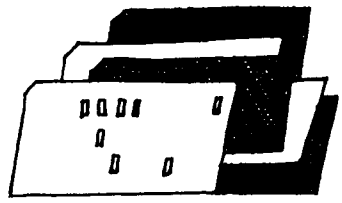
Research Summaries



Skill level differences in white-collar pay

CARL PRIESER

Differing duties and responsibilities, as well as skill levels, are major factors contributing to wide variations in pay for the same occupation. The Bureau of Labor Statistics' national survey of professional, administrative, technical, and clerical pay (PATC) underscores this observation in relation to two dozen white-collar occupations, spanning 101 work level categories in private industry. The annual survey, covering medium and large firms, is used in the pay comparability process for Federal white-collar employees.[1]

Engineers, the survey's most heavily populated occupational group, illustrate the effect of skill levels on pay. Recent engineering graduates averaged $2,130 monthly in March 1983 at the first of eight survey work levels; at level VIII, engineers responsible for highly complex engineering programs averaged $5,578 a month. In the clerical occupations, pay levels for secretaries ranged from $1,228 monthly for individuals following general instructions in carrying out the recurring work of the office (level I) to $1,928 monthly for those independently handling "the unexpected" for policymakers in large organizations (level V). Other examples of occupations with substantial pay differences across work levels are found in table 1.

It should be noted, however, that relatively small differences in salary levels were evident for the *same* level of work in *different* occupations. The following tabulation shows a 4-percent spread separated the highest paid and lowest

Table 1. Average monthly salaries of employees in selected white-collar occupations in private establishments, March 1983

Occupational level and Federal GS grade equivalent	All establishments		2,500 workers or more		Manufacturing	
	Number of employees[1]	Average monthly salaries	Percent of all establishment employment	Percent of all establishment salaries	Percent of all establishment employment	Percent of all establishment salaries
ACCOUNTANTS AND AUDITORS						
Accountants I (GS–5)	14,446	$1,627	23	103	47	98
Accountants II (GS–7)	24,627	1,939	31	109	57	100
Accountants III (GS–9)	38,490	2,279	25	105	58	100
Accountants IV (GS–11)	22,037	2,854	29	102	59	98
Accountants V (GS–12)	7,319	3,489	33	101	58	97
Accountants VI (GS–13)	1,423	4,317	56	100	63	98
Chief accountants I (GS–11)	857	2,807	—	—	—	—
Chief accountants II (GS–12)	1,195	3,472	—	—	63	98
Chief accountants III (GS–13)	741	4,441	11	99	57	99
Chief accountants IV (GS–14)	246	5,660	—	—	—	—
Auditors I (GS–5)	1,578	1,560	31	102	25	111
Auditors II (GS–7)	3,530	1,941	35	103	36	105
Auditors III (GS–9)	4,762	2,354	37	103	36	103
Auditors IV (GS–11)	2,431	2,841	39	104	51	100
Public accountants I (GS–7)	10,804	1,556	—	—	—	—
Public accountants II (GS–9)	11,168	1,715	—	—	—	—
Public accountants III (GS–11)	8,698	2,023	—	—	—	—
Public accountants IV (GS–12)	5,395	2,428	—	—	—	—
ATTORNEYS						
Attorneys I (GS–9)	1,311	2,343	33	113	—	—
Attorneys II (GS–11)	2,905	2,875	28	109	17	108

See footnote at end of table.

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Table 1. Continued—Average monthly salaries of employees in selected white-collar occupations in private establishments, March 1983

