27	67.08	64.38	74.48	71.48	92.34	88.62	74.60	71.59	82.18	78.87
1962.....	85.91	81.55	69.56	66.00	76.99	73.05	96.56	91.61	77.86	73.87	85.53	81.15
1963.....	88.46	82.91	71.05	66.59	78.56	73.63	99.63	93.37	79.82	74.81	87.58	82.08
1964.....	91.33	84.49	75.04	69.42	82.57	76.38	102.97	95.25	84.40	78.08	92.18	85.27
1965.....	95.06	86.50	78.99	71.87	86.30	78.53	107.53	97.84	89.08	81.06	96.78	88.06
1966.....	98.82	87.37	81.29	71.87	88.66	78.39	112.34	99.33	91.57	80.96	99.45	87.93
1967.....	101.84	87.57	83.38	71.69	90.86	78.13	114.90	98.80	93.28	80.21	101.26	87.07
1968.....	107.73	88.89	86.71	71.54	95.28	78.61	122.51	101.08	97.70	80.61	106.75	88.08
1968:												
November.....	109.50	88.74	87.64	71.02	96.55	78.24	125.97	102.08	99.80	80.88	109.22	88.51
December.....	100.38	89.23	88.29	71.37	97.22	78.59	127.82	103.33	101.17	81.79	110.65	89.45
1969:												
January.....	110.25	88.84	87.76	70.72	96.68	77.90	126.05	101.57	99.36	80.06	108.78	87.66
February.....	110.11	88.37	87.65	70.35	96.57	77.50	124.80	100.16	98.44	79.00	107.82	86.53
March.....	111.67	88.91	88.80	70.70	97.76	77.83	127.39	101.43	100.34	79.89	109.81	87.43
April.....	111.75	88.41	88.86	70.30	97.82	77.39	127.58	100.93	100.48	79.49	109.95	86.99
May.....	113.48	89.50	90.13	71.08	99.13	78.18	128.61	101.43	101.24	79.84	110.74	87.33
June.....	115.14	90.24	91.35	71.59	100.40	78.68	129.65	101.61	102.00	79.94	111.54	87.41
July.....	115.82	90.34	91.85	71.65	100.92	78.72	129.20	100.78	101.67	79.31	111.20	86.74
August.....	116.51	90.53	92.35	71.76	101.45	78.83	129.51	100.63	101.90	79.18	111.44	86.59
September.....	117.80	91.11	93.30	72.16	102.44	79.23	132.84	102.74	104.34	80.70	114.01	88.17
October.....	117.25	90.33	92.89	71.56	102.01	78.59	131.87	101.59	103.63	79.84	113.25	87.25
November.....	117.00	89.66	92.71	71.04	101.82	78.02	132.36	101.43	103.99	79.69	113.63	87.07

<sup>1</sup> For comparability of data with those published in issues prior to August 1969, see footnote 1, table 11. For employees covered, see footnote 1, table 17.

Spendable average weekly earnings are based on gross average weekly earnings as published in table 21 less the estimated amount of the workers' Federal social security and income tax liability. Since the amount of tax liability depends on the number of dependents supported by the worker as well as on the level of his gross income, spendable earnings have been computed for 2 types of income receivers: (1) A worker with no dependents and (2) a married worker with 3 dependents.

The earnings expressed in 1957-59 dollars have been adjusted for changes in purchasing power as measured by the Bureau's Consumer Price Index.

These series are described in "The Spendable Earnings Series: A Technical Note on its Calculation," in Employment and Earnings and Monthly Report on the Labor Force, February 1969, pp. 6-13.

NOTE: Data for the most recent month are preliminary. For additional detail see Employment and Earnings, table C-5.



23. Consumer Price Index—general summary

[The official name of the index is, "Consumer Price Index for Urban Wage Earners and Clerical Workers." It measures the average change in prices of goods and services purchased by families and single workers. The indexes shown below represent the average of price changes in 56 metropolitan areas, selected to represent all U.S. urban places having populations of more than 2500.]

[1957-59=100 unless otherwise specified]

Item and group	1969												1968	Annual average	
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1969	1968
All items.....	131.3	130.5	129.8	129.3	128.7	128.2	127.6	126.8	126.4	125.6	124.6	124.1	123.7	127.7	121.2
All items (1947-49=100).....	161.1	160.1	159.3	158.6	157.9	157.3	156.6	155.6	155.0	154.1	152.9	152.3	151.8	156.7	148.7
Food.....	129.9	128.1	127.2	127.5	127.4	126.7	125.5	123.7	123.2	122.4	121.9	122.0	121.2	125.5	119.3
Food at home.....	125.8	123.8	122.9	123.6	123.0	121.8	119.8	119.3	119.3	118.5	118.1	118.3	117.4	121.5	115.9
Food away from home.....	149.9	149.0	148.1	146.7	145.8	144.8	143.7	142.8	142.2	141.3	140.7	140.3	139.9	144.6	136.3
Housing.....	130.5	129.8	129.2	128.6	127.8	127.0	126.3	125.8	125.3	124.4	123.3	122.7	122.3	126.7	119.1
Rent.....	121.0	120.5	120.1	119.7	119.3	118.8	118.5	118.1	117.8	117.5	117.2	116.9	116.7	118.8	115.1
Homeownership.....	145.4	144.5	143.6	142.6	141.3	140.0	138.7	138.0	137.1	135.7	133.6	132.7	132.0	139.4	127.0
Apparel and upkeep.....	130.8	130.7	129.8	128.7	126.6	126.8	127.0	126.6	125.6	124.9	123.9	123.4	124.3	127.1	120.1
Transportation.....	126.4	125.6	125.7	123.6	124.2	124.3	124.6	124.0	124.6	124.3	122.0	120.7	120.2	124.2	119.6
Health and recreation.....	139.6	139.1	138.6	138.4	137.7	137.0	136.3	135.7	135.1	134.3	133.7	133.3	132.8	136.6	130.0
Medical care.....	158.1	157.4	156.9	157.6	156.8	155.9	155.2	154.5	153.6	152.5	151.3	150.2	149.1	155.0	145.0
Special groups:															
All items less shelter.....	129.5	128.6	128.1	127.6	127.1	126.7	126.3	125.4	125.0	124.4	123.5	123.1	122.7	126.3	120.6
All items less food.....	131.9	131.4	130.8	130.0	129.3	128.8	128.4	127.9	127.5	126.8	125.6	124.9	124.7	128.6	121.9
All items less medical care.....	129.7	128.9	128.2	127.6	127.0	126.5	126.0	125.2	124.7	124.0	123.0	122.5	122.2	126.1	119.7
Commodities.....	123.6	122.9	122.4	121.7	121.4	121.0	120.5	119.6	119.3	118.7	117.8	117.4	117.2	120.5	115.3
Nondurables.....	127.7	126.7	126.1	125.8	125.2	124.7	124.1	123.0	122.5	121.8	121.1	121.0	120.7	124.1	118.4
Durables.....	113.6	113.5	113.2	111.6	111.9	111.9	111.7	111.3	111.4	111.1	109.7	108.6	108.7	111.6	107.5
Services.....	148.3	147.2	146.5	146.0	145.0	144.0	143.3	142.7	142.0	140.9	139.7	139.0	138.1	143.7	134.3
Commodities less food.....	120.3	120.2	119.8	118.7	118.2	118.1	118.0	117.5	117.2	116.8	115.7	115.0	115.2	118.0	113.2
Nondurables less food.....	125.7	125.5	125.1	124.4	123.8	123.1	123.0	122.4	121.9	121.4	120.5	120.1	120.3	123.0	117.7
Apparel commodities.....	130.3	130.4	129.3	128.1	125.9	126.2	126.4	126.0	124.9	124.3	123.1	122.6	123.7	126.5	119.3
Apparel commodities less footwear.....	127.5	127.7	126.6	125.3	122.8	123.5	123.7	123.4	122.2	121.6	120.5	119.9	121.2	123.7	116.8
Nondurables less food and apparel.....	123.0	122.6	122.6	122.2	121.7	121.3	121.0	120.3	120.2	119.7	118.9	118.6	118.3	121.0	116.8
Household durables.....	106.5	106.5	106.4	106.2	106.0	106.0	105.8	105.6	105.0	104.4	103.7	103.3	103.0	105.5	101.4
Housefurnishings.....	110.6	110.4	110.2	109.9	109.4	109.3	109.0	108.8	108.3	107.8	107.1	106.6	106.6	109.0	104.7
Service less rent.....	154.3	153.1	152.3	151.7	150.7	149.6	148.8	148.1	147.4	146.1	144.6	143.9	142.9	149.2	138.6
Household services less rent.....	152.4	151.4	150.4	149.5	148.2	146.9	145.7	145.0	144.2	142.5	140.6	139.8	139.2	146.4	134.5
Transportation services.....	148.4	145.8	145.1	144.0	143.1	142.5	142.3	141.8	141.4	140.9	139.8	139.2	136.8	142.9	133.5
Medical care services.....	172.8	171.8	171.2	172.2	171.1	170.1	169.1	168.2	167.2	165.8	164.3	162.8	161.4	168.9	156.3
Other services.....	148.9	148.2	147.6	147.2	146.5	145.7	145.2	144.7	144.2	143.2	142.7	142.3	142.0	145.5	138.8

24. Consumer Price Index—U.S. average for groups, subgroups, and selected items

[1957-59=100 unless otherwise specified]

Item or group	Other index bases	1969												1968	Annual average 1969
		Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	
<b>FOOD.....</b>		129.9	128.1	127.2	127.5	127.4	126.7	125.5	123.7	123.2	122.4	121.9	122.0	121.2	125.5
Food away from home.....		149.9	149.0	148.1	146.7	145.8	144.8	143.7	142.8	142.2	141.3	140.7	140.3	139.9	144.6
Restaurant meals.....		150.2	149.3	148.3	147.2	146.2	145.1	144.0	143.0	142.3	141.4	140.8	140.4	140.0	144.9
Snacks.....	Dec. 63	129.9	129.2	128.8	126.2	125.6	125.1	124.4	124.1	123.7	123.0	122.4	122.2	121.6	125.4
Food at home.....		125.8	123.8	122.9	123.6	123.0	121.8	119.8	119.3	118.5	118.1	118.3	117.4	121.5	115.9
Cereals and bakery products.....		124.9	124.1	123.7	123.0	122.6	122.0	121.6	121.3	121.2	121.2	121.2	120.8	120.5	120.1
Flour.....		110.9	111.2	111.6	111.2	111.4	111.6	112.1	112.2	111.7	111.5	111.7	111.0	110.2	111.5
Cracker meal.....	Dec. 63	127.9	127.2	126.9	125.8	124.7	123.3	122.1	119.3	117.9	117.8	117.6	117.6	117.5	122.3
Corn flakes.....		130.0	129.7	129.6	129.4	129.4	129.0	129.0	127.9	128.4	129.3	129.4	129.6	129.3	129.2
Rice.....		113.4	113.0	113.0	112.9	112.6	112.3	112.1	112.0	111.7	111.6	111.6	111.2	111.1	112.3
Bread, white.....		131.1	129.7	129.1	128.8	128.1	128.2	127.2	127.1	127.2	127.4	126.8	126.6	126.0	128.1
Bread, whole wheat.....	Dec. 63	124.1	123.4	122.5	121.6	120.3	120.9	119.6	119.6	119.5	119.5	118.5	117.1	117.9	120.5
Cookies.....		100.9	99.8	99.8	101.0	100.9	100.9	100.1	100.9	101.1	100.8	99.5	101.1	100.6	100.6
Layer cake.....	Dec. 63	118.0	117.1	115.4	113.2	113.8	113.6	114.1	113.9	112.3	111.3	111.3	110.5	110.5	113.7
Cinnamon rolls.....	Dec. 63	115.8	115.1	115.2	113.2	112.8	113.4	113.2	111.9	112.1	111.8	111.5	111.1	109.0	113.1
Meats, poultry, and fish.....		127.2	127.2	127.6	129.0	127.9	127.6	125.3	119.9	118.4	116.5	116.2	115.6	114.4	123.2
Meats.....		131.3	131.1	132.0	133.1	131.9	131.7	129.5	123.4	121.2	119.1	119.0	118.6	117.1	126.8
Beef and veal.....		130.6	131.5	132.9	135.0	135.4	136.8	134.6	127.9	125.1	121.4	121.3	121.1	118.7	129.5
Steak, round.....		123.2	125.2	126.8	128.1	129.9	132.5	131.0	124.1	121.4	116.8	117.0	116.8	112.7	124.4
Steak, sirloin.....	Apr. 60	119.0	121.1	123.4	128.3	127.4	131.1	129.6	120.7	117.2	113.5	113.8	114.7	111.1	121.7
Steak, porterhouse.....	Dec. 63	123.9	125.9	129.0	132.9	132.7	135.5	133.0	125.2	121.6	118.5	118.6	119.4	116.7	126.4
Rump roast.....	Dec. 63	118.8	119.5	121.1	122.1	123.4	125.0	123.0	117.2	115.4	112.3	111.9	111.5	108.8	118.4
Rib roast.....		140.5	140.9	140.8	145.9	146.5	150.1	147.1	138.1	133.6	129.3	130.8	132.5	129.3	139.7
Chuck roast.....		123.2	122.7	125.3	127.2	128.7	131.0	127.9	121.5	119.2	114.3	114.0	113.1	110.4	126.4
Hamburger.....		137.8	138.4	139.1	140.9	140.5	140.0	137.9	131.4	128.3	125.0	124.4	124.0	123.1	134.0
Beef liver.....	Dec. 63	118.6	117.9	117.8	117.8	116.8	115.4	112.1	109.6	110.1	107.7	108.1	106.4	106.2	113.2
Veal cutlets.....		162.0	162.1	162.8	162.8	162.1	161.1	159.8	154.2	150.6	147.7	146.1	145.0	143.8	156.4