Occupational level and Federal GS grade equivalent	All establishments		2,500 workers or more		Manufacturing	
	Number of employees[1]	Average monthly salaries	Percent of all establishment employment	Percent of all establishment salaries	Percent of all establishment employment	Percent of all establishment salaries
ATTORNEYS						
Attorneys III (GS–12)	3,518	$3,523	36	103	29	104
Attorneys IV (GS–13)	3,342	4,432	35	102	41	100
Attorneys V (GS–14)	1,851	5,467	45	101	41	102
Attorneys VI (GS–15)	492	7,076	50	103	48	97
BUYERS						
Buyers I (GS–5)	6,726	1,593	20	112	70	100
Buyers II (GS–7)	18,096	1,969	23	106	85	99
Buyers III (GS–9)	16,259	2,419	38	102	85	100
Buyers IV (GS–11)	5,366	2,964	61	99	82	98
PROGRAMMERS						
Programmers/analysts I (GS–5)	14,660	1,648	35	108	35	105
Programmers/analysts II (GS–7)	35,263	1,846	32	107	35	104
Programmers/analysts III (GS–9)	51,033	2,185	36	105	38	103
Programmers/analysts IV (GS–11)	29,142	2,620	47	103	46	103
Programmers/analysts V (GS–12)	9,654	3,177	66	103	61	104
PERSONNEL MANAGEMENT						
Job analysts I (GS–5)	140	1,658	—	—	—	—
Job analysts II (GS–7)	443	1,833	43	102	41	112
Job analysts III (GS–9)	837	2,202	39	106	43	108
Job analysts IV (GS–11)	561	2,757	60	103	76	102
Directors of personnel I (GS–11)	1,528	2,723	—	—	77	99
Directors of personnel II (GS–12)	2,659	3,504	—	—	69	99
Directors of personnel III (GS–13)	1,082	4,275	11	106	54	101
Directors of personnel IV (GS–14)	308	5,220	44	104	52	100
CHEMISTS AND ENGINEERS						
Chemists I (GS–5)	2,653	1,780	20	108	77	97
Chemists II (GS–7)	5,255	2,028	30	108	88	100
Chemists III (GS–9)	9,197	2,451	28	110	89	99
Chemists IV (GS–11)	9,413	2,953	30	107	88	99
Chemists V (GS–12)	6,850	3,574	33	104	93	100
Chemists VI (GS–13)	2,312	4,252	36	100	91	101
Chemists VII (GS–14)	779	5,039	50	102	—	—
Engineers I (GS–5)	32,588	2,130	51	102	73	99
Engineers II (GS–7)	64,490	2,314	46	102	75	99
Engineers III (GS–9)	131,048	2,609	47	102	72	99
Engineers IV (GS–11)	138,684	3,061	51	102	72	99
Engineers V (GS–12)	99,584	3,643	56	101	67	100
Engineers VI (GS–13)	46,426	4,288	62	101	65	100
Engineers VII (GS–14)	12,383	4,847	58	100	58	101
Engineers VIII (GS–15)	3,125	5,578	54	101	50	103
TECHNICAL SUPPORT						
Engineering technicians I (GS–3)	4,996	$1,304	23	104	67	100
Engineering technicians II (GS–4)	18,416	1,506	37	105	71	99
Engineering technicians III (GS–5)	31,731	1,788	41	102	79	99
Engineering technicians IV (GS–7)	35,260	2,088	52	101	78	99
Engineering technicians V (GS–9)	20,491	2,360	64	101	75	99
Drafters I (GS–2)	2,029	1,012	15	109	53	99
Drafters II (GS–3)	11,234	1,302	25	110	54	95
Drafters III (GS–4)	22,217	1,533	25	107	67	97
Drafters IV (GS–5)	24,714	1,871	31	104	68	98
Drafters V (GS–7)	20,170	2,316	44	103	68	98
Computer operators I (GS–4)	6,003	1,040	27	110	30	105
Computer operators II (GS–5)	17,903	1,221	24	120	34	98
Computer operators III (GS–6)	29,576	1,416	26	113	45	103
Computer operators IV (GS–7)	15,171	1,727	38	108	47	103
Computer operators V (GS–8)	3,136	2,026	53	106	38	104
Computer operators VI (GS–9)	477	2,100	—	—	—	—
Photographers II (GS–5)	705	1,703	29	108	69	103
Photographers III (GS–7)	730	2,035	48	101	71	100
Photographers IV (GS–9)	397	2,235	76	97	84	101

See footnote at end of table.

Table 1. Continued—Average monthly salaries of employees in selected white-collar occupations in private establishments, March 1983