24. Consumer Price Index—U.S. average for groups, subgroups, and selected items—Continued

Index or group	Other index bases	1969												Annual average 1969	
		Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.		Dec.
<b>FOOD—Continued</b>															
<b>Meats, poultry, and fish—Continued</b>															
<b>Meats—Continued</b>															
Pork		133.3	132.0	132.7	133.7	130.2	129.0	126.1	118.8	117.5	116.4	116.6	115.7	114.9	125.2
Chops		135.7	134.1	134.0	137.6	135.7	136.4	134.8	122.4	122.0	121.0	116.6	120.1	118.0	129.6
Loin roast	Apr. 60	143.4	140.4	141.8	143.0	141.3	141.9	139.7	129.8	128.1	126.6	127.8	126.2	124.6	135.8
Pork sausage	Dec. 63	146.8	148.3	149.1	149.6	146.0	143.6	137.2	130.0	127.4	125.7	125.5	124.5	125.4	137.8
Ham, whole		130.7	124.8	123.9	121.8	117.0	114.2	114.2	111.1	108.0	113.1	112.4	114.5	112.4	117.1
Picnics	Dec. 63	134.7	136.0	136.5	135.5	134.5	130.9	124.8	121.5	121.1	118.3	118.4	117.9	117.2	127.5
Bacon		133.1	132.4	134.9	135.6	128.7	126.8	124.1	118.4	117.3	114.3	113.6	112.6	113.0	124.3
<b>Other meats</b>															
Lamb chops	Dec. 63	134.4	133.6	133.3	132.6	131.2	128.8	127.2	124.0	122.2	122.0	121.4	121.2	120.7	127.7
Frankfurters		140.4	139.4	139.9	139.7	139.3	140.9	139.1	136.2	133.7	132.4	131.9	130.6	129.9	137.0
Ham, canned	Dec. 63	130.6	134.7	134.7	135.4	133.7	129.4	127.6	122.2	120.4	119.2	118.5	118.1	117.9	127.4
Bologna sausage	Dec. 63	134.4	127.8	125.1	122.6	120.6	115.6	117.6	116.6	115.3	117.2	115.0	116.4	115.5	120.0
Salami sausage	Dec. 63	136.6	136.1	136.2	136.2	134.5	132.0	128.8	123.7	122.4	121.8	121.8	121.5	121.3	129.3
Liverwurst	Dec. 63	127.9	127.1	127.2	127.0	126.0	123.7	121.5	118.6	116.6	116.6	116.7	116.8	116.1	122.1
	Dec. 63	129.9	129.8	129.9	128.0	126.3	125.0	122.2	120.6	118.8	118.3	118.4	117.5	117.6	123.7
<b>Poultry</b>															
Frying chicken		97.9	99.1	98.2	102.0	101.4	100.4	97.3	93.3	95.3	94.2	92.3	90.8	90.8	96.9
Chicken breasts	Dec. 63	97.9	99.5	98.6	103.8	103.3	103.1	99.2	94.7	97.9	95.5	93.0	90.9	91.2	98.1
Turkey	Dec. 63	110.4	110.8	112.0	113.8	113.0	109.4	107.6	104.4	106.7	105.3	103.9	103.6	103.6	108.4
	Dec. 63	110.3	110.0	107.2	105.9	104.7	101.8	101.1	98.7	93.4	99.7	100.5	100.4	98.4	102.8
<b>Fish</b>															
Shrimp, frozen	Dec. 63	135.4	134.0	133.4	132.2	131.5	130.6	129.8	129.5	128.4	127.7	127.7	127.0	126.3	130.6
Fish, fresh or frozen		124.4	122.9	122.5	121.0	120.8	119.7	118.3	118.2	116.8	116.5	115.6	114.5	112.5	119.3
Tuna, fish, canned		143.4	141.1	139.9	138.6	137.2	134.5	133.1	132.0	130.2	128.6	128.3	128.1	127.5	134.6
Sardines, canned	Dec. 63	117.9	116.7	116.2	114.9	114.4	113.6	113.8	114.0	113.1	112.4	113.3	112.4	112.1	114.4
	Dec. 63	125.4	125.0	124.9	124.2	123.5	124.4	124.0	123.7	123.7	123.5	123.9	123.6	123.6	124.2
<b>Dairy products</b>															
Milk, fresh, grocery		127.6	126.3	125.8	125.5	125.0	124.4	124.0	123.6	122.9	123.0	122.8	122.7	122.6	124.5
Milk, fresh, delivered		125.0	123.4	122.8	122.8	122.3	121.7	121.3	120.7	120.5	120.7	120.3	120.5	120.7	121.8
Milk, fresh, skim	Dec. 63	132.3	130.4	130.1	129.4	128.7	128.0	127.6	127.3	126.8	127.0	126.7	126.6	126.3	128.4
Milk, evaporated		126.0	125.0	124.3	124.8	124.3	122.9	122.3	121.7	121.5	121.4	121.1	120.3	121.0	123.0
	Dec. 63	125.0	124.3	123.8	124.1	124.1	123.9	124.0	123.8	122.9	122.4	121.8	121.7	121.5	123.5
Ice cream		102.0	100.7	99.9	100.1	99.5	99.0	99.8	98.8	97.0	98.9	99.4	99.4	99.0	99.5
Cheese, American process		152.4	151.0	149.9	148.9	148.5	147.7	146.6	146.1	143.6	142.5	142.7	142.1	141.2	146.8
Butter		119.6	119.4	119.9	118.9	118.0	118.0	118.0	117.8	117.9	117.4	117.7	117.6	117.8	118.3
<b>Fruits and vegetables</b>															
<b>Fresh fruits and vegetables</b>															
Apples		132.1	127.0	124.0	126.8	130.2	132.3	130.8	130.0	127.9	127.6	124.7	127.0	126.4	128.4
Bananas		144.1	135.4	130.1	134.9	141.0	145.0	142.4	140.9	137.6	137.2	132.3	136.4	135.2	138.1
Oranges		129.3	125.7	131.7	174.6	190.5	192.9	185.3	171.4	167.4	164.7	160.1	156.0	160.0	162.5
Orange juice, fresh	Dec. 63	93.3	93.9	100.7	99.6	97.4	97.7	94.5	96.3	91.7	91.4	94.7	92.9	87.8	95.3
	Dec. 63	125.0	132.4	131.9	132.1	132.7	127.9	125.4	126.2	126.4	126.9	126.9	127.1	131.5	128.4
	Dec. 63	91.5	91.8	92.0	92.1	92.0	91.4	91.8	91.2	91.7	90.2	88.0	87.4	88.1	90.9
Grapefruit		142.0	144.1	144.0	205.9	194.6	156.6	143.5	137.3	134.5	134.3	141.6	143.1	151.3	155.1
Grapes		(1)	154.3	144.0	137.8	147.4	188.3	(1)	(1)	(1)	(1)	(1)	(1)	(1)	154.4
Strawberries		(1)	(1)	(1)	(1)	(1)	(1)	126.8	121.5	147.5	(1)	(1)	(1)	(1)	131.9
Watermelon		(1)	(1)	(1)	(1)	116.1	119.6	159.9	(1)	(1)	(1)	(1)	(1)	(1)	131.9
Potatoes		142.0	140.1	137.6	144.5	159.0	165.2	154.5	143.8	141.2	139.1	136.4	133.7	133.4	144.8
Onions	Dec. 63	136.4	133.2	134.2	139.0	152.2	141.5	135.0	130.5	124.3	123.6	128.2	131.5	132.0	134.1
Asparagus		(1)	(1)	(1)	(1)	(1)	129.6	121.1	118.9	152.2	171.5	(1)	(1)	(1)	138.7
Cabbage		173.4	150.6	145.9	135.6	138.3	145.7	155.6	152.6	148.8	149.7	153.8	174.3	156.3	152.0
Carrots		146.6	127.1	129.6	128.3	139.6	129.5	119.8	109.7	114.0	113.0	114.3	114.2	112.6	123.8
Celery		132.2	131.2	115.5	120.1	130.2	151.8	139.2	134.3	113.2	110.6	111.6	117.7	110.7	125.6
Cucumbers	Dec. 63	176.5	122.5	118.5	111.7	122.5	123.0	124.6	161.1	161.9	145.3	171.5	237.8	217.1	148.1
Lettuce		189.5	177.9	133.3	130.8	124.2	126.8	120.2	149.3	166.1	156.0	115.3	143.9	138.6	144.4
Peppers, green	Dec. 63	217.2	160.9	145.7	147.8	146.4	165.6	180.7	188.0	163.7	192.9	192.1	167.2	160.1	172.4
Spinach	Dec. 63	121.8	116.5	120.1	118.0	117.2	118.8	111.1	109.6	113.4	110.0	110.3	110.2	107.1	114.8
Tomatoes		177.5	146.7	119.0	103.2	116.3	131.0	158.0	173.8	118.7	144.3	133.2	135.9	166.0	138.1
<b>Processed fruits and vegetables</b>															
Fruit cocktail, canned		117.1	116.8	116.6	116.9	116.7	116.4	116.3	116.3	115.9	115.8	115.3	115.3	115.7	116.3
Pears, canned	Dec. 63	106.2	105.4	105.6	106.6	106.3	107.1	106.3	106.0	106.5	106.6	106.9	107.2	107.9	106.4
Grapefruit-pineapple juice, canned	Dec. 63	106.4	106.9	107.6	108.2	108.8	108.6	108.9	109.0	109.4	110.1	110.1	110.9	111.5	108.7
Orange juice concentrate, frozen		102.4	102.6	102.2	101.8	101.0	100.4	99.9	99.1	99.6	99.4	98.7	98.4	98.5	100.5
	Dec. 63	97.4	97.2	98.2	99.4	100.0	100.4	101.0	103.7	102.1	99.5	94.8	92.6	91.8	98.9
Lemonade concentrate, frozen	Apr. 60	94.7	94.1	93.8	93.3	92.5	90.6	92.3	92.5	92.3	91.4	91.2	90.7	90.6	92.5
Beets, canned	Dec. 63	113.6	113.3	112.8	113.1	112.8	113.3	112.7	113.4	113.1	113.5	113.2	113.3	113.2	113.2
Peas, green, canned		122.4	123.1	122.9	122.9	122.7	121.7	121.0	121.1	121.3	120.6	120.1	120.7	121.6	121.7
Tomatoes, canned		126.6	125.5	124.8	124.1	124.6	124.5	124.1	123.8	123.6	124.3	124.9	125.7	126.4	124.7
Dried beans		123.3	123.6	124.3	125.0	125.0	124.7	124.9	125.4	124.6	124.8	125.3	124.9	125.5	124.7
Broccoli, frozen	Dec. 63	109.6	108.0	106.7	107.5	106.7	105.4	104.9	103.2	101.1	101.3	100.7	101.2	101.2	104.7
<b>Other food at home</b>															
Eggs		116.6	112.9	111.0	110.5	110.5	107.2	106.6	107.1	109.0	108.5	109.4	109.8	108.4	109.9
Fats and oils:		140.6	122.3	114.5	113.8	114.4	95.6	92.5	97.4	109.8	108.5	116.2	119.8	112.2	112.1
Margarine		105.0	103.7	102.7	102.2	102.4	103.1	103.5	102.8	102.6	103.0	102.3	102.6	102.7	103.0
Salad dressing, Italian	Dec. 63	102.6	102.5	102.8	102.3	102.3	102.4	103.4	103.2	102.9	102.6	102.3	101.6	101.3	102.6
Salad or cooking oil	Dec. 63	124.8	123.9	123.0	123.6	123.6	123.5	123.3	122.7						

## 24. Consumer Price Index—U.S. average for groups, subgroups, and selected items—Continued

Item or group	Other index bases	1969												1968	Annual average 1969
		Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	
<b>FOOD—Continued</b>															
<b>Other food at home—Continued</b>															
Nonalcoholic beverages.....		107.4	106.1	104.3	103.7	103.8	103.3	103.4	102.7	102.6	102.5	102.2	102.3	102.3	103.7
Coffee, can and bag.....		92.3	90.0	87.0	86.6	85.7	86.3	86.8	86.6	86.8	87.0	87.0	87.2	87.4	87.5
Coffee, instant.....	July 61	108.0	106.0	104.2	103.8	103.9	103.6	103.7	103.0	102.1	101.2	99.7	99.7	100.6	103.2
Tea.....		102.9	102.2	102.1	102.0	102.2	102.0	102.0	100.8	101.0	101.6	101.5	101.8	101.2	101.8
Cola drink.....		158.4	158.7	158.0	156.8	156.6	155.3	155.1	153.8	153.8	152.8	152.4	152.1	151.6	155.3
Carbonated fruit drink.....	Dec. 63	124.8	124.7	124.5	123.4	123.1	122.7	121.9	120.4	119.8	119.3	119.1	119.2	119.0	121.9
Prepared and partially prepared foods.....	Dec. 63	108.2	107.6	107.4	106.9	106.7	106.2	105.9	106.0	105.8	105.1	104.5	104.3	103.9	106.2
Bean soup, canned.....	Dec. 63	108.8	107.2	106.3	105.6	105.4	105.1	105.1	105.2	104.5	103.5	102.4	101.2	100.8	105.0
Chicken soup, canned.....	Dec. 63	100.3	99.5	98.3	98.1	98.3	98.0	97.8	98.2	97.5	96.7	96.2	96.5	95.9	98.0
Spaghetti, canned.....	Dec. 63	120.4	119.8	118.9	117.2	117.3	117.0	116.4	116.2	116.0	115.7	115.1	114.6	114.4	117.1
Mashed potatoes, instant.....	Dec. 63	109.6	110.0	109.6	108.9	108.5	108.1	107.7	107.7	106.4	104.5	103.2	102.6	102.7	107.2
Potatoes, french fried, frozen.....	Apr. 60	92.5	92.1	92.8	92.7	92.5	91.8	90.8	90.6	91.2	90.7	89.0	89.7	89.0	91.4
Baby foods, canned.....		111.9	111.4	111.7	112.7	112.1	111.7	110.7	110.9	111.1	111.1	111.8	111.8	111.1	111.6
Sweet pickle relish.....	Dec. 63	115.0	114.3	114.2	112.6	112.0	111.0	111.8	112.5	113.2	112.8	112.3	112.4	111.9	112.8
Pretzels.....	Dec. 63	107.5	107.0	107.6	107.6	107.6	107.4	107.0	106.8	106.9	106.7	106.9	106.7	106.5	107.1
<b>HOUSING</b> .....		130.5	129.8	129.2	128.6	127.8	127.0	126.3	125.8	125.3	124.4	123.3	122.7	122.3	126.7
<b>Shelter</b> .....		138.5	137.7	137.0	136.1	135.1	134.0	133.0	132.4	131.6	130.5	128.9	128.2	127.6	133.6
Rent.....		121.0	120.5	120.1	119.7	119.3	118.8	118.5	118.1	117.8	117.5	117.2	116.9	116.7	118.8
Homeownership.....		145.4	144.5	143.6	142.6	141.3	140.0	138.7	138.0	137.1	135.7	133.6	132.7	132.0	139.4
Mortgage interest rates.....	Dec. 63	139.6	139.3	138.8	138.2	137.1	135.8	134.9	134.3	133.5	129.5	126.1	125.4	125.3	134.4
Property taxes.....		132.0	131.5	130.5	130.4	129.9	128.7	128.2	128.3	128.1	127.7	126.4	126.1	125.1	129.0
Property insurance rates.....		153.3	152.3	150.7	149.5	150.3	149.6	147.4	146.9	146.0	146.1	146.0	145.7	145.6	148.7
Maintenance and repairs.....		145.8	144.9	144.5	143.8	142.4	141.5	140.8	139.6	138.4	137.4	135.4	134.3	133.5	140.7
Commodities.....	Dec. 63	115.9	116.0	116.2	116.7	117.2	117.5	117.8	117.5	117.0	115.9	113.9	112.1	111.2	116.1
Exterior house paint.....		119.1	118.7	118.0	117.6	116.5	115.7	115.6	115.9	116.2	115.5	114.6	114.0	113.4	116.5
Interior house paint.....	Dec. 63	114.3	113.6	113.8	113.1	113.1	112.3	112.2	111.6	111.7	111.6	111.2	109.9	110.2	112.4
Services.....	Dec. 63	143.5	142.2	141.6	140.4	138.2	136.9	135.7	134.2	132.9	132.0	130.1	129.6	129.0	136.4
Repairing living and dining rooms.....		183.6	182.6	181.8	179.7	178.3	176.1	174.0	171.5	167.9	167.1	166.5	165.5	164.9	174.6
Reshingling roofs.....		164.1	163.0	162.3	161.4	157.6	155.4	154.2	152.3	151.4	150.4	149.4	148.5	147.5	155.8
Residing houses.....	Dec. 63	134.0	134.2	133.7	133.0	130.0	129.3	128.6	127.6	126.5	125.3	123.3	122.9	122.3	129.0
Replacing sinks.....	Dec. 63	144.5	142.6	142.0	140.4	139.0	137.8	137.2	135.3	134.7	133.7	131.1	130.8	130.0	137.4
Repairing furnaces.....	Dec. 63	149.7	145.2	144.1	142.8	141.2	139.7	137.7	136.4	135.0	134.5	131.5	130.8	130.4	139.1
<b>Fuel and utilities</b> .....		114.6	114.2	113.5	113.3	113.0	112.6	112.7	112.6	112.6	112.2	111.8	111.7	111.5	112.9
Fuel oil and coal.....		119.2	118.9	118.4	118.1	117.7	117.4	117.5	117.5	117.4	117.2	116.9	116.7	116.2	117.8
Fuel oil, #2.....		116.2	116.0	115.5	115.4	115.2	115.0	115.0	114.9	114.8	114.5	114.3	114.0	113.5	115.1
Gas and electricity.....		113.7	113.2	112.2	112.0	111.5	110.9	111.3	111.2	111.2	110.6	110.2	110.2	110.0	111.5
Gas.....		119.8	118.8	116.9	116.7	116.1	115.7	116.4	116.4	116.5	116.2	116.1	116.0	115.6	116.8
Electricity.....		107.2	107.2	106.9	106.8	106.4	105.6	105.7	105.5	105.4	104.5	104.0	104.0	103.9	105.8
<b>Other utilities</b> .....															
Residential telephone services.....		103.8	103.7	103.6	103.6	103.6	103.6	103.6	103.4	103.3	103.1	103.1	103.0	102.9	103.5
Residential water and sewerage.....		147.5	147.5	145.3	145.3	145.3	145.3	143.4	143.4	143.4	143.4	141.6	141.6	141.6	144.4
<b>Household furnishings and operation</b> .....		120.0	119.6	119.3	119.0	118.5	118.2	117.9	117.4	116.9	116.4	115.8	115.2	115.1	117.9
Housefurnishings.....		110.6	110.4	110.2	109.9	109.4	109.3	109.0	108.8	108.3	107.8	107.1	106.6	106.6	109.0
Textiles.....		116.1	115.7	115.0	115.2	113.8	114.8	114.8	114.4	114.6	113.6	112.7	111.7	113.7	114.4
Sheets, percale or muslin.....		122.2	121.7	120.1	119.8	116.2	118.7	120.2	118.3	121.0	119.6	119.6	117.5	121.2	119.6
Curtains, tailored, polyester mar- quisette.....		112.3	112.1	112.0	112.0	112.0	111.6	111.5	111.1	110.4	109.3	108.0	108.1	107.9	110.9
Bedspreads, chiefly cotton, tufted.....		117.6	117.7	117.1	116.9	115.7	116.5	116.9	117.3	117.3	116.3	113.5	111.2	113.7	116.2
Draperies, chiefly cotton or rayon/ acetate.....		126.6	126.0	124.1	124.5	125.0	124.8	122.2	122.1	121.3	121.1	120.1	119.7	119.3	123.1
Slipcovers, ready made, chiefly cotton.....	Dec. 63	110.4	110.0	111.1	110.0	110.3	110.1	109.6	109.4	109.3	108.6	108.0	108.4	108.9	109.6
<b>Furniture and bedding</b> .....		123.9	123.7	123.6	122.9	122.4	122.1	121.8	121.6	120.5	119.7	118.3	117.6	117.4	121.5
Bedroom suites, good or inexpen- sive quality.....		128.0	128.0	127.6	127.2	125.8	125.3	124.8	124.4	123.0	122.3	121.2	120.6	120.7	124.9
Living room suites, good and inex- pensive quality.....		126.3	125.8	125.9	124.9	124.8	123.9	123.4	123.3	122.4	121.9	121.2	120.4	120.3	123.7
Lounge chairs, upholstered.....	Dec. 63	118.8	118.6	118.9	119.0	117.9	116.5	116.2	114.6	113.3	112.7	112.0	111.3	111.7	115.8
Dining room suites.....	Dec. 63	129.5	129.4	128.7	127.5	126.0	126.6	126.1	126.7	125.7	125.0	124.5	123.6	121.2	126.6
Sofas, upholstered.....	Dec. 63	116.5	115.7	115.9	114.8	115.1	114.3	113.8	114.3	113.3	112.7	112.0	112.1	111.6	114.2
Sofas, dual purpose.....		120.0	120.2	118.9	118.8	118.6	117.9	117.1	116.2	116.0	114.8	114.1	113.2	113.0	110.3
Sleep sets, Hollywood bed type.....	Dec. 63	(?)	(?)	(?)	(?)	(?)	(?)	111.6	111.6	110.9	110.0	109.3	108.2	108.8	110.3
Box springs.....	Dec. 63	122.6	122.5	124.1	123.7	123.2	123.0	123.0	122.8	121.6	120.4	119.7	117.2	116.8	122.0
Cribs.....	Dec. 63	119.8	119.5	119.2	117.1	118.0	117.7	117.5	117.1	115.8	115.1	113.2	113.4	113.5	117.0
<b>Floor coverings</b> .....		107.1	107.1	107.1	107.0	106.3	106.4	106.2	106.2	106.2	106.1	106.1	105.8	105.5	106.5
Rugs, soft surface.....		104.7	104.8	104.9	104.9	104.1	104.4	104.1	104.2	104.4	104.4	104.5	104.0	103.6	104.5
Rugs, hard surface.....		112.5	112.5	112.1	111.8	111.6	111.5	111.2	111.1	110.3	110.0	110.0	110.0	109.6	111.2
Tile, vinyl.....	Dec. 63	110.3	110.1	109.6	109.3	108.5	108.2	108.0	108.0	107.7	107.2	106.8	107.3	107.2	108.4
<b>Appliances</b> .....		86.4	86.3	86.2	86.0	86.0	85.9	85.8	85.6	85.6	85.4	85.4	85.5	85.5	85.8
Washing machines, electric, auto- matic.....		91.5	91.2	90.9	91.0	90.8	90.5	90.5	90.2	90.1	89.9	90.0	90.0	89.8	90.6
Vacuum cleaners, canister type.....		81.4	81.4	81.5	81.3	82.1	82.0	81.8	81.4	81.2	81.1	81.1	81.2	80.9	81.5

See footnotes at end of table.



## 24. Consumer Price Index—U.S. average for groups, subgroups, and selected items—Continued

Index or group	Other index bases	1969											1968	Annual average 1969	
		Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.		Dec.
<b>HOUSING—Continued</b>															
<b>Household furnishings and operation—Con.</b>															
<b>Appliances—Continued</b>															
Refrigerators or refrigerator-freezers, electric.....		86.0	85.8	85.8	85.8	85.7	85.4	85.2	84.9	84.8	84.7	84.7	84.6	84.6	85.3
Ranges, free standing, gas or electric.....		99.0	98.8	98.5	98.1	98.2	97.6	97.4	97.0	97.1	97.1	96.5	96.6	96.7	97.7
Clothes dryers, electric, automatic.....	Dec. 63	100.6	100.5	99.8	99.6	99.7	99.5	99.5	99.1	98.9	98.8	98.4	98.6	98.7	99.4
Air conditioners, demountable.....	June 64	(1)	(1)	(1)	(2)	99.8	99.7	99.5	99.2	99.3	(2)	(2)	(2)	(2)	99.5
Room heaters, electric, portable.....	Dec. 63	100.4	99.8	99.6	(2)	(1)	(1)	(1)	(1)	(1)	98.0	97.5	97.7	97.2	98.8
Garbage disposal units.....	Dec. 63	105.0	105.0	104.7	104.3	103.9	103.9	103.9	103.6	103.1	102.8	103.2	103.0	102.9	103.9
<b>Other house furnishings:</b>															
Dinnerware, earthenware.....	Dec. 63	135.6	135.2	134.8	134.3	133.5	133.6	132.7	132.5	132.2	132.0	131.8	130.9	130.0	133.3
Flatware, stainless steel.....	Dec. 63	119.0	119.6	119.6	119.8	119.6	119.5	118.9	118.1	118.1	117.0	117.0	118.2	118.2	118.7
Table lamps, with shade.....	Dec. 63	118.7	118.3	117.8	116.0	115.4	115.3	114.0	113.6	113.0	112.4	111.3	109.6	109.3	114.6
<b>Housekeeping supplies:</b>															
Laundry soaps and detergents.....		107.1	106.2	106.8	107.4	107.4	106.4	106.5	106.1	105.7	105.6	105.3	105.3	105.4	106.3
Paper napkins.....		131.0	130.0	129.0	128.6	128.0	127.2	128.1	127.1	127.0	127.5	127.6	127.0	126.5	128.2
Toilet tissue.....		120.3	121.2	121.2	120.7	119.1	119.5	119.8	118.0	117.7	116.8	116.5	116.1	115.5	118.9
<b>Housekeeping services:</b>															
Domestic service, general housework.....	Dec. 63	179.9	178.7	177.6	175.1	173.9	172.9	172.2	171.9	171.1	170.2	169.8	168.7	168.4	173.5
Baby sitter service.....	Dec. 63	137.4	136.6	135.7	135.6	134.9	134.5	133.7	133.1	131.9	131.0	130.1	129.4	129.0	133.7
Postal charges.....	Dec. 63	165.5	165.5	165.5	165.5	165.5	165.5	165.5	165.5	165.5	165.5	165.5	165.5	165.5	165.5
Laundry, flatwork, finished service.....	Dec. 63	146.8	144.3	143.2	142.7	141.4	140.6	140.2	139.6	139.0	137.9	136.6	134.4	133.4	140.6
Licensed day care service, pre-school child.....	Dec. 63	131.8	131.8	130.7	130.3	129.7	128.4	128.1	127.2	125.3	124.1	123.7	123.4	123.3	127.9
Washing machine repairs.....	Dec. 63	135.4	135.1	135.2	134.4	133.5	133.0	131.6	131.0	129.2	129.0	127.3	125.8	125.2	131.7
<b>APPAREL AND UPKEEP.....</b>															
Men's and boys'.....		130.8	130.7	129.8	128.7	126.6	126.8	127.0	126.6	125.6	124.9	123.9	123.4	124.3	127.1
Men's:		132.0	132.1	131.0	130.0	128.7	128.1	128.5	128.1	127.3	126.4	125.3	124.9	125.3	128.5
Topcoats, wool.....		147.4	148.5	145.9	144.0	(1)	(1)	(1)	(1)	(1)	137.7	137.5	139.4	140.1	142.9
Suits, year round weight.....	June 64	158.2	158.2	156.4	154.5	150.7	149.6	150.0	150.1	148.1	146.8	144.6	144.1	146.1	150.9
Suits, tropical weight.....	Dec. 63	(1)	(1)	(1)	(1)	(1)	127.7	130.8	130.0	128.1	126.2	(2)	(2)	(1)	128.6
Jackets, lightweight.....	Dec. 63	125.7	125.6	125.4	125.2	125.0	125.1	125.6	125.3	124.6	123.1	122.7	122.3	120.6	124.6
Slacks, wool or wool blend.....		131.2	131.7	130.4	128.9	127.1	126.1	126.6	126.3	126.5	123.4	123.4	125.1	126.3	127.4
Slacks, cotton or manmade blend.....		117.6	117.1	115.6	115.2	114.5	112.1	114.3	114.3	114.2	112.9	111.0	107.7	108.9	113.9
Trousers, work, cotton.....		117.2	117.0	116.9	116.9	116.8	116.9	116.7	116.5	116.0	115.5	115.1	115.2	114.4	116.4
Shirts, work, cotton.....		124.2	124.7	124.2	123.2	123.3	123.1	123.4	122.6	122.2	121.8	121.1	120.7	120.6	122.9
Shirts, business, cotton.....		122.3	122.2	122.2	121.8	121.6	121.5	121.7	121.3	120.5	120.4	120.1	120.5	120.1	121.3
T-shirts, chiefly cotton.....		131.9	131.8	131.5	130.6	130.6	130.1	129.4	128.8	129.0	129.2	128.7	127.9	127.3	130.0
Socks, cotton.....		120.9	120.4	121.1	121.6	121.6	121.1	120.5	119.4	118.9	118.1	117.5	116.6	116.9	119.8
Handkerchiefs, cotton.....	Dec. 63	113.8	113.3	112.9	112.7	112.4	112.3	112.3	111.5	111.6	111.4	110.9	109.9	109.2	112.1
Boys':															
Coats, all purpose, cotton or cotton blend.....	Dec. 63	116.1	115.9	115.2	113.5	(1)	(1)	(1)	(1)	(1)	108.7	108.2	109.2	111.5	112.4
Sport coats, wool or wool blend.....	Dec. 63	130.3	131.0	126.4	122.5	(1)	(1)	(1)	(1)	(1)	(1)	(1)	117.6	118.4	125.6
Dungarees, cotton or cotton blend.....		127.1	127.9	126.9	127.4	127.4	127.2	127.0	126.0	125.2	124.3	124.9	123.8	123.1	126.3
Undershorts, cotton.....		130.3	130.3	129.0	128.9	128.4	127.9	126.6	126.1	125.6	125.0	124.0	123.1	122.2	127.1
Women's and girls'.....		127.2	127.4	126.2	124.6	120.8	122.5	122.7	122.4	121.0	120.6	119.3	118.7	120.8	122.8
Women's:															
Coats, heavyweight, wool or wool blend.....	Sept. 61	136.2	139.9	139.9	136.0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	119.9	130.0	134.4
Skirts, wool or wool blend.....	Mar. 62	144.6	145.3	133.9	129.4	(1)	(1)	(1)	(1)	(1)	(1)	(1)	104.4	118.3	129.3
Skirts, cotton or cotton blend.....		(1)	(1)	(1)	(1)	121.8	130.7	135.0	134.4	124.4	(2)	(1)	(1)	(1)	129.3
Blouses, cotton.....		127.6	127.2	125.4	122.7	122.2	122.4	122.7	123.4	123.2	123.1	121.2	121.9	122.5	123.6
Dresses, street, chiefly manmade fiber.....		158.3	158.8	155.9	152.5	147.3	147.6	147.3	147.7	148.8	148.4	146.3	143.7	145.2	150.2
Dresses, street, wool or wool blend.....		145.7	144.8	145.7	140.8	(1)	(1)	(1)	(1)	(1)	(1)	(1)	128.0	136.8	141.0
Dresses, street, cotton.....		(1)	(1)	(1)	(1)	136.6	149.9	150.6	150.5	148.5	(1)	(1)	(1)	(1)	147.2
Housedresses, cotton.....		153.0	152.1	150.7	149.0	150.0	148.8	149.6	147.3	146.4	144.2	142.5	141.3	139.8	147.9
Slips, nylon.....		112.3	112.2	111.9	111.9	111.6	109.7	110.5	110.1	110.3	109.4	109.4	109.8	109.6	110.8
Panties, acetate.....		111.2	111.4	110.5	109.9	109.1	108.6	108.4	108.8	108.5	107.9	108.1	107.9	108.1	109.2
Girdles, manmade blend.....		120.8	120.5	120.2	119.5	119.4	119.0	118.7	119.0	119.1	118.2	118.2	116.4	113.9	119.1
Brassieres, cotton.....	Dec. 63	124.9	123.8	123.1	122.9	122.5	122.2	122.0	120.8	120.7	119.4	119.1	118.8	118.8	121.7
Hose, nylon, seamless.....	Dec. 63	99.8	99.8	99.4	99.2	98.8	99.6	99.0	99.1	98.7	99.1	98.0	98.2	99.5	99.1
Anklets, cotton.....	Dec. 63	121.5	118.5	118.5	118.4	118.2	118.1	117.6	116.6	115.2	114.7	114.6	114.0	113.9	117.2
Gloves, fabric, nylon or cotton.....	Dec. 63	110.5	109.8	109.2	109.0	109.3	108.9	108.9	108.6	108.4	107.8	106.7	105.7	105.5	108.6
Handbags, rayon faille or plastic.....	Dec. 63	117.3	117.2	115.5	114.8	114.1	113.8	113.7	113.0	112.1	111.4	110.8	109.7	109.1	113.6
Girls':															
Raincoats, vinyl plastic or chiefly cotton.....	Dec. 63	125.6	124.4	121.7	120.8	(1)	(1)	(1)	(1)	(1)	118.3	118.9	116.3	117.1	120.9
Skirts, wool or wool blend.....		123.2	123.4	124.0	(2)	(1)	(1)	(1)	(1)	(1)	(2)	(2)	115.0	118.9	121.4

See footnotes at end of table.

## 24. Consumer Price Index—U.S. average for groups, subgroups, and selected items—Continued

Index or group	Other index bases	1969												1968	Annual average 1969
		Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	
<b>APPAREL AND UPKEEP—Continued</b>															
<b>Women's and girls'—Continued</b>															
<b>Girls' Continued</b>															
Dresses, cotton.....		133.6	136.3	137.4	136.9	135.4	134.2	133.9	134.1	134.1	133.5	132.5	130.6	131.2	134.4
Slacks, cotton.....	Dec. 63	131.8	131.7	127.9	(?)	(1)	(1)	(1)	(1)	(1)	(?)	117.7	119.9	123.9	125.8
Slips, cotton blend.....	Dec. 63	108.0	108.6	108.5	107.7	108.0	108.1	107.2	107.0	107.0	106.9	106.6	106.0	106.1	107.5
Handbags.....	Dec. 63	114.2	114.7	111.1	108.9	108.3	108.2	106.5	108.5	108.8	108.0	107.7	106.6	107.4	109.3
<b>Footwear.....</b>															
<b>Men's:</b>															
Shoes, street, oxford.....		144.4	143.9	143.3	142.3	141.5	139.9	140.1	139.6	138.4	137.6	136.8	136.3	136.3	140.3
Shoes, work, high.....		142.6	142.1	141.5	140.1	138.7	137.5	138.6	138.2	136.7	136.0	134.4	134.0	135.0	138.4
<b>Women's:</b>															
Shoes, street, pump.....		139.8	139.5	139.0	138.4	138.1	137.3	136.8	136.1	135.2	134.5	133.5	132.6	131.9	136.7
Shoes, evening, pump.....	Dec. 63	152.7	152.5	152.0	150.8	149.9	147.3	147.9	148.0	147.2	145.9	144.9	144.0	144.8	148.6
Shoes, casual, pump.....	Dec. 63	123.2	122.9	122.9	122.3	121.8	121.0	120.0	119.1	118.0	117.9	117.4	117.1	116.3	120.3
Houseslippers, scuff.....	Dec. 63	134.0	133.4	132.0	129.6	128.9	126.8	128.2	127.1	125.5	123.3	122.5	121.5	123.1	127.7
<b>Children's:</b>															
Shoes, oxford.....	Dec. 63	127.5	127.1	126.6	126.4	125.4	123.9	124.0	123.9	123.4	123.0	122.7	122.1	121.5	124.7
Sneakers, boys', oxford type.....	Dec. 63	144.3	143.3	142.3	141.4	140.7	140.2	139.8	139.4	138.2	137.6	137.1	137.2	136.7	140.1
Dress shoes, girls', strap.....	Dec. 63	119.5	119.3	119.1	118.9	118.1	116.9	116.2	115.8	115.8	115.7	115.7	115.5	114.9	117.2
<b>Miscellaneous apparel:</b>															
Diapers, cotton gauze.....		136.4	135.7	134.6	134.1	133.1	130.6	131.9	130.7	129.1	127.6	127.7	127.0	126.8	131.5
Yard goods, cotton.....		104.0	104.1	103.8	103.9	104.0	103.5	103.2	102.7	102.3	101.7	101.9	101.3	101.9	103.0
<b>Apparel services:</b>															
Drycleaning, men's suits and women's dresses.....		123.5	123.1	123.5	123.2	123.2	122.1	123.2	120.5	119.3	118.1	115.8	115.0	114.8	120.9
Automatic laundry service.....	Dec. 63	133.3	132.9	132.2	132.0	131.7	130.5	130.2	129.8	129.9	129.4	129.1	128.3	128.0	130.8
Laundry, men's shirts.....	Dec. 63	112.0	111.8	111.4	111.3	111.0	110.4	110.3	110.2	108.4	108.4	107.9	107.8	107.9	110.1
Tailoring charges, hem adjustment.....	Dec. 63	126.7	124.3	123.8	123.4	123.2	123.0	122.5	122.1	122.2	121.9	121.3	120.7	119.9	122.9
Shoe repairs, women's heel lift.....	Dec. 63	127.4	127.6	127.5	126.5	125.4	125.2	125.1	123.5	122.7	121.8	121.3	120.1	119.9	124.5
<b>TRANSPORTATION.....</b>															
<b>Private.....</b>															
Automobiles, new.....		126.4	125.6	125.7	123.6	124.2	124.3	124.6	124.0	124.6	124.3	122.0	120.7	120.2	124.2
Automobiles, used.....		123.4	122.7	122.8	120.5	121.3	121.4	121.8	121.2	121.9	121.6	119.3	117.9	117.5	121.3
Gasoline, regular and premium.....		104.9	105.1	104.2	99.5	101.0	101.6	101.8	101.8	101.9	102.4	102.3	102.3	102.7	102.4
Motor oil, premium.....		123.9	124.9	123.8	121.4	125.4	127.0	128.2	126.8	131.2	130.5	122.6	115.5	118.7	125.3
Tires, new, tubeless.....		116.9	116.3	118.0	117.7	118.0	117.7	118.6	117.3	117.8	117.2	114.5	114.5	113.3	117.0
Auto repairs and maintenance.....		140.2	140.1	139.6	139.1	137.1	138.1	137.4	136.7	136.0	135.5	134.6	134.1	134.0	137.5
Auto insurance rates.....		118.2	118.0	117.4	117.0	116.0	116.3	115.5	115.6	115.7	114.8	114.9	115.0	114.3	116.2
Auto registration.....		137.3	136.6	136.1	135.2	134.5	133.8	133.3	132.9	132.3	132.0	131.1	130.3	128.9	133.8
<b>Public.....</b>															
Local transit fares.....		171.5	164.6	163.7	163.2	160.3	159.0	158.7	158.1	157.2	156.1	155.7	154.7	150.0	160.2
Taxicab fares.....	Dec. 63	134.2	134.2	134.2	134.2	134.2	134.2	134.2	134.2	134.2	133.5	130.7	131.0	127.4	133.6
Railroad fares, coach.....		153.0	151.1	150.3	150.3	149.7	149.5	149.1	148.0	148.0	147.5	145.5	144.8	144.3	148.9
Airplane fares, chiefly coach.....	Dec. 63	163.2	163.0	161.7	161.7	160.8	160.5	159.9	159.6	159.6	158.4	158.4	157.3	156.5	160.4
Bus fares, intercity.....	Dec. 63	131.5	127.5	127.5	127.5	127.5	127.5	127.5	124.8	124.8	124.8	124.8	124.8	124.8	126.7
<b>HEALTH AND RECREATION.....</b>															
<b>Medical care.....</b>															
Drugs and prescriptions.....		153.0	151.1	150.3	150.3	149.7	149.5	149.1	148.0	148.0	147.5	145.5	144.8	144.3	148.9
Over-the-counter items.....	Dec. 63	163.2	163.0	161.7	161.7	160.8	160.5	159.9	159.6	159.6	158.4	158.4	157.3	156.5	160.4
Multiple vitamin concentrates.....	Dec. 63	131.5	127.5	127.5	127.5	127.5	127.5	127.5	124.8	124.8	124.8	124.8	124.8	124.8	126.7
Aspirin compounds.....	Dec. 63	117.2	115.5	115.1	115.1	114.9	114.9	114.9	114.6	114.6	114.6	108.4	108.4	108.4	114.0
Liquid tonics.....	Dec. 63	117.4	111.6	111.6	112.1	112.1	112.1	112.1	110.7	110.7	110.7	103.3	103.3	103.3	110.6
Adhesive bandages, package.....	Dec. 63	127.9	127.0	127.0	127.0	122.9	122.9	122.9	118.6	118.6	118.6	117.8	117.8	117.8	122.4
Cold tablets or capsules.....		139.6	139.1	138.6	138.4	137.7	137.0	136.3	135.7	135.1	134.3	133.7	133.3	132.8	136.6
Cough syrup.....		158.1	157.4	156.9	157.6	156.8	155.9	155.2	154.5	153.6	152.5	151.3	150.2	149.1	155.0
Prescriptions.....		99.6	99.6	99.4	99.3	99.3	99.2	99.3	99.3	99.0	98.8	98.6	98.6	98.5	99.2
Anti-infectives.....	Mar. 60	107.1	107.1	106.9	106.9	107.0	106.9	107.1	107.0	105.8	106.6	106.4	106.7	106.6	106.9
Sedatives and hypnotics.....	Mar. 60	92.8	92.4	92.5	92.4	92.4	92.1	92.2	92.4	92.2	92.2	92.2	92.9	92.2	92.4
Ataractics.....	Mar. 60	106.6	106.2	106.1	105.5	106.8	106.4	106.6	106.2	105.3	105.5	105.6	105.2	105.7	106.2
Anti-spasmodics.....	Mar. 60	101.3	101.3	101.3	101.2	101.0	101.0	101.2	101.1	100.9	101.1	101.1	101.1	100.7	101.1
Cough preparations.....	Mar. 60	89.1	89.0	89.0	88.8	88.7	88.6	88.6	88.6	88.3	88.2	88.0	87.8	87.6	88.6
Cardiovasculars and antihypertensives.....	Mar. 60	62.8	62.8	63.0	62.9	62.9	62.8	63.1	63.1	62.5	62.5	62.4	62.4	62.2	62.8
Analgesics, internal.....	Mar. 60	110.4	109.6	108.9	107.8	107.6	107.1	106.9	106.4	105.1	105.9	105.0	104.3	103.4	107.2
Anti-obesity.....	Mar. 60	89.8	89.8	89.8	89.8	89.7	89.9	90.0	90.0	89.7	89.7	89.8	89.8	89.8	89.8
Hormones.....	Mar. 60	101.3	101.3	101.3	101.2	101.0	101.0	101.2	101.1	100.9	101.1	101.1	101.1	100.7	101.1
Professional services:		112.0	111.7	111.4	111.1	110.8	110.2	109.7	109.3	108.5	106.7	106.4	105.1	104.5	109.4
Physicians' fees.....	Mar. 60	98.0	98.0	97.9	97.7	97.6	97.1	97.0	96.9	96.9	96.5	95.9	95.4	95.1	97.1
Family doctor, office visits.....	Mar. 67	103.3	103.2	103.1	103.1	103.1	102.9	102.8	103.0	103.0	102.4	102.1	101.8	101.5	102.8
Family doctor, house visits.....	Mar. 67	104.3	104.3	104.2	103.6	103.3	102.9	102.6	102.6	102.4	102.8	102.1	101.9	101.4	103.1
Obstetrical cases.....	Mar. 67	94.2	93.9	94.3	93.9	93.9	93.9	93.9	94.9	94.7	94.3	94.7	94.9	95.5	94.3
Pediatric care, office visits.....	Dec. 63	160.0	159.0	158.3	158.0	156.8	156.0	155.5	154.3	153.3	152.6	151.1	149.7	149.1	155.4
Psychiatrist, office visits.....	Dec. 63	162.4	161.0	160.6	160.3	158.7	158.3	157.6	155.8	154.9	154.1	152.0	151.0	150.5	157.2
<b>See footnotes at end of table.</b>															