Occupational level and Federal GS grade equivalent	All establishments		2,500 workers or more		Manufacturing	
	Number of employees[1]	Average monthly salaries	Percent of all establishment employment	Percent of all establishment salaries	Percent of all establishment employment	Percent of all establishment salaries
CLERICAL						
Accounting clerks I (GS–2)	26,763	$933	13	126	30	105
Accounting clerks II (GS–3)	87,578	1,122	17	117	40	99
Accounting clerks III (GS–4)	59,324	1,339	26	111	44	101
Accounting clerks IV (GS–5)	21,355	1,621	39	109	52	101
File clerks I (GS–1)	19,738	809	9	108	13	106
File clerks II (GS–2)	10,926	911	18	113	20	117
File clerks III (GS–3)	3,457	1,142	24	110	21	124
Key entry operators I (GS–2)	52,682	1,049	20	119	35	104
Key entry operators II (GS–3)	32,483	1,255	29	113	42	106
Messengers (GS–1)	11,746	910	26	113	26	110
Personnel clerks I (GS–3)	1,605	1,075	14	106	53	99
Personnel clerks II (GS–4)	3,575	1,286	18	114	64	100
Personnel clerks III (GS–5)	3,234	1,442	18	110	64	102
Personnel clerks IV (GS–6)	1,528	1,683	27	116	65	103
Purchasing assistants I (GS–4)	3,883	1,236	20	124	81	100
Purchasing assistants II (GS–5)	3,987	1,567	37	113	87	100
Purchasing assistants III (GS–6)	1,185	2,005	82	104	86	100
Secretaries I (GS–4)	57,779	1,228	28	115	42	105
Secretaries II (GS–5)	61,183	1,336	34	106	45	102
Secretaries III (GS–6)	102,687	1,521	37	109	52	102
Secretaries IV (GS–7)	45,266	1,686	36	107	48	101
Secretaries V (GS–8)	20,993	1,928	34	109	54	103
Stenographers I (GS–3)	13,635	1,359	58	103	38	100
Stenographers II (GS–4)	8,162	1,614	64	101	50	102
Typists I (GS–2)	26,832	952	21	114	29	112
Typists II (GS–3)	13,827	1,257	42	108	42	109

[1]Occupational employment estimates relate to the total in all establishments within scope of the survey and not to the number actually surveyed.

NOTE: The following occupational levels were surveyed but insufficient data were obtained to warrant publication: Chief accountant V; director of personnel V; chemist VIII; personnel assistant V; and photographer I and V.

paid of the six survey work levels in private industry that equate to a grade level 13 within the Federal white-collar pay system:

Work levels	*Monthly salary level*
Chief accountant III	$4,441
Attorney IV	4,432
Accountant VI	4,317
Engineer VI	4,288
Director of personnel III	4,275
Chemist VI	4,252

Thus, skill level can act as a source of wage variation or wage uniformity.

Besides skill level, other factors studied that bear on white-collar pay levels include the size of a firm's workforce and its industrial activity. In addition to presenting overall survey results, table 1 relates occupational employment and salary information separately for large firms (at least 2,500 employees) and for manufacturers to all-industry figures.

Salary levels in large establishments were consistently higher than the levels in the survey as a whole. Of the 91 occupational work levels permitting comparison, 37 showed large establishments within 3 percent of the all-establishment average, 37 were from 4 to 10 percent higher, and the remaining 17, 10 percent or more above the average. Clerical occupations accounted for 14 of the 17 levels with the largest differences.

For manufacturing establishments, salaries were at or slightly above the all-industry averages for most occupations. Salary levels for 70 of the 91 work levels permitting comparisons showed manufacturing within 3 percent of the all-industry average, and 16 of the remaining 21 levels were from 4 to 10 percent higher than the average. The occupations with the highest relative salaries in manufacturing were lower level-clerical occupations, such as messengers, typists, and file clerks.

Although the survey focuses on salary levels, it also permits a look at salary trends. In this connection, some 100 occupational work levels were grouped into three broad categories of skill levels: Group A equates to grades 1–4 of the Federal Government General Salary (GS) Schedule; Group B to grades 5–9; and Group C to grades 11–15. (See

Table 2. Percent increases in average salaries by work level category, 1973–83

Period	Group A (GS grades 1–4)	Group B (GS grades 5–9)	Group C (GS grades 11–15)
1973–83	116.4	113.5	122.0
1973–74	6.2	5.7	6.2
1974–75	9.1	8.6	8.8
1975–76	7.6	6.4	6.5
1976–77	6.9	6.3	7.7
1977–78	7.5	8.0	8.8
1978–79	7.2	7.5	8.0
1979–80	9.1	10.1	9.3
1980–81	9.8	9.6	10.2
1981–82	9.5	9.4	10.4
1982–83	7.4	7.3	7.2

table 1 for identification of the job classifications that equate to each GS grade for use in the Federal pay setting process.[2]) In 1982–83, increases in average salaries varied little among these groups—7.2 to 7.4 percent. Since 1973, cumulative percentage increases have been the highest for the grades 11–15 category and lowest for the middle grades. (See table 2.)

A MORE DETAILED ANALYSIS of white-collar salaries and complete results of this year's survey are contained in the *National Survey of Professional, Administrative, Technical and Clerical Pay, March 1983*, BLS Bulletin 2181. It includes salary distributions for 101 occupational work levels, and relative employment and salary levels by industry division for the two dozen occupations covered. □

FOOTNOTES

[1] The PATC survey is conducted by the Bureau of Labor Statistics, but survey occupations and coverage such as establishment size and the private sector industries to be included are determined by the President's Pay Agent