24. Consumer Price Index—U.S. average for groups, subgroups, and selected items—Continued

Index or group	Other index bases	1969												1968	Annual average 1969
		Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	
<b>HEALTH AND RECREATION—Continued</b>															
<b>Medical care—Continued</b>															
<b>Professional services—Continued</b>															
<b>Physicians' fees—Continued</b>															
Herniorrhaphy, adult	Dec. 63	125.4	125.2	124.6	124.6	124.3	124.3	124.1	123.9	123.2	123.1	122.8	121.3	121.2	123.9
Tonsillectomy and adenoidectomy		151.6	151.3	149.3	149.1	149.0	148.1	147.8	147.3	146.5	146.4	146.3	145.5	145.3	148.2
<b>Dentists' fees</b>															
Fillings, adult, amalgam, one surface		147.6	147.2	146.9	146.0	145.5	144.9	144.2	143.6	142.9	140.1	139.4	138.9	137.3	143.9
Extractions, adult		148.7	148.3	148.3	147.1	146.4	145.7	145.1	144.6	144.0	141.1	140.2	139.1	137.3	144.9
Dentures, full upper	Dec. 63	147.0	146.7	145.9	145.3	144.7	144.5	143.4	142.6	141.8	138.9	138.4	138.3	137.6	143.1
		130.2	129.7	129.5	128.9	128.8	128.3	127.7	127.3	126.5	124.3	124.1	124.0	122.5	127.4
<b>Other professional services:</b>															
Examination, prescription, and dispensing of eyeglasses		133.9	133.8	132.8	132.4	132.2	131.7	131.2	130.8	129.5	128.9	128.5	127.8	127.6	131.1
Routine laboratory tests	Dec. 63	119.5	119.4	118.5	118.5	118.6	118.0	117.9	117.6	115.6	115.4	115.1	114.3	114.2	117.4
<b>Hospital service charges:</b>															
Daily service charges		267.9	265.4	263.8	261.9	259.9	256.7	253.8	252.4	251.4	249.2	246.2	243.1	239.3	256.0
Semiprivate rooms		264.1	261.7	260.1	258.4	255.3	253.0	250.0	248.4	247.4	245.1	242.2	239.0	235.1	252.1
Private rooms		258.7	256.1	254.7	252.6	250.8	247.9	245.5	244.4	243.5	241.6	238.4	235.8	232.3	247.5
Operating room charges	Dec. 63	170.9	170.6	170.9	168.7	167.6	166.4	165.6	164.8	163.0	160.4	158.1	155.1	150.9	165.2
X-ray, diagnostic series, upper G.I.	Dec. 63	124.7	124.5	124.8	124.6	123.2	122.7	122.3	122.1	121.8	121.4	120.3	119.9	119.0	122.7
<b>Personal care</b>															
<b>Toilet goods</b>															
Toothpaste, standard dentifrice		111.6	111.8	111.6	111.7	111.4	111.2	110.9	110.4	109.8	109.8	109.2	108.7	108.6	110.7
Toilet soap, hard milled		114.6	114.7	114.4	113.8	113.4	112.9	113.6	113.2	114.1	113.9	113.3	112.8	111.3	113.7
Hand lotions, liquid	Dec. 63	123.4	124.8	125.1	126.3	123.3	125.1	123.6	123.9	124.2	123.9	123.5	122.6	122.9	124.1
Shaving cream, aerosol		101.9	109.7	110.7	111.1	111.2	110.4	109.0	107.7	107.0	106.4	105.4	105.1	104.3	108.6
Shaving powder, pressed		101.9	101.6	102.0	102.1	101.4	102.3	102.3	101.9	101.9	101.9	102.4	102.6	102.8	102.0
Deodorants, cream or roll-on	Dec. 63	127.6	127.5	127.2	126.8	126.6	126.1	125.0	124.0	124.4	123.1	121.4	120.4	120.8	125.0
Cleansing tissues		94.5	95.0	95.1	95.3	95.5	95.0	94.9	95.4	95.1	94.9	93.9	93.9	94.7	94.9
Home permanent refills		112.5	111.8	109.2	108.4	109.3	109.3	108.7	107.9	108.0	107.1	106.8	106.2	106.5	108.8
Personal care services		98.7	98.6	98.5	99.2	99.1	98.8	99.3	98.4	97.5	96.6	96.0	95.4	94.6	98.0
Men's haircuts		148.5	147.5	146.7	146.5	145.8	145.5	144.9	144.7	144.2	143.2	142.5	142.1	141.6	145.2
Beauty shop services		157.8	156.4	155.2	154.8	154.5	154.7	153.8	153.1	152.3	151.7	150.5	150.0	149.7	153.7
Women's haircuts	Dec. 63	138.8	138.0	137.7	137.5	136.6	136.0	135.6	135.7	135.4	134.2	133.9	133.0	133.0	136.1
Shampoo and wave sets, plain		125.2	124.0	123.4	123.2	121.9	121.2	120.9	121.7	121.4	120.7	120.5	120.3	119.7	122.0
Permanent waves, cold		156.3	155.3	154.9	154.6	153.6	152.8	152.3	152.1	151.7	150.1	149.7	149.0	148.3	152.7
Reading and recreation		107.2	107.2	107.1	107.0	106.9	106.7	106.5	106.5	106.1	105.4	105.3	105.1	104.9	106.4
<b>Recreational goods</b>															
TV sets, portable and console	Dec. 63	132.7	132.3	132.0	131.6	131.2	130.7	130.4	130.2	129.6	128.7	128.4	128.4	128.2	130.5
TV replacement tubes		99.1	99.2	99.1	99.0	98.8	98.7	98.6	98.6	98.4	97.9	97.7	97.8	97.9	98.6
Radios, portable and table model	Dec. 63	80.2	80.3	80.2	80.0	79.7	79.8	80.0	80.1	80.1	79.8	80.1	80.3	80.5	81.0
Tape recorders, portable		116.3	116.3	115.9	115.7	115.4	115.6	115.8	115.6	115.3	114.8	114.7	114.8	114.0	115.5
Phonograph records, stereophonic	Dec. 63	76.5	76.5	76.6	76.9	76.5	76.5	76.6	76.6	76.5	76.3	76.3	76.7	76.8	76.5
Movie cameras, Super 8, zoom lens	Dec. 63	90.1	91.2	91.4	91.5	91.4	91.5	91.9	91.7	91.7	91.2	91.1	90.6	91.2	91.3
Film, 35mm, color	Dec. 63	98.0	98.0	98.1	97.6	97.7	97.9	97.5	97.5	96.6	96.4	95.9	95.6	96.7	97.2
Bicycle, boys'	Dec. 63	82.3	83.4	83.1	83.5	83.4	83.5	84.1	85.0	84.9	84.8	84.5	85.0	85.3	84.0
Tricycles	Dec. 63	99.1	99.1	99.4	99.6	99.2	99.1	99.0	98.9	98.9	98.9	98.6	98.6	98.6	99.0
Recreational services	Dec. 63	110.4	110.0	109.7	109.9	109.5	109.7	109.1	109.0	108.6	107.8	107.3	107.2	106.7	109.0
Indoor movie admissions		111.6	111.4	111.9	111.6	111.2	109.4	109.2	108.5	107.9	107.5	107.2	107.8	107.7	109.6
Adult	Dec. 63	133.2	132.6	132.1	131.7	131.1	130.1	129.7	129.2	128.7	127.1	126.7	126.6	126.3	129.9
Children's		210.3	208.3	207.0	206.5	204.2	200.2	198.3	197.4	196.3	193.2	192.6	192.6	190.3	200.6
Drive-in movie admissions, adult	Dec. 63	205.4	203.2	201.9	201.6	198.8	194.4	192.9	192.0	191.5	188.6	188.2	187.9	185.3	195.5
Bowling fees, evening	Dec. 63	227.1	225.4	224.5	223.2	222.1	219.6	216.7	215.6	212.5	208.6	207.4	208.5	207.0	217.6
Golf greens fees	Dec. 63	165.5	165.0	164.5	164.1	163.5	161.9	160.1	157.0	156.0	153.1	153.6	153.9	153.7	159.9
TV repairs, picture tube replacement	Dec. 63	113.7	113.6	112.1	110.9	110.3	110.4	110.6	110.6	110.8	110.4	110.1	109.8	109.2	111.1
Film developing, black and white	Dec. 63	(1)	(1)	135.5	135.9	135.8	134.7	134.6	133.8	130.9	127.3	125.0	124.8	122.2	131.8
Reading and education:		100.2	100.0	101.4	101.0	101.0	101.0	102.2	102.3	103.3	102.7	102.6	102.6	101.7	
Newspapers, street sale and delivery	Dec. 63	117.7	117.9	117.9	118.3	118.4	118.9	119.2	120.0	120.5	120.2	120.0	120.1	120.2	119.1
Piano lessons, beginner		158.2	156.7	156.4	155.9	155.8	155.2	154.3	153.7	153.2	152.7	152.3	152.1	151.3	154.7
<b>Other goods and services</b>															
<b>Tobacco products</b>															
Cigarettes, nonfilter tip, regular size	Dec. 63	127.3	126.7	126.5	126.1	123.8	122.8	122.3	122.2	122.2	121.7	121.6	121.3	121.1	123.7
Cigarettes, filter tip, king size		133.5	133.1	132.2	131.3	130.1	129.1	127.9	126.9	126.6	126.1	125.8	125.6	125.6	129.0
Cigars, domestic, regular size	Mar. 59	153.8	153.1	151.5	150.6	148.7	146.7	144.0	142.3	142.1	141.8	141.7	141.6	141.3	146.5
Alcoholic beverages		161.4	160.7	158.9	158.0	155.8	153.7	150.8	149.3	149.1	148.7	148.6	148.5	148.0	153.6
Beer		153.5	152.6	151.0	150.0	148.1	146.2	143.4	141.0	140.9	140.7	140.5	140.5	140.4	145.7
Whiskey, spirit blended and straight bourbon	Dec. 63	110.0	109.9	109.4	109.6	108.7	107.1	106.5	106.1	106.0	105.9	105.9	105.6	105.4	107.6
Wine, dessert and table		120.6	120.4	120.0	119.1	118.2	117.7	117.4	116.8	116.5	115.9	115.6	115.3	115.6	117.8
Beer, away from home	Dec. 63	116.5	116.6	116.3	116.4	115.3	114.8	114.5	114.2	113.9	113.5	113.0	112.8	112.6	114.8
Financial and miscellaneous personal expenses:		111.5	111.4	111.3	110.4	110.1	109.8	109.4	109.2	109.2	108.9	108.9	109.0	109.0	109.9
Funeral services, adult	Dec. 63	115.2	114.5	113.6	112.0	110.6	110.2	109.5	108.8	108.6	108.0	107.8	107.4	107.1	110.5
Bank service charges, checking accounts	Dec. 63	125.9	125.6	125.0	123.0	122.3	121.8	121.5	120.5	119.9	118.9	118.8	118.1	119.3	121.8
Legal services, short form will	Dec. 63	117.4	117.3	116.9	116.5	115.9	115.5	115.2	114.6	114.0	113.6	113.1	112.5	112.3	115.2
		110.3	109.9	109.1	108.3	107.4	108.2	108.2	107.9	107.8	107.5	107.4	106.9	106.6	108.3
		141.2	139.5	139.5	138.8	137.8	135.0	134.5	132.9	130.8	129.5	128.2	128.3	127.6	134.7

<sup>1</sup> Priced only in season.  
<sup>2</sup> Not available.

NOTE: Monthly data for individual nonfood items not available for 1968.



25. Consumer Price Index<sup>1</sup>—U.S. city average, and selected areas

[1957-59=100 unless otherwise specified]

Area <sup>2</sup>	1969												1968			Annual avg.
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1968	
	All items															
U.S. city average <sup>3</sup>	131.3	130.5	129.8	129.3	128.7	128.2	127.6	126.8	126.4	125.6	124.6	124.1	123.7	123.4	121.2	
Atlanta, Ga.	129.9	( <sup>4</sup> )	( <sup>4</sup> )	128.6	( <sup>4</sup> )	( <sup>4</sup> )	126.1	( <sup>4</sup> )	( <sup>4</sup> )	124.9	( <sup>4</sup> )	( <sup>4</sup> )	122.1	( <sup>4</sup> )	119.6	
Baltimore, Md.	131.9	( <sup>4</sup> )	( <sup>4</sup> )	130.4	( <sup>4</sup> )	( <sup>4</sup> )	127.9	( <sup>4</sup> )	( <sup>4</sup> )	125.7	( <sup>4</sup> )	( <sup>4</sup> )	124.0	( <sup>4</sup> )	120.9	
Boston, Mass.	( <sup>4</sup> )	( <sup>4</sup> )	134.7	( <sup>4</sup> )	( <sup>4</sup> )	132.1	( <sup>4</sup> )	( <sup>4</sup> )	129.8	( <sup>4</sup> )	( <sup>4</sup> )	127.9	( <sup>4</sup> )	( <sup>4</sup> )	124.7	
Buffalo, N.Y. (Nov. 1963=100)	( <sup>4</sup> )	123.2	( <sup>4</sup> )	( <sup>4</sup> )	121.2	( <sup>4</sup> )	( <sup>4</sup> )	120.2	( <sup>4</sup> )	( <sup>4</sup> )	117.3	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	114.8	
Chicago, Ill.—Northwestern Ind.	128.3	127.7	126.9	127.2	126.1	125.3	124.6	123.6	123.2	122.9	121.9	121.4	121.0	120.3	118.5	
Cincinnati, Ohio—Kentucky	127.7	( <sup>4</sup> )	( <sup>4</sup> )	125.5	( <sup>4</sup> )	( <sup>4</sup> )	124.6	( <sup>4</sup> )	( <sup>4</sup> )	122.7	( <sup>4</sup> )	( <sup>4</sup> )	121.1	( <sup>4</sup> )	118.9	
Cleveland, Ohio	( <sup>4</sup> )	129.5	( <sup>4</sup> )	( <sup>4</sup> )	127.3	( <sup>4</sup> )	( <sup>4</sup> )	125.3	( <sup>4</sup> )	( <sup>4</sup> )	123.1	( <sup>4</sup> )	( <sup>4</sup> )	121.8	119.6	
Dallas, Tex. (Nov. 1963=100)	( <sup>4</sup> )	123.7	( <sup>4</sup> )	( <sup>4</sup> )	121.2	( <sup>4</sup> )	( <sup>4</sup> )	119.4	( <sup>4</sup> )	( <sup>4</sup> )	116.4	( <sup>4</sup> )	( <sup>4</sup> )	115.4	113.0	
Detroit, Mich.	130.8	129.8	129.2	128.6	128.5	127.6	127.3	126.4	125.7	125.1	123.4	122.8	122.5	122.1	119.8	
Honolulu, Hawaii (Dec. 1963=100)	119.7	( <sup>4</sup> )	( <sup>4</sup> )	118.1	( <sup>4</sup> )	( <sup>4</sup> )	116.6	( <sup>4</sup> )	( <sup>4</sup> )	115.6	( <sup>4</sup> )	( <sup>4</sup> )	113.9	( <sup>4</sup> )	111.9	
Houston, Tex.	( <sup>4</sup> )	( <sup>4</sup> )	129.8	( <sup>4</sup> )	( <sup>4</sup> )	127.0	( <sup>4</sup> )	( <sup>4</sup> )	125.5	( <sup>4</sup> )	( <sup>4</sup> )	123.2	( <sup>4</sup> )	( <sup>4</sup> )	119.3	
Kansas City, Mo.—Kansas	133.2	( <sup>4</sup> )	( <sup>4</sup> )	131.4	( <sup>4</sup> )	( <sup>4</sup> )	130.4	( <sup>4</sup> )	( <sup>4</sup> )	128.1	( <sup>4</sup> )	( <sup>4</sup> )	125.5	( <sup>4</sup> )	123.5	
Los Angeles—Long Beach, Calif.	131.1	130.0	130.1	129.6	128.9	128.6	127.9	126.9	126.6	125.2	124.7	124.2	124.2	124.2	122.2	
Milwaukee, Wis.	( <sup>4</sup> )	127.0	( <sup>4</sup> )	( <sup>4</sup> )	123.9	( <sup>4</sup> )	( <sup>4</sup> )	122.8	( <sup>4</sup> )	( <sup>4</sup> )	120.8	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	116.8	
Minneapolis—St. Paul, Minn.	( <sup>4</sup> )	( <sup>4</sup> )	130.3	( <sup>4</sup> )	( <sup>4</sup> )	128.0	( <sup>4</sup> )	( <sup>4</sup> )	125.1	( <sup>4</sup> )	( <sup>4</sup> )	122.9	( <sup>4</sup> )	( <sup>4</sup> )	121.2	
New York, N.Y.—Northeastern N.J.	136.0	134.6	134.1	133.5	132.5	132.1	131.6	130.8	130.5	129.6	128.3	127.8	127.2	126.9	124.1	
Philadelphia, Pa.—N.J.	132.2	131.7	131.2	131.0	130.2	129.2	128.2	127.5	127.0	126.0	125.2	125.1	124.9	124.9	122.4	
Pittsburgh, Pa.	( <sup>4</sup> )	( <sup>4</sup> )	128.5	( <sup>4</sup> )	( <sup>4</sup> )	127.7	( <sup>4</sup> )	( <sup>4</sup> )	126.0	( <sup>4</sup> )	( <sup>4</sup> )	124.0	( <sup>4</sup> )	( <sup>4</sup> )	120.4	
Portland, Oreg.—Wash. <sup>4</sup>	( <sup>4</sup> )	( <sup>4</sup> )	130.1	( <sup>4</sup> )	( <sup>4</sup> )	128.4	( <sup>4</sup> )	( <sup>4</sup> )	127.9	( <sup>4</sup> )	( <sup>4</sup> )	125.3	( <sup>4</sup> )	( <sup>4</sup> )	122.3	
St. Louis, Mo.—Ill.	130.7	( <sup>4</sup> )	( <sup>4</sup> )	129.2	( <sup>4</sup> )	( <sup>4</sup> )	127.0	( <sup>4</sup> )	( <sup>4</sup> )	125.4	( <sup>4</sup> )	( <sup>4</sup> )	123.4	( <sup>4</sup> )	121.5	
San Diego, Calif. (Feb. 1965=100)	( <sup>4</sup> )	117.0	( <sup>4</sup> )	( <sup>4</sup> )	116.0	( <sup>4</sup> )	( <sup>4</sup> )	114.4	( <sup>4</sup> )	( <sup>4</sup> )	112.8	( <sup>4</sup> )	( <sup>4</sup> )	111.2	109.4	
San Francisco—Oakland, Calif.	134.5	( <sup>4</sup> )	( <sup>4</sup> )	132.8	( <sup>4</sup> )	( <sup>4</sup> )	130.8	( <sup>4</sup> )	( <sup>4</sup> )	128.9	( <sup>4</sup> )	( <sup>4</sup> )	126.7	( <sup>4</sup> )	124.3	
Scranton, Pa. <sup>5</sup>	( <sup>4</sup> )	127.3	( <sup>4</sup> )	( <sup>4</sup> )	130.5	( <sup>4</sup> )	( <sup>4</sup> )	128.1	( <sup>4</sup> )	( <sup>4</sup> )	126.2	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	122.8	
Seattle, Wash.	( <sup>4</sup> )	130.0	( <sup>4</sup> )	( <sup>4</sup> )	129.5	( <sup>4</sup> )	( <sup>4</sup> )	127.6	( <sup>4</sup> )	( <sup>4</sup> )	125.9	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	122.3	
Washington, D.C.—Md.—Va.	( <sup>4</sup> )	132.0	( <sup>4</sup> )	( <sup>4</sup> )	130.8	( <sup>4</sup> )	( <sup>4</sup> )	128.8	( <sup>4</sup> )	( <sup>4</sup> )	126.3	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	122.0	
Food																
U.S. city average <sup>3</sup>	129.9	128.1	127.2	127.5	127.4	126.7	125.5	123.7	123.2	122.4	121.9	122.0	121.2	120.5	119.3	
Atlanta, Ga.	128.4	126.9	126.5	126.7	126.3	124.4	122.8	121.2	121.8	120.7	120.0	119.7	119.1	118.6	117.2	
Baltimore, Md.	134.1	132.3	131.5	131.8	130.8	130.1	127.9	126.2	126.3	125.3	124.1	124.8	123.9	122.6	121.3	
Boston, Mass.	133.1	131.6	131.2	131.4	131.8	130.2	129.5	127.8	127.5	126.3	126.0	125.1	124.6	123.7	122.7	
Buffalo, N.Y. (Nov. 1963=100)	125.1	122.8	121.9	121.8	122.5	122.4	121.2	118.9	118.2	117.4	117.2	117.0	117.0	115.7	114.6	
Chicago, Ill.—Northwestern Ind.	131.3	129.4	128.3	130.2	130.5	129.0	127.5	125.3	124.4	123.9	123.0	124.0	122.5	121.7	120.4	
Cincinnati, Ohio—Kentucky	126.6	125.1	124.1	123.6	123.2	123.3	121.9	120.7	120.2	119.1	118.8	118.7	118.4	117.9	116.3	
Cleveland, Ohio	128.5	125.7	125.0	125.1	125.2	123.3	123.2	122.3	120.1	119.6	120.0	119.9	119.2	118.6	116.7	
Dallas, Tex. (Nov. 1963=100)	124.2	122.8	121.7	122.0	121.9	120.6	120.1	118.2	116.9	116.5	116.2	116.7	115.9	114.9	113.7	
Detroit, Mich.	129.3	126.8	126.1	126.5	127.3	126.5	124.5	122.7	121.9	120.8	119.9	119.5	118.4	118.3	117.6	
Honolulu, Hawaii (Dec. 1963=100)	120.8	119.5	119.7	119.1	118.0	116.9	116.3	116.1	115.8	115.7	115.7	115.6	113.9	114.1	112.2	
Houston, Tex.	131.2	129.2	128.7	129.2	129.0	127.7	126.8	125.2	124.3	124.3	123.8	123.4	122.9	122.1	119.7	
Kansas City, Mo.—Kansas	134.4	132.9	131.2	131.9	131.3	130.7	129.8	127.5	126.6	125.6	125.0	124.4	124.1	124.1	122.7	
Los Angeles—Long Beach, Calif.	125.8	124.7	124.0	124.0	123.9	124.0	123.0	121.6	121.2	120.3	119.6	119.6	119.3	118.4	117.5	
Milwaukee, Wis.	128.4	127.8	127.6	127.9	127.6	126.5	125.1	123.3	122.9	122.0	121.4	121.4	120.4	119.5	118.2	
Minneapolis—St. Paul, Minn.	128.2	127.2	126.5	125.9	126.4	125.4	122.8	121.3	120.7	120.2	119.3	120.5	119.3	118.7	117.3	
New York, N.Y.—Northeastern N.J.	132.9	130.6	129.6	129.1	128.7	128.1	126.6	124.9	124.7	123.6	123.1	123.3	122.3	121.8	120.2	
Philadelphia, Pa.—N.J.	129.7	128.0	127.0	127.2	127.2	126.0	124.5	123.1	124.3	123.2	122.9	122.7	121.9	121.1	119.6	
Pittsburgh, Pa.	127.1	125.7	123.3	123.2	123.9	124.2	123.2	120.9	119.6	119.2	118.7	118.7	118.8	117.2	115.9	
Portland, Oreg.—Wash. <sup>4</sup>	( <sup>4</sup> )	( <sup>4</sup> )	124.4	( <sup>4</sup> )	( <sup>4</sup> )	125.2	( <sup>4</sup> )	( <sup>4</sup> )	122.7	( <sup>4</sup> )	( <sup>4</sup> )	122.5	( <sup>4</sup> )	( <sup>4</sup> )	119.3	
St. Louis, Mo.—Ill.	135.5	133.5	132.4	132.6	131.2	129.8	128.6	126.9	126.4	125.8	125.2	125.8	124.9	123.9	123.5	
San Diego, Calif. (Feb. 1965=100)	120.0	119.1	117.8	118.3	118.6	118.7	118.1	116.4	115.3	114.5	113.8	113.4	112.9	112.5	111.3	
San Francisco—Oakland, Calif.	127.2	126.2	125.6	124.9	124.9	125.9	124.3	122.7	122.3	121.4	120.2	120.1	119.6	119.3	118.4	
Scranton, Pa.	( <sup>4</sup> )	131.9	( <sup>4</sup> )	( <sup>4</sup> )	127.5	( <sup>4</sup> )	( <sup>4</sup> )	123.4	( <sup>4</sup> )	( <sup>4</sup> )	121.6	( <sup>4</sup> )	( <sup>4</sup> )	119.8	118.4	
Seattle, Wash.	127.6	126.2	125.2	125.9	125.2	125.8	125.0	123.6	123.2	122.3	121.5	121.4	120.5	119.8	118.8	
Washington, D.C.—Md.—Va.	133.5	131.2	130.5	131.6	132.5	131.3	129.1	128.3	127.6	126.3	126.0	125.5	124.9	124.1	121.3	

<sup>1</sup> See table 23. Indexes measure time-to-time changes in prices. They do not indicate whether it costs more to live in one area than in another.

<sup>2</sup> The areas listed include not only the central city but the entire urban portion of the Standard Metropolitan Statistical Area, as defined for the 1960 Census of Population; except that the Standard Consolidated Area is used for New York and Chicago.

<sup>3</sup> Average of 56 "cities" (metropolitan areas and nonmetropolitan urban places beginning January 1963).

<sup>4</sup> All items indexes are computed monthly for 5 areas and once every 3 months on a rotating cycle for other areas.

<sup>5</sup> Old series.

26. Wholesale price indexes,<sup>1</sup> by group and subgroup of commodities[1957-59=100 unless otherwise specified]<sup>2</sup>

Code	Commodity Group	1969												1968	Annual average 1968
		Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	
	<b>ALL COMMODITIES</b> .....	115.1	114.7	114.0	113.6	113.4	113.3	113.2	112.8	111.9	111.7	111.1	110.7	109.8	108.7
	<b>FARM PRODUCTS AND PROCESSED FOODS AND FEEDS</b> .....	116.4	115.7	114.3	114.3	114.6	115.5	115.5	114.1	110.9	110.7	110.0	109.8	108.4	107.6
	<b>INDUSTRIAL COMMODITIES</b> .....	114.6	114.2	113.8	113.2	112.8	112.4	112.2	112.2	112.1	112.0	111.4	110.9	110.2	109.0
	<b>FARM PRODUCTS, AND PROCESSED FOODS AND FEEDS</b>														
01	Farm products.....	111.7	111.1	107.9	108.4	108.9	110.5	111.2	110.5	105.6	106.5	105.0	104.9	103.3	102.2
01-1	Fresh and dried fruits and vegetables.....	112.4	125.3	101.3	103.4	106.7	103.1	112.9	126.7	106.8	112.1	108.7	112.0	109.3	108.2
01-2	Grains.....	82.9	81.7	84.8	83.4	81.9	83.7	85.6	86.7	83.1	81.6	82.0	82.5	80.4	81.9
01-3	Livestock.....	120.2	116.6	118.7	119.2	123.6	126.8	130.4	123.0	113.8	112.5	109.2	106.1	104.2	104.8
01-4	Live poultry.....	86.9	86.3	85.3	89.0	92.3	90.2	89.8	90.7	87.0	95.5	94.3	90.5	82.9	84.9
01-5	Plant and animal fibers.....	65.7	66.0	66.1	66.4	66.9	67.7	67.7	67.7	67.3	67.3	67.7	68.8	69.0	75.4
01-6	Fluid milk.....	138.3	137.6	136.8	135.6	135.1	134.9	134.6	134.1	133.5	132.8	132.6	131.8	132.3	128.8
01-7	Eggs.....	155.8	139.8	113.8	122.5	100.5	117.0	85.9	80.6	97.3	110.9	108.1	111.5	117.8	93.9
01-8	Hay, haysseeds, and oilseeds.....	105.1	103.4	101.2	105.7	107.3	111.3	110.6	115.1	113.8	112.5	112.4	111.5	108.8	111.5
01-9	Other farm products.....	113.1	115.9	116.7	110.6	109.5	106.9	106.2	105.6	106.1	106.8	106.4	105.9	107.7	103.1
02	Processed foods and feeds.....	122.6	121.8	121.6	121.3	121.5	122.0	121.4	119.4	117.3	116.4	116.3	116.0	114.7	114.1
02-1	Cereal and bakery products.....	122.0	121.9	121.2	120.4	120.1	119.9	119.3	119.3	119.3	119.3	119.3	119.3	119.3	118.2
02-2	Meats, poultry, and fish.....	121.9	120.5	120.2	122.9	124.5	127.5	126.5	121.0	114.0	112.2	111.4	111.1	107.3	108.3
02-3	Dairy products.....	133.9	131.2	130.7	133.4	133.0	133.0	132.5	131.4	131.4	130.2	130.2	130.1	130.4	127.7
02-4	Processed fruits and vegetables.....	116.4	116.3	116.0	116.6	116.8	116.6	115.6	115.7	115.4	115.1	114.5	113.6	113.3	114.1
02-5	Sugar and confectionery.....	127.1	127.9	127.7	127.2	127.2	122.3	123.0	122.7	120.2	119.5	119.2	119.2	118.8	115.8
02-6	Beverages and beverage materials.....	116.1	116.0	115.0	113.1	112.6	112.6	112.4	111.8	111.4	111.3	111.1	110.8	110.6	109.6
02-7	Animal fats and oils.....	115.6	123.0	118.3	104.0	105.0	96.4	91.2	89.0	90.8	96.1	90.3	84.0	74.1	69.6
02-72	Crude vegetable oils.....	86.1	97.0	88.4	79.8	80.0	80.0	81.9	81.0	80.6	83.0	83.4	80.4	78.0	84.5
02-73	Refined vegetable oils.....	97.9	91.1	88.9	85.0	84.7	89.4	89.4	89.4	89.4	91.6	95.0	91.5	90.0	94.4
02-74	Vegetable oil end products.....	108.0	106.5	104.7	102.1	102.1	102.1	103.3	103.3	103.3	103.1	102.9	101.1	100.5	100.2
02-8	Miscellaneous processed foods.....	126.4	127.2	131.6	121.2	119.8	119.5	118.6	118.6	119.0	119.3	119.1	118.2	118.2	115.5
02-9	Manufactured animal feeds.....	121.8	119.5	119.9	119.3	118.2	118.7	116.9	114.9	118.3	115.7	117.5	118.2	118.2	118.5
	<b>INDUSTRIAL COMMODITIES</b>														
03	Textile products and apparel.....	109.2	109.2	109.1	109.0	108.7	107.7	107.2	106.9	107.1	107.1	107.2	107.2	107.1	105.7
03-1	Cotton products.....	106.1	106.0	105.8	105.9	105.7	105.3	104.5	104.6	104.5	104.6	104.8	104.8	105.1	105.1
03-2	Wool products.....	104.3	104.6	104.5	105.0	104.8	105.0	105.0	104.3	104.3	104.2	104.4	104.7	104.6	103.7
03-3	Manmade fiber textile products.....	91.1	91.5	91.6	92.1	92.7	92.6	92.7	92.6	92.4	92.1	92.3	92.8	92.9	90.8
03-41	Silk yarns.....	191.1	184.6	183.9	181.2	177.1	168.2	164.6	157.9	155.4	155.0	156.4	160.8	165.2	183.0
03-5	Apparel.....	116.9	116.7	116.5	116.2	115.8	113.9	113.3	112.9	113.0	112.8	112.7	112.7	111.9	110.3
03-6	Textile housefurnishings.....	108.1	108.0	108.0	107.3	104.7	104.2	104.2	103.2	107.7	107.7	107.6	110.2	110.2	110.5
03-7	Miscellaneous textile products.....	127.8	129.6	127.2	121.4	119.6	120.3	118.0	114.7	119.7	121.9	127.1	126.2	125.3	115.5
04	Hides, skins, leather, and related products.....	126.5	126.8	127.4	128.2	126.4	126.4	125.7	126.1	126.0	123.4	123.4	123.5	122.8	119.5
04-1	Hides and skins.....	108.9	110.4	118.0	128.7	123.1	123.0	117.4	122.6	125.8	109.1	106.3	109.2	106.8	99.6
04-2	Leather.....	119.7	119.6	120.3	121.7	121.0	121.2	121.5	121.7	122.3	116.4	116.5	116.8	115.8	112.6
04-3	Footwear.....	135.0	135.5	135.2	134.9	132.7	132.7	132.3	132.1	131.9	131.5	132.2	132.1	131.7	128.0
04-4	Other leather and related products.....	118.5	118.6	118.4	117.9	117.6	117.5	117.2	117.0	116.0	115.3	114.8	114.2	113.8	112.7
05	Fuels and related products and power.....	106.1	105.5	105.4	104.7	104.7	105.0	105.0	104.5	104.5	104.2	102.7	102.4	102.2	102.4
05-1	Coal.....	124.6	123.5	120.6	115.9	115.5	115.4	114.2	113.5	112.8	112.7	112.7	112.7	112.7	106.7
05-2	Coke.....	126.9	126.9	126.9	120.3	120.3	120.3	120.3	120.3	120.3	120.3	120.3	120.3	120.3	116.0
05-3	Gas fuels (Jan. 1958=100).....	131.8	128.8	128.7	123.0	121.8	121.6	121.8	121.6	121.8	124.6	124.0	124.4	120.9	123.8
05-4	Electric power (Jan. 1958=100).....	103.4	103.4	103.7	103.5	102.4	102.5	102.6	102.5	102.3	102.3	102.2	102.0	102.1	101.5
05-61	Crude petroleum.....	104.5	104.5	104.5	104.5	104.5	104.5	104.5	104.7	104.8	103.7	99.9	99.7	99.7	99.4
05-7	Petroleum products, refined.....	102.2	101.6	101.6	101.8	102.5	103.2	103.3	102.4	102.5	101.7	99.5	98.9	99.0	100.3
06	Chemicals and allied products.....	98.8	98.9	98.6	98.9	98.7	98.2	98.3	98.1	97.9	98.0	97.8	97.6	97.7	98.2
06-1	Industrial chemicals.....	97.8	97.8	97.6	98.2	98.2	97.7	97.0	96.9	96.7	97.9	98.1	98.1	97.9	98.4
06-21	Prepared paint.....	120.3	120.3	120.3	119.2	119.2	119.2	119.2	118.7	118.7	118.7	118.2	118.2	115.9	114.6
06-22	Paint materials.....	93.4	93.1	93.9	93.3	93.3	93.2	92.8	92.8	92.2	91.9	92.0	92.0	91.9	92.2
06-3	Drugs and pharmaceuticals.....	94.6	94.2	94.0	94.0	93.8	93.8	93.8	93.8	93.7	93.6	93.4	93.4	93.6	93.3
06-4	Fats and oils, inedible.....	92.8	100.5	98.9	102.1	99.3	90.5	86.8	83.3	83.7	80.4	73.6	72.2	69.8	73.9
06-5	Agricultural chemicals and chem. products.....	86.7	86.7	86.3	87.4	88.4	88.6	92.1	92.1	92.1	92.3	92.2	92.9	94.8	99.7
06-6	Plastic resins and materials.....	80.1	79.6	80.2	81.0	80.7	80.2	80.8	80.8	80.9	81.3	81.5	80.8	80.5	82.0
06-7	Other chemicals and allied products.....	115.1	114.9	114.3	113.9	112.9	112.8	112.8	112.7	112.2	111.2	111.1	110.4	110.3	110.0
07	Rubber and rubber products.....	104.5	104.4	103.5	102.7	103.0	102.5	101.2	101.1	101.2	100.9	100.5	100.0	101.1	100.3
07-11	Crude rubber.....	88.1	88.7	89.7	90.6	92.5	90.7	89.7	89.5	90.1	88.9	87.5	86.4	86.8	84.9
07-12	Tires and tubes.....	101.7	101.7	100.6	99.2	99.2	98.4	96.3	96.3	96.3	96.3	96.3	96.3	99.5	99.2
07-13	Miscellaneous rubber products.....	113.4	113.0	111.7	110.7	110.8	111.0	110.2	110.2	110.1	109.7	109.5	108.7	108.3	107.4
08	Lumber and wood products.....	122.5	123.9	122.6	123.2	124.0	125.3	129.8	138.0	143.3	149.5	144.5	137.8	133.5	119.3
08-1	Lumber.....	128.2	129.3	128.0	129.5	131.1	133.4	142.3	155.9	164.9	164.7	155.8	147.9	142.2	127.2
08-2	Millwork.....	131.7	133.2	133.9	134.4	135.1	135.6	136.0	134.3	132.3	128.8	126.7	124.8	123.8	118.5
08-3	Plywood.....	96.9	99.6	95.8	94.4	93.6	93.9	94.2	103.5	111.0	106.9	106.5	106.5	128.9	103.1
08-4	Other wood products (Dec. 1966=100).....	118.4	116.7	116.7	116.5	116.8	115.6	115.1	114.7	112.6	112.4	111.2	111.0	110.3	106.7

See footnotes at end of table.

26. Wholesale price indexes,<sup>1</sup> by group and subgroup of commodities—Continued[1957=100 unless otherwise specified]<sup>2</sup>

Code	Commodity Group	1969											1968	Annual average 1968	
		Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.		Dec.
<b>INDUSTRIAL COMMODITIES—Continued</b>															
09	Pulp, paper, and allied products.....	109.5	109.3	109.0	108.8	108.7	108.4	108.3	108.1	108.0	107.4	106.8	106.2	105.2	105.2
09-1	Pulp, paper, and products, excluding building paper and board.....	110.1	109.9	109.6	109.3	109.2	108.9	108.6	108.3	108.3	107.7	107.1	106.6	105.6	105.6
09-11	Woodpulp.....	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
09-12	Wastepaper.....	106.7	107.0	107.2	108.4	110.3	111.2	108.8	107.1	117.0	116.4	116.1	115.7	115.0	113.4
09-13	Paper.....	117.4	117.0	116.5	116.5	117.2	117.1	117.0	116.7	116.4	116.1	115.7	115.0	113.4	112.7
09-14	Paperboard.....	96.0	96.0	95.9	95.9	95.8	93.7	93.5	93.5	93.5	93.6	92.6	92.2	91.4	92.2
09-15	Converted paper and paperboard products.....	110.7	110.6	110.3	109.8	109.2	109.0	108.7	108.4	108.3	107.6	106.8	106.3	105.4	105.9
09-2	Building paper and board.....	93.9	94.4	94.6	95.1	95.2	95.9	99.4	100.7	100.4	99.6	98.2	97.3	94.8	92.8
10	Metals and metal products.....	123.8	122.9	122.4	121.7	120.4	118.7	117.9	117.5	116.5	115.8	115.2	114.4	112.8	112.4
10-1	Iron and steel.....	113.9	113.7	113.7	113.2	112.7	111.1	110.3	109.9	108.9	108.8	108.0	107.5	106.1	105.5
10-13	Steel mill products.....	116.4	116.4	116.4	115.5	115.4	113.6	112.8	112.7	111.9	111.7	110.7	110.4	109.1	108.5
10-2	Nonferrous metals.....	150.1	146.4	144.8	143.5	139.5	136.1	135.5	134.2	132.4	129.9	128.9	127.2	123.5	125.3
10-3	Metal containers.....	120.6	120.6	120.6	120.3	119.7	119.7	119.7	119.7	119.7	119.4	119.4	119.4	117.0	116.0
10-4	Hardware.....	123.0	122.7	122.2	121.0	120.6	120.5	119.9	119.9	119.9	119.8	119.4	119.0	118.5	117.7
10-5	Plumbing fixtures and brass fittings.....	122.8	122.2	120.8	120.2	119.4	119.4	117.9	117.1	116.6	116.6	116.1	115.8	115.3	114.1
10-6	Heating equipment.....	99.7	99.3	98.7	98.0	97.7	97.7	97.2	97.0	96.8	96.6	96.3	96.1	96.0	94.9
10-7	Fabricated structural metal products.....	113.7	113.6	113.4	112.8	112.6	112.0	111.0	110.8	110.2	109.6	109.4	109.3	109.0	107.6
10-8	Miscellaneous metal products.....	124.5	124.4	124.4	124.2	123.2	121.3	120.7	120.5	120.4	120.4	120.4	119.6	118.3	116.1
11	Machinery and equipment.....	121.9	121.0	120.5	119.9	119.1	119.0	118.6	118.3	118.0	117.8	117.3	117.0	116.7	115.2
11-1	Agricultural machinery and equipment.....	136.4	135.8	133.2	133.0	132.3	132.3	132.0	131.9	131.8	131.7	131.6	131.2	130.1	127.1
11-2	Construction machinery and equipment.....	139.8	138.6	137.7	136.1	134.9	134.8	134.5	134.3	134.1	134.0	133.6	133.5	132.7	129.6
11-3	Metalworking machinery and equipment.....	138.0	136.5	135.4	134.4	133.5	133.3	132.3	132.1	131.8	131.4	131.1	131.0	130.5	128.6
11-4	General purpose machinery and equipment.....	124.8	123.7	123.4	122.6	121.8	121.5	121.2	120.3	120.0	119.8	119.1	118.5	118.3	117.2
11-6	Special industry machinery and equipment (Jan. 1961=100).....	132.8	130.6	130.2	129.6	129.2	129.2	128.1	128.0	127.2	126.9	126.6	126.5	125.0	122.2
11-7	Electrical machinery and equipment.....	106.2	106.0	105.6	105.4	104.7	104.8	104.7	104.5	104.3	104.2	103.5	103.5	103.5	103.0
11-9	Miscellaneous machinery.....	121.0	120.4	120.0	119.2	118.5	118.1	117.8	117.6	116.6	116.5	116.1	115.7	115.6	114.0
12	Furniture and household durables.....	107.2	106.9	106.5	106.4	106.2	106.1	105.9	105.4	105.8	105.7	105.4	105.3	105.0	104.0
12-1	Household furniture.....	123.6	123.6	123.3	123.0	123.0	122.8	122.3	121.9	121.5	121.3	121.0	120.7	119.2	117.2
12-2	Commercial furniture.....	124.1	124.0	122.4	121.7	119.5	119.5	119.3	119.0	118.0	117.8	117.2	117.0	117.0	115.4
12-3	Floor coverings.....	93.1	93.1	93.1	93.2	93.2	93.2	93.8	94.6	95.0	95.5	95.5	95.5	94.8	95.0
12-4	Household appliances.....	93.6	93.6	93.1	93.0	93.0	93.0	92.9	93.0	93.0	92.8	92.5	92.6	92.9	92.2
12-5	Home electronic equipment.....	77.8	77.7	77.9	77.9	77.9	77.9	78.1	78.1	78.5	78.6	78.7	78.7	79.8	81.0
12-6	Other household durable goods.....	133.3	131.1	131.2	131.4	131.4	131.2	130.2	130.0	130.0	129.6	129.1	128.9	127.3	124.9
13	Nonmetallic mineral products.....	114.5	113.9	113.8	113.5	113.0	113.0	112.8	112.6	112.3	111.9	111.2	110.6	109.3	108.1
13-11	Flat glass.....	117.8	116.2	116.2	116.2	116.2	116.2	115.2	114.6	113.4	112.3	110.8	109.9	110.0	109.5
13-2	Concrete ingredients.....	116.7	116.7	116.6	116.5	116.1	116.1	115.9	115.6	115.6	115.5	113.8	112.2	110.2	109.2
13-3	Concrete products.....	114.2	113.6	113.5	113.2	112.4	112.3	111.6	111.6	111.3	111.2	110.8	110.7	109.5	108.1
13-4	Structural clay products exc. refractories.....	118.5	118.5	117.8	117.5	117.0	116.9	116.9	116.8	116.7	116.0	115.9	115.8	115.4	113.1
13-5	Refractories.....	120.9	117.2	117.2	117.2	117.0	113.6	113.6	113.6	113.6	112.6	112.6	112.6	112.6	112.1
13-6	Asphalt roofing.....	101.2	94.0	96.7	96.7	96.7	100.9	100.2	99.2	99.2	99.2	99.6	98.8	96.8	97.5
13-7	Gypsum products.....	104.3	109.8	105.9	106.1	103.2	104.9	108.7	108.7	106.2	106.2	106.2	106.2	106.2	105.5
13-8	Glass containers.....	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	110.3
13-9	Other nonmetallic minerals.....	110.6	110.6	110.6	109.6	109.2	109.0	109.0	109.0	109.0	107.6	107.6	107.2	106.8	105.0
14	Transportation equipment (Dec. 1968=100).....	102.7	102.7	102.3	100.0	99.9	100.4	100.3	100.2	100.1	100.0	100.1	100.1	100.0	100.0
14-1	Motor vehicles and equipment.....	109.0	109.0	108.7	106.1	106.0	106.6	106.6	106.5	106.4	106.3	106.4	106.5	106.6	104.9
14-4	Railroad equipment (Jan. 1961=100).....	115.7	115.1	115.1	114.4	114.3	114.3	111.8	111.1	110.2	110.2	108.5	108.5	108.5	106.6
15	Miscellaneous products.....	117.0	117.0	116.7	116.4	115.9	115.5	115.1	112.8	112.7	112.5	112.5	112.5	112.5	111.8
15-1	Toys, sporting goods, small arms, ammunition.....	112.7	112.8	112.3	112.1	111.8	111.2	110.9	110.7	110.8	110.5	110.1	110.2	109.3	108.3
15-2	Tobacco products.....	124.0	124.0	123.8	123.8	123.5	123.4	123.2	117.0	116.9	116.7	116.7	116.6	116.5	115.2
15-3	Notions.....	107.2	107.2	106.7	106.7	106.7	102.0	102.0	102.0	100.8	100.7	100.7	100.7	100.7	103.4
15-4	Photographic equipment and supplies.....	115.3	115.0	114.9	113.9	113.1	111.4	112.0	112.4	112.1	112.0	112.7	112.7	112.7	113.6
15-9	Other miscellaneous products.....	114.9	114.9	114.8	114.3	114.2	114.1	112.6	111.7	111.7	111.4	111.2	111.2	112.0	110.9

<sup>1</sup> As of January 1967, the indexes incorporated a revised weighting structure reflecting 1963 values of shipments. Changes also were made in the classification structure, and titles and composition of some indexes were changed. Titles and indexes in this table conform with the revised classification structure, and may differ from data previously published. See "Wholesale Prices and Price Indexes", January 1967 (final) and February 1967 (final) for a description of the changes.

<sup>2</sup> As of January 1962, the indexes were converted from the former base of 1947-49=100 to the new base of 1957-59=100. Technical details and earlier data on the 1957-59 base furnished upon request to the Bureau.

NOTE: For a description of the general method of computing the monthly Wholesale Price Index, see "BLS Handbook of Methods for Surveys and Studies" (BLS Bulletin 1458, October 1966), Chapter 11.



27. Wholesale price indexes for special commodity groupings<sup>1</sup>[1957-59=100, unless otherwise specified]<sup>2</sup>

Commodity group	1969												1968	Annual average 1968
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	
All commodities—less farm products.....	115.4	115.0	114.7	114.1	113.8	113.6	113.3	112.9	112.5	112.3	111.8	111.3	110.5	109.4
All foods.....	123.3	123.1	119.8	120.1	119.9	120.7	119.9	119.0	115.4	115.7	115.0	115.5	113.8	112.2
Processed foods.....	122.8	122.1	121.8	121.6	121.9	122.5	122.0	119.9	117.0	116.2	115.8	115.4	114.0	113.3
Textile products, excluding hard and bast fiber products.....	101.0	101.1	101.1	101.3	101.3	101.0	100.8	100.6	100.9	100.8	101.0	101.5	101.6	100.6
Hosiery.....	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.4	92.5	93.2	92.5
Underwear and nightwear.....	115.9	115.7	115.7	115.6	115.6	115.6	114.5	114.3	114.2	114.3	114.2	114.3	113.6	112.6
Refined petroleum products.....	102.2	101.6	101.6	101.8	102.5	103.2	103.3	102.4	102.5	101.7	99.5	98.9	99.0	100.3
East Coast.....	103.4	103.4	103.4	103.4	103.4	103.4	103.4	103.4	103.4	103.4	103.4	103.4	103.4	104.9
Mid-Continent.....	103.9	102.5	98.7	98.0	103.9	98.8	103.9	101.0	103.2	106.9	101.1	101.8	97.1	99.6
Gulf Coast.....	100.7	99.8	101.4	101.4	101.4	104.8	103.2	102.4	101.8	99.5	96.8	95.2	97.3	99.8
Pacific Coast.....	92.5	92.5	92.3	94.9	94.9	94.9	93.6	93.6	93.6	91.0	91.0	90.9	90.9	91.8
Midwest (Jan. 1961=100).....	99.1	98.4	97.4	97.0	97.0	97.0	98.7	97.4	97.6	98.4	95.8	95.8	96.4	95.3
Pharmaceutical preparations.....	97.1	96.7	96.5	96.5	96.2	96.3	96.2	96.2	96.2	96.1	95.9	95.9	96.1	95.4
Lumber and wood products excluding millwork and other wood products <sup>3</sup> .....	120.6	122.2	120.1	120.8	121.7	123.5	130.0	142.5	151.1	161.6	155.0	146.0	140.1	121.7
Special metals and metal products <sup>4</sup> .....	119.9	119.2	118.8	117.5	116.6	115.7	115.2	114.9	114.3	113.7	113.4	112.9	111.9	110.9
Machinery and motive products.....	117.9	117.4	116.9	115.5	115.1	115.2	114.9	114.7	114.4	114.3	114.0	113.8	113.6	112.0
Machinery and equipment, except electrical.....	131.9	130.6	129.9	129.0	128.3	128.1	127.5	127.1	126.6	126.4	126.0	125.5	125.0	123.0
Agricultural machinery, including tractors.....	139.1	138.5	135.5	135.3	134.6	134.7	134.3	134.3	134.4	134.4	134.1	133.7	132.6	129.4
Metalworking machinery.....	144.6	143.6	143.4	141.7	140.9	140.9	139.2	138.9	138.6	138.1	137.8	137.7	136.9	135.3
Total tractors.....	142.5	141.3	139.4	138.4	137.1	137.0	137.0	137.0	137.0	136.8	136.8	136.8	135.6	131.5
Industrial valves.....	127.3	125.8	125.8	124.8	124.8	125.8	126.5	123.5	123.1	122.4	120.4	120.6	121.0	124.6
Industrial fittings.....	119.4	118.6	118.0	118.0	115.3	115.3	115.9	115.9	114.7	114.7	113.0	112.0	112.0	107.7
Abrasive grinding wheels.....	107.1	107.0	102.6	102.6	102.6	102.6	102.6	102.6	102.6	102.6	102.6	102.6	102.3	99.0
Construction materials.....	116.9	116.9	116.3	115.9	115.7	115.9	116.9	118.9	120.2	121.6	119.8	117.4	115.4	111.1

<sup>1</sup> See footnote 1, table 26.<sup>2</sup> See footnote 2, table 26.<sup>3</sup> Formerly titled "Lumber and wood products, excluding millwork."<sup>4</sup> Metals and metal products, agricultural machinery and equipment, and motor vehicles and equipment.

28. Wholesale price indexes,<sup>1</sup> by stage of processing[1957-59=100]<sup>2</sup>

Commodity group	1969												1968	Annual average 1968
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	
<b>ALL COMMODITIES</b> .....	115.1	114.7	114.0	113.6	113.4	113.3	113.2	112.8	111.9	111.7	111.1	110.7	109.8	108.7
<b>CRUDE MATERIALS FOR FURTHER PROCESSING</b> .....	109.9	109.0	108.7	108.7	109.5	110.2	111.2	109.7	105.7	105.2	103.8	102.8	101.3	101.1
Foodstuffs and feedstuffs.....	112.2	111.0	110.5	110.4	112.1	113.8	115.6	113.5	107.6	107.6	105.9	104.5	102.6	102.5
Nonfood materials except fuel.....	104.2	104.0	104.0	104.8	104.1	102.6	102.1	101.8	101.1	99.5	98.3	97.9	97.1	97.4
Manufacturing.....	103.2	103.0	103.0	103.9	103.2	101.6	101.0	100.8	100.0	98.3	97.0	96.6	95.8	96.4
Construction.....	115.3	115.3	115.1	114.9	114.1	114.1	113.8	113.2	113.2	113.1	112.8	112.8	111.7	109.8
Crude fuel.....	121.5	121.1	119.9	118.1	117.2	117.1	116.8	116.4	116.2	115.8	115.4	115.7	115.3	112.7
Manufacturing industries.....	118.8	118.6	117.8	116.7	115.6	115.5	115.3	115.0	114.9	114.7	114.2	114.5	114.0	112.2
Nonmanufacturing industries.....	125.0	124.5	122.8	120.1	119.4	119.3	118.7	118.2	117.8	117.4	117.1	117.3	117.0	113.5
<b>INTERMEDIATE MATERIALS, SUPPLIES AND COMPONENTS</b> .....	113.5	113.1	112.8	112.4	111.9	111.4	111.4	111.4	111.4	111.4	110.7	110.1	109.2	108.0
Materials and Components for Manufacturing.....	112.9	112.6	112.2	111.8	111.4	110.6	110.4	110.2	109.8	109.6	109.1	108.5	107.8	107.1
Materials for food manufacturing.....	119.9	120.0	119.2	118.3	118.4	117.8	117.8	116.3	114.1	113.4	113.1	112.7	111.5	110.7
Materials for nondurable manufacturing.....	101.6	101.7	101.5	101.7	101.7	101.2	101.1	100.9	100.8	100.7	100.6	100.5	100.5	100.2
Materials for durable manufacturing.....	121.4	120.4	120.0	119.6	118.7	117.4	117.1	117.5	117.3	117.0	116.0	114.8	112.9	111.7
Components for manufacturing.....	117.0	116.7	116.1	115.1	114.3	113.9	113.4	113.1	112.6	112.4	111.9	111.5	111.4	110.5
Materials and Components for Construction.....	116.8	116.7	116.2	115.8	115.5	115.4	116.0	117.6	118.4	119.7	118.3	116.3	114.6	110.7
Processed fuels and lubricants.....	102.7	102.1	102.3	101.0	100.6	100.8	100.9	100.5	100.3	100.4	99.6	99.5	99.2	99.7
Manufacturing industries.....	105.1	104.5	104.8	103.2	102.3	102.4	102.4	102.4	102.2	102.8	102.8	102.6	101.9	102.0
Nonmanufacturing industries.....	99.0	98.4	98.4	97.6	97.8	98.4	98.5	97.5	97.2	96.7	94.7	94.8	94.9	96.2
Containers.....	114.8	114.6	114.5	114.2	113.7	113.3	113.2	113.1	112.9	112.3	111.7	110.9	109.1	109.2
Supplies.....	116.9	115.9	115.6	115.1	114.4	114.3	113.8	113.3	113.9	112.9	113.0	113.1	112.8	112.5
Manufacturing industries.....	119.4	118.7	118.0	117.8	117.4	116.8	116.7	116.5	116.3	115.8	115.2	115.0	114.6	113.8
Nonmanufacturing industries.....	115.1	113.9	113.9	113.3	112.4	112.5	111.9	111.2	112.1	111.0	111.4	111.5	111.3	111.2
Manufactured animal feeds.....	114.1	111.6	112.3	111.7	110.5	110.8	109.3	107.4	110.8	108.1	109.8	110.6	110.6	111.0
Other supplies.....	111.8	111.4	111.0	110.4	109.7	109.7	109.6	109.4	109.2	108.8	108.6	108.4	108.1	107.8
<b>FINISHED GOODS (Including Raw Foods and Fuels)</b> .....	118.0	117.6	116.5	116.0	115.7	115.9	115.4	114.7	113.8	113.7	113.3	113.2	112.6	111.3
Consumer Goods.....	116.5	116.2	115.1	114.7	114.4	114.8	114.2	113.5	112.3	112.2	111.7	111.8	111.1	109.9
Foods.....	124.5	123.9	121.2	121.6	121.2	122.3	121.3	120.1	116.9	117.1	116.4	116.8	115.2	113.4
Crude.....	129.5	131.0	114.2	116.9	112.4	114.9	111.3	116.0	111.4	117.4	115.1	119.7	117.6	109.1
Processed.....	123.5	122.5	122.4	122.4	122.8	123.7	123.1	120.9	117.9	116.9	116.5	116.2	114.7	114.2
Other nondurable goods.....	114.1	113.8	113.6	113.3	113.0	112.6	112.2	111.4	111.5	111.2	110.7	110.4	110.2	109.4
Durable goods.....	107.2	107.1	106.9	105.3	105.2	105.6	105.5	105.4	105.4	105.3	105.1	105.1	105.0	103.9
Producer Finished Goods.....	122.3	121.5	120.8	119.9	119.3	119.3	118.7	118.5	118.1	118.0	117.8	117.6	117.1	115.3
Manufacturing industries.....	127.5	126.2	125.8	125.0	124.4	124.4	123.5	123.2	122.7	122.6	122.3	121.9	121.5	119.8
Nonmanufacturing industries.....	117.4	117.0	116.1	115.0	114.4	114.5	114.2	113.9	113.7	113.7	113.5	113.3	112.8	111.1
<b>SPECIAL GROUPINGS</b>														
Crude materials for further processing, excluding crude foodstuffs and feedstuffs, plant and animal fibers, oilseeds and leaf tobacco.....	114.5	114.1	113.7	113.9	112.5	110.7	110.2	109.7	109.0	107.2	105.5	105.0	103.8	101.8
Intermediate materials supplies and components, excluding intermediate materials for food mfg., and mfr.'d animal feeds.....	112.9	112.6	112.2	111.8	111.3	110.9	110.8	111.1	111.0	111.1	110.4	109.7	108.8	107.5
Consumer finished goods, excluding consumer foods.....	111.5	111.3	111.1	110.3	110.1	110.0	109.7	109.2	109.2	109.0	108.7	108.4	108.3	107.4

<sup>1</sup> See footnote 1, table 26.<sup>2</sup> See footnote 2, table 26.

NOTE: For description of the series by stage of processing, see "Wholesale Prices and Price Indexes," January 1967 (final) and February 1967 (final).

29. Wholesale price indexes,<sup>1</sup> by durability of product[1957-59=100]<sup>2</sup>

Commodity group	1969												1968	Annual average 1968
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	
All commodities.....	115.1	114.7	114.0	113.6	113.4	113.3	113.2	112.8	111.9	111.7	111.1	110.7	109.8	108.7
Total durable goods.....	119.0	118.4	117.9	117.1	116.5	116.1	115.9	116.1	116.0	116.1	115.4	114.6	113.6	111.8
Total nondurable goods.....	112.4	111.9	111.2	111.1	111.1	111.3	111.2	110.3	108.8	108.6	108.0	107.8	107.1	106.5
Total manufactures.....	115.3	114.9	114.6	113.9	113.6	113.5	113.2	112.8	112.4	112.2	111.7	111.3	110.5	109.4
Durable.....	118.8	118.3	117.9	117.0	116.4	116.1	116.0	116.2	116.2	116.3	115.6	114.8	113.9	112.0
Nondurable.....	111.9	111.6	111.4	111.0	111.0	111.0	110.6	109.6	108.9	108.3	108.0	107.7	107.2	106.9
Total raw or slightly processed goods.....	113.9	113.1	111.0	111.6	111.5	112.2	112.6	112.1	108.6	109.1	107.8	107.6	106.2	104.9
Durable.....	125.3	124.0	122.8	123.7	119.7	114.8	114.9	113.3	110.6	108.1	107.1	105.0	101.3	101.1
Nondurable.....	113.3	112.5	110.3	110.9	111.1	112.1	112.4	112.0	108.5	109.1	107.8	107.7	106.5	105.2

<sup>1</sup> See footnote 1, table 26.<sup>2</sup> See footnote 2, table 26.

NOTE: For description of the series by durability of product and data beginning with 1947, see "Wholesale Price and Price Indexes, 1957" (BLS Bulletin 1235, 1958).

30. Industry-sector price indexes for the output of selected industries<sup>1</sup>

[1957-59=100 unless otherwise indicated]

1963 SIC Code	Industry	Other bases	1969												1968	Annual average 1968
			Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	
<b>MINING</b>																
1111	Anthracite.....		118.4	114.9	111.4	111.4	108.0	108.0	104.2	104.2	106.2	107.4	107.0	107.0	107.0	99.9
1211	Bituminous coal.....		124.9	124.2	121.3	116.2	116.1	116.0	115.0	114.1	113.4	113.1	113.1	113.1	113.1	107.2
1311	Crude petroleum and natural gas.....		110.9	110.9	110.8	110.9	110.6	110.5	110.6	110.7	110.9	109.9	106.6	106.5	106.4	106.0
1421	Crushed and broken stone.....		114.5	114.5	114.2	114.2	113.6	113.6	113.6	112.6	112.5	112.5	112.5	112.5	111.3	109.5
1442	Construction sand and gravel.....		123.0	123.0	123.0	122.5	121.5	121.5	120.7	120.6	120.8	120.6	119.8	119.8	118.6	116.6
1475	Phosphate rock.....		147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4
1476	Rock salt.....		107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	100.8	100.8	100.8	100.8
1477	Sulfur.....		115.8	115.8	124.1	165.4	165.4	165.4	165.4	165.4	165.4	165.4	165.4	173.7	173.7	171.6
<b>MANUFACTURING</b>																
2011	Meat slaughtering plants.....	12/66	114.0	113.5	113.8	116.2	117.4	121.7	121.2	114.8	108.0	104.6	103.9	104.2	100.1	101.1
2013	Meat processing plants.....	12/66	121.3	118.5	119.1	120.3	122.0	118.7	117.0	109.7	104.8	103.4	101.7	100.3	100.7	92.8
2015	Poultry dressing plants.....		105.7	103.3	101.7	104.0	107.8	103.3	101.7	102.3	96.1	99.6	98.5	95.9	90.4	93.8
2021	Creamery butter.....	12/66	106.3	105.3	105.1	105.1	104.9	104.9	104.8	104.8	104.9	103.3	103.3	103.4	105.0	102.6
2033	Canned fruits and vegetables.....	12/66	109.8	109.7	109.5	109.0	108.7	108.7	107.7	107.7	107.8	107.7	107.6	107.4	107.3	109.4
2036	Fresh or frozen packaged fish.....		150.8	154.1	146.5	145.9	143.8	146.4	139.9	140.4	136.8	141.7	141.4	140.1	139.0	131.5
2044	Rice milling.....		94.0	94.0	94.0	93.1	92.6	92.6	93.8	93.8	93.8	93.8	93.8	93.8	93.8	96.6
2052	Biscuits, crackers and cookies.....	12/66	109.7	109.7	108.0	107.1	104.5	104.4	104.4	104.4	104.3	104.3	104.3	104.3	104.3	104.3
2061	Raw cane sugar.....	12/66	107.0	110.1	110.5	109.6	108.9	104.5	109.5	109.0	108.5	107.7	107.5	106.8	105.4	105.4
2062	Can sugar refining.....	12/66	108.9	109.3	109.2	108.4	108.1	107.6	107.6	107.2	105.8	103.9	103.6	103.6	103.2	101.9
2063	Beet sugar.....	12/66	106.1	106.6	106.7	106.4	106.3	105.7	106.7	104.9	105.0	102.3	102.2	102.2	102.5	102.3
2073	Chewing gum.....		106.2	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.0
2082	Malt liquors.....		107.3	107.3	107.7	107.1	107.2	107.2	106.7	106.0	104.9	104.9	104.9	104.9	104.9	104.6
2083	Malt.....	12/66	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
2084	Wines and brandy.....		118.3	118.3	118.3	115.5	115.5	115.7	115.7	115.7	115.7	115.7	115.5	115.5	115.2	115.2
2091	Cottonseed oil mills.....		99.4	95.8	91.5	97.0	97.2	98.3	92.9	92.7	93.9	93.6	93.7	95.0	94.5	108.9
2092	Soybean oil mills.....	12/66	88.6	88.0	91.0	85.7	87.4	87.1	87.0	86.3	85.6	84.8	83.1	83.3	82.2	86.9
2094	Animal and marine fats and oils.....	12/66	96.4	104.9	102.1	105.8	104.6	99.6	93.8	89.0	88.9	85.1	82.9	81.3	79.7	79.0
2096	Shortening and cooking oils.....		108.8	107.2	105.5	102.6	102.5	102.3	103.3	103.1	103.2	103.1	102.9	101.0	100.3	100.5
2098	Macaroni and noodle products.....	12/66	101.9	101.9	101.9	101.9	101.8	101.9	101.8	101.8	101.5	100.4	100.3	100.3	100.3	100.3
2111	Cigarettes.....		125.1	125.0	125.0	125.0	125.0	125.0	124.9	117.5	117.5	117.4	117.4	117.4	115.8	115.8
2121	Cigars.....		107.3	107.3	106.8	106.8	105.2	103.8	102.7	102.7	102.7	102.1	102.0	102.0	101.7	101.6
2131	Chewing and smoking tobacco.....		141.4	140.6	138.5	138.3	138.1	137.1	137.0	136.0	134.7	134.7	134.7	132.4	132.4	130.7
2254	Knit underwear mills.....	12/66	107.8	107.7	107.7	107.7	107.7	107.7	106.3	106.4	106.3	106.3	106.3	106.3	105.7	104.7
2311	Men's and boys' suits and coats.....		142.7	142.2	140.4	139.4	138.5	137.1	135.8	134.4	134.7	134.3	134.3	134.2	133.4	127.3
2321	Men's dress shirts and nightwear.....		122.1	121.0	121.0	120.6	120.6	118.3	118.2	118.2	118.8	118.8	118.9	118.7	115.5	114.4
2322	Men's and boys' underwear.....	12/66	109.1	109.0	109.0	107.9	107.9	107.7	106.9	107.0	107.1	107.1	107.0	106.9	106.4	104.5
2327	Men's and boys' separate trousers.....	12/66	106.9	106.8	106.8	106.4	106.3	106.1	106.1	104.8	104.8	104.7	104.7	104.7	103.9	102.8
2328	Work clothing.....		119.1	119.0	119.0	118.3	117.7	117.4	117.4	116.6	116.6	116.6	116.6	116.5	115.1	114.3
2381	Fabric dress and work gloves.....		137.1	135.4	135.4	134.8	132.1	131.9	131.9	131.7	131.7	130.8	130.6	130.1	128.4	127.5
2426	Hardwood dimension and flooring.....	12/66	116.5	116.6	116.7	117.2	117.3	117.8	119.0	120.7	121.1	120.6	118.8	116.5	114.7	106.6
2442	Wirebound boxes and crates.....	12/67	110.7	110.0	110.0	110.0	108.6	108.3	107.4	107.4	106.5	106.4	106.4	106.3	105.6	104.6
2515	Mattresses and bedsprings.....	12/66	108.2	108.7	108.5	108.5	108.5	108.3	108.2	108.2	108.3	108.2	108.2	106.7	104.3	103.7
2521	Wood office furniture.....		139.2	138.9	137.6	135.9	134.3	134.3	134.3	133.4	132.8	132.2	131.7	131.1	131.1	128.0
2647	Sanitary paper products.....	12/66	115.3	115.3	113.9	113.5	113.1	112.3	111.5	111.1	111.1	111.1	110.2	108.0	107.1	107.1
2654	Sanitary food containers.....	12/66	101.3	101.2	100.6	100.4	100.4	100.1	100.7	100.6	100.6	100.4	100.7	100.8	100.5	101.5

See footnote at end of table.



30. Industry-sector price indexes for the output of selected industries<sup>1</sup>—Continued

1963 SIC Code	Industry	Other bases	1969												1968	Annual Average 1968
			Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	
<b>MANUFACTURING—Continued</b>																
2822	Synthetic rubber.....		96.0	96.0	96.0	96.0	95.9	95.9	95.9	95.9	95.8	95.3	95.3	94.5	94.7	95.3
2823	Cellulosic man-made fibers.....		95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.8	95.8	95.8	95.7	95.2
2824	Organic fibers, noncellulosic.....	12/66	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	95.1
2871	Fertilizers.....	12/66	85.0	85.0	85.4	88.3	88.5	88.7	99.2	99.2	99.2	99.4	99.4	99.6	100.3	102.0
2872	Fertilizers, mixing only.....	12/66	90.6	90.6	91.2	92.7	92.6	93.1	93.3	93.3	93.3	93.9	93.7	94.1	94.8	98.4
2892	Explosives.....		117.1	117.3	117.3	117.4	117.5	117.4	117.5	116.9	115.0	114.8	114.1	114.1	114.6	113.8
2911	Petroleum refining.....		97.8	97.3	97.3	97.5	98.1	98.8	98.8	98.0	98.0	97.1	95.1	94.7	95.1	96.3
3111	Leather tanning and finishing.....		120.4	120.5	121.2	122.3	121.5	121.7	122.1	122.2	122.8	116.7	116.7	117.0	116.1	112.7
3121	Industrial leather belting.....	12/66	118.3	117.2	117.4	117.6	118.2	117.5	113.5	115.4	112.0	111.5	110.5	109.7	111.0	110.4
3221	Glass containers.....		116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	110.3	108.4
3241	Cement, hydraulic.....		114.9	114.9	114.9	114.9	114.8	114.8	114.8	114.8	114.8	114.7	111.7	108.5	105.9	105.7
3251	Brick and structural clay tile.....		125.1	125.1	124.4	124.4	123.5	123.5	123.4	123.2	123.0	121.5	121.5	121.4	121.2	117.8
3255	Clay refractories.....		126.2	122.2	122.2	122.2	122.0	117.8	117.8	117.8	117.8	117.8	116.7	116.7	116.7	116.0
3259	Structural clay products, n.e.c.....		116.4	116.4	115.9	115.1	115.0	114.4	114.8	115.3	115.3	115.3	115.1	115.0	114.1	114.3
3261	Vitreous plumbing fixtures.....		104.6	104.2	103.4	102.4	102.4	102.4	100.9	100.8	99.8	99.8	99.7	99.5	99.1	98.2
3262	Vitreous china food utensils.....		143.7	143.7	139.8	139.8	139.8	139.8	137.2	137.2	137.2	134.3	134.3	134.3	134.3	130.8
3263	Fine earthenware food utensils.....		131.2	131.2	130.9	130.9	130.9	130.9	127.0	127.0	127.0	123.3	123.3	123.3	123.3	123.1
3271	Concrete block and brick.....		115.4	115.0	114.9	114.6	114.5	114.5	113.7	114.2	114.2	114.5	113.4	112.9	111.7	110.8
3273	Ready mixed concrete.....		110.4	114.9	114.7	114.4	113.7	113.5	112.7	112.6	112.3	112.0	111.8	111.7	111.0	108.6
3275	Gypsum products.....	1958	104.7	110.1	106.2	106.4	103.6	105.2	108.9	108.9	106.5	106.5	106.5	106.5	106.5	105.8
3312	Blast furnace and steel mills.....		115.3	115.3	115.2	114.4	114.3	112.5	111.8	111.7	110.8	110.6	109.5	109.3	107.7	107.6
3315	Steel wire drawing, etc.....	12/66	108.6	108.5	108.4	107.5	107.0	106.4	106.3	105.9	105.1	105.1	105.1	104.5	103.7	101.5
3316	Cold finishing of steel shapes.....	12/66	113.6	113.7	113.7	112.1	112.1	109.0	109.0	108.7	107.5	107.4	107.4	107.2	107.0	104.6
3317	Steel pipe and tube.....	12/66	110.5	110.4	110.4	108.4	107.8	107.7	107.3	107.3	107.2	105.7	105.6	104.8	104.7	103.6
3333	Primary zinc.....	12/66	107.7	107.7	107.4	105.6	100.9	100.6	100.5	100.4	97.1	96.9	96.9	97.2	93.9	93.9
3334	Primary aluminum.....	12/66	114.0	114.0	114.0	110.0	110.0	110.0	109.0	109.0	109.0	109.0	109.0	106.1	105.4	104.0
3339	Primary nonferrous metals, n.e.c.....	12/66	134.8	138.9	133.9	131.8	123.8	120.5	120.1	120.1	120.3	119.5	119.8	122.3	119.4	122.3
3351	Copper rolling and drawing.....		171.4	166.4	166.4	165.9	160.6	154.5	152.3	151.7	147.8	144.6	142.8	142.8	134.3	140.3
3411	Metal cans.....	12/66	109.0	109.0	109.0	109.0	109.0	108.9	108.9	108.9	108.9	108.9	108.8	106.3	106.2	105.6
3423	Hand and edge tools.....	12/67	110.8	110.6	109.6	108.4	108.4	107.8	107.1	106.9	107.2	106.3	105.9	105.0	104.8	102.6
3431	Metal plumbing fixtures.....		100.4	100.3	99.8	99.4	98.8	98.7	97.3	96.6	95.8	95.8	95.7	95.3	95.0	93.5
3493	Steel springs.....	12/66	107.2	107.2	107.2	106.8	106.8	106.8	106.3	106.0	105.9	105.8	105.8	105.8	105.2	102.6
3496	Collapsible tubes.....	1958	103.8	103.7	103.7	103.7	103.6	103.6	103.5	103.2	103.1	103.0	102.9	101.5	100.2	
3498	Fabricated pipe and fittings.....		130.9	130.8	130.4	130.4	130.3	130.3	129.7	129.7	129.7	123.4	123.4	123.4	122.7	119.8
3519	Internal combustion engines.....	12/66	110.9	110.8	110.1	109.7	109.1	108.0	108.3	108.3	107.9	107.5	106.9	106.7	106.6	104.5
3533	Oil field machinery.....		125.1	122.7	122.5	122.4	121.8	121.5	121.0	120.8	120.4	120.0	119.1	119.0	118.0	114.6
3534	Elevators and moving stairways.....	12/66	110.5	107.7	107.7	107.6	107.6	107.6	104.5	104.5	104.5	104.5	103.9	103.9	103.9	102.8
3537	Industrial trucks and tractors.....		134.0	133.9	133.6	132.6	131.2	131.2	130.5	129.1	128.6	128.6	128.2	128.1	127.2	123.7
3562	Ball and roller bearings.....	12/66	105.7	103.7	103.7	102.6	102.6	102.2	102.2	102.1	102.1	102.1	102.1	101.6	101.6	100.8
3572	Typewriters.....	12/66	103.9	103.8	103.2	103.1	103.1	101.5	101.4	101.3	100.5	100.6	100.6	100.6	100.6	101.3
3576	Scales and balances.....		133.4	133.2	133.0	133.0	129.9	129.9	128.6	127.0	127.0	126.9	126.9	126.3	126.4	123.4
3612	Transformers.....	12/66	100.3	99.3	100.2	101.6	101.6	101.3	101.1	100.2	100.8	102.2	102.3	104.6	104.6	106.1
3613	Switchgear and switchboards.....	12/66	107.1	106.7	105.7	105.9	103.6	104.4	104.9	104.0	103.6	104.3	104.9	104.8	104.4	104.3
3624	Carbon and graphite products.....	12/67	104.8	104.4	104.4	104.3	104.3	104.3	103.0	101.1	101.0	101.0	101.0	101.0	101.0	100.8
3635	Household vacuum cleaners.....	12/66	99.9	99.9	99.9	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.7	99.7	99.5	101.2
3641	Electric lamps.....	12/66	98.4	98.5	99.2	101.1	100.3	99.6	104.1	103.1	103.6	102.7	103.0	103.0	103.0	104.9
3652	Phonograph records.....		123.5	123.5	123.5	123.5	122.6	122.6	122.6	122.3	122.3	122.3	122.3	121.3	119.8	119.8
3671	Electron tubes, receiving type.....	12/66	121.2	121.3	121.3	121.2	117.8	117.8	117.8	117.8	117.8	117.7	109.6	105.9	105.9	105.9
3672	Cathode ray picture tubes.....	12/66	87.5	89.7	90.0	90.0	90.0	90.0	89.9	89.9	89.9	89.9	89.8	89.9	92.4	94.5
3673	Electron tubes, transmitting.....	12/66	103.2	103.2	103.1	103.0	102.9	102.9	102.1	102.1	102.0	102.0	102.0	102.1	102.0	101.4
3674	Semiconductors.....	12/66	92.7	92.8	92.7	92.6	92.7	92.6	92.6	92.7	92.7	92.6	92.4	92.4	92.5	92.3
3692	Primary batteries, dry and wet.....		115.4	115.4	115.3	115.2	115.2	115.2	115.2	115.2	115.2	114.9	113.8	112.5	111.3	111.3
3693	X-ray apparatus and tubes.....	12/67	117.4	115.6	115.4	113.1	112.8	112.8	112.5	112.6	111.0	111.3	111.4	111.1	107.7	105.1
3941	Games and toys.....	12/66	112.1	112.2	111.4	111.4	111.4	111.1	111.1	111.1	111.1	111.1	111.1	110.3	110.1	109.3

<sup>1</sup> For a description of the series, see BLS Handbook of Methods for Surveys and Studies (BLS Bulletin 1458), Chapter 12. See also, "Industry and Sector Price Indexes," in Monthly Labor Review, August 1965, pp. 974-982.

NOTE. Beginning in January 1967, index weights and classifications are based on the 1963 Censuses of Manufactures and Minerals. They were formerly based on the 1958 Industrial Censuses.

31. Work stoppages resulting from labor-management disputes <sup>1</sup>

Month and year	Number of stoppages		Workers involved in stoppages		Man-days idle during month or year	
	Beginning in month or year	In effect during month	Beginning in month or year (thousands)	In effect during month (thousands)	Number (thousands)	Percent of estimated working time
1945.....	4,750	-----	3,470	-----	38,000	0.31
1946.....	4,985	-----	4,600	-----	116,000	1.04
1947.....	3,693	-----	2,170	-----	34,600	.30
1948.....	3,419	-----	1,960	-----	34,100	.28
1949.....	3,606	-----	3,030	-----	50,500	.44
1950.....	4,843	-----	2,410	-----	38,800	.33
1951.....	4,737	-----	2,220	-----	22,900	.18
1952.....	5,117	-----	3,540	-----	59,100	.48
1953.....	5,091	-----	2,400	-----	28,300	.22
1954.....	3,468	-----	1,530	-----	22,600	.18
1955.....	4,320	-----	2,650	-----	28,200	.22
1956.....	3,825	-----	1,900	-----	33,100	.24
1957.....	3,673	-----	1,390	-----	16,500	.12
1958.....	3,694	-----	2,060	-----	23,900	.18
1959.....	3,708	-----	1,880	-----	69,000	.50
1960.....	3,333	-----	1,320	-----	19,100	.14
1961.....	3,367	-----	1,450	-----	16,300	.11
1962.....	3,614	-----	1,230	-----	18,600	.13
1963.....	3,362	-----	941	-----	16,100	.11
1964.....	3,655	-----	1,640	-----	22,900	.15
1965.....	3,963	-----	1,550	-----	23,300	.15
1966.....	4,405	-----	1,960	-----	25,400	.15
1967.....	4,595	-----	2,870	-----	42,100	.25
1968.....	5,045	-----	2,649	-----	49,018	.28
1967: January.....	286	443	94.4	163.5	1,247.9	.09
February.....	292	485	104.1	159.2	1,275.8	.10
March.....	368	545	129.9	195.4	1,507.8	.10
April.....	462	638	397.6	438.8	2,544.8	.19
May.....	528	769	277.8	584.9	4,406.4	.30
June.....	472	759	211.8	405.0	4,927.4	.33
July.....	389	682	664.6	865.5	4,328.7	.32
August.....	392	689	91.3	233.1	2,859.5	.18
September.....	415	681	372.8	473.6	6,159.8	.45
October.....	449	727	178.8	458.7	7,105.6	.47
November.....	360	653	277.1	559.5	3,213.2	.22
December.....	182	445	74.4	209.5	2,546.5	.18
1968: January.....	314	483	187.8	275.7	2,668.5	.18
February.....	357	569	275.0	451.3	4,104.1	.29
March.....	381	618	174.5	368.7	3,682.0	.26
April.....	505	748	537.2	656.7	5,677.4	.38
May.....	610	930	307.3	736.2	7,452.2	.49
June.....	500	810	168.5	399.9	5,576.8	.40
July.....	520	880	202.0	465.1	4,611.9	.30
August.....	466	821	153.8	359.6	4,048.9	.26
September.....	448	738	169.8	349.0	3,081.1	.22
October.....	434	741	279.0	414.5	3,991.7	.25
November.....	327	617	129.9	306.1	2,430.5	.17
December.....	183	408	64.1	189.2	1,692.5	.11
1969: January <sup>2</sup> .....	320	480	182	255	3,380	.22
February <sup>2</sup> .....	330	500	137	266	2,590	.19
March <sup>2</sup> .....	420	600	112	261	2,080	.14
April <sup>2</sup> .....	570	770	253	303	2,740	.18
May <sup>2</sup> .....	660	870	219	329	3,530	.24
June <sup>2</sup> .....	560	800	181	302	3,370	.22
July <sup>2</sup> .....	500	760	220	307	3,420	.22
August <sup>2</sup> .....	500	770	160	280	2,890	.19
September <sup>2</sup> .....	490	740	157	215	1,830	.12
October <sup>2</sup> .....	510	750	317	372	2,850	.17
November <sup>2</sup> .....	310	550	132	323	4,050	.29

<sup>1</sup> The data include all known strikes or lockouts involving 6 workers or more and lasting a full day or shift or longer. Figures on workers involved and man-days idle cover all workers made idle for as long as 1 shift in establishments directly involved in

a stoppage. They do not measure the indirect or secondary effect on other establishments or industries whose employees are made idle as a result of material or service shortages.

<sup>2</sup> Preliminary.

## 32. Output per man-hour, hourly compensation and unit labor costs, private economy, seasonally adjusted

[Indexes 1957-59=100]

Year and quarter	Output		Man-hours		Output per man-hour		Compensation per man-hour <sup>1</sup>		Real compensation per man-hour <sup>2</sup>		Unit labor costs	
	Private	Private nonfarm	Private	Private nonfarm	Private	Private nonfarm	Private	Private nonfarm	Private	Private nonfarm	Private	Private nonfarm
1967: 1st quarter.....	146.4	148.2	110.6	115.5	132.4	128.3	147.9	143.5	129.0	125.2	111.7	111.9
2d quarter.....	147.2	148.9	109.6	114.9	134.4	129.6	150.3	145.5	130.1	126.0	111.9	112.3
3d quarter.....	148.9	150.7	110.3	115.3	134.9	130.6	152.2	147.6	130.4	126.4	112.9	113.0
4th quarter.....	150.2	152.1	110.9	116.0	135.4	131.1	154.3	149.7	131.1	127.2	114.0	114.2
Annual average.....	148.2	150.0	110.4	115.4	134.3	129.9	151.2	146.6	130.1	126.2	112.6	112.9
1968: 1st quarter.....	152.4	154.3	111.2	116.4	137.0	132.6	158.5	153.6	133.3	129.2	115.7	115.9
2d quarter.....	155.2	157.5	112.2	117.5	138.3	134.1	160.8	155.7	133.7	129.4	116.3	116.1
3d quarter.....	156.7	159.0	112.7	118.3	139.0	134.4	163.7	158.1	134.5	129.8	117.8	117.6
4th quarter.....	158.1	160.6	112.6	118.3	140.4	135.8	167.8	162.0	136.3	131.5	119.6	119.4
Annual average.....	155.6	157.9	112.2	117.6	138.7	134.2	162.7	157.4	134.4	130.0	117.4	117.3
1969: 1st quarter.....	159.1	161.5	113.7	119.6	139.9	135.0	170.5	164.4	136.7	131.8	121.8	121.8
2d quarter.....	159.9	162.3	114.6	120.7	139.5	134.5	172.7	166.5	136.2	131.3	123.8	123.8
3d quarter.....	160.8	163.1	115.0	121.4	139.8	134.4	175.8	169.1	136.8	131.5	125.8	125.8
4th quarter.....	160.6	163.4	114.3	121.0	140.5	135.0	179.3	172.1	137.5	132.0	127.7	127.5
Annual average.....	160.1	162.6	114.4	120.6	139.9	134.8	174.6	168.0	136.8	131.7	124.8	124.7
Percent change over previous quarter at annual rate <sup>3</sup>												
1967: 1st quarter.....	-1.4	-2.2	0.0	-0.3	-1.4	-1.9	3.9	4.9	3.2	4.1	5.3	6.9
2d quarter.....	2.3	1.9	-3.7	-2.1	6.2	4.1	6.7	5.5	3.7	2.6	0.5	1.4
3d quarter.....	4.5	4.8	2.9	1.7	1.5	3.0	5.2	5.8	0.9	1.6	3.6	2.7
4th quarter.....	3.6	3.9	2.1	2.4	1.5	1.5	5.6	5.9	2.1	2.3	4.1	4.4
1968: 1st quarter.....	6.0	6.0	1.0	1.2	4.9	4.8	11.3	10.9	6.8	6.5	6.0	5.9
2d quarter.....	7.4	8.4	3.5	3.8	3.8	4.5	6.0	5.5	1.1	0.7	2.1	1.0
3d quarter.....	4.1	4.0	1.9	2.8	2.1	1.1	7.5	6.4	2.3	1.3	5.3	5.3
4th quarter.....	3.5	4.0	-0.3	0.0	3.8	4.0	10.4	10.3	5.5	5.4	6.3	6.0
1969: 1st quarter.....	2.6	2.2	3.8	4.6	-1.2	-2.3	6.4	5.8	1.4	0.8	7.6	8.3
2d quarter.....	1.9	2.0	3.2	3.5	-1.3	-1.4	-5.4	5.4	-1.4	-1.4	6.8	6.9
3d quarter.....	2.2	2.0	1.3	2.4	0.8	-0.4	7.4	6.2	1.5	0.4	6.5	6.6
4th quarter.....	-0.3	0.6	-2.2	-1.3	2.0	1.9	8.2	7.5	2.3	1.7	6.0	5.5
Percent change over previous year <sup>4</sup>												
1968: 3d quarter.....	5.3	5.6	2.1	2.6	3.1	2.9	7.6	7.2	3.1	2.7	4.4	4.1
4th quarter.....	5.3	5.6	1.5	1.9	3.7	3.6	8.8	8.3	3.9	3.4	4.9	4.5
1969: 1st quarter.....	4.4	4.6	2.2	2.8	2.1	1.8	7.6	7.0	2.6	2.0	5.3	5.1
2d quarter.....	3.0	3.0	2.2	2.7	0.8	0.3	7.4	7.0	1.9	1.5	6.5	6.6
3d quarter.....	2.6	2.6	2.0	2.6	0.5	0.0	7.4	6.9	1.7	1.3	6.8	7.0
4th quarter.....	1.6	1.7	1.5	2.3	0.1	-0.6	6.8	6.2	0.9	0.4	6.7	6.8

<sup>1</sup> Wages and salaries of employees plus employers' contributions for social insurance and private benefit plans. Also includes an estimate of wages, salaries, and supplementary payments for the self-employed.

<sup>2</sup> Compensation per man-hour adjusted for changes in the consumer price index.

<sup>3</sup> Percent change computed from original data.

<sup>4</sup> Current quarter divided by comparable quarter a year ago.

SOURCE: Output data from the Office of Business Economics, U.S. Department of Commerce. Man-hours and compensation of all persons from the Bureau of Labor Statistics.

NOTE: Data for 1967, 1968, and first quarter 1969 have been revised to reflect new benchmark information on output, employment and compensation.



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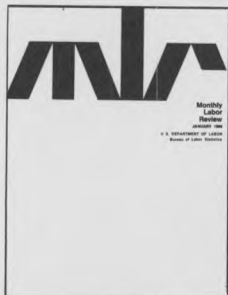
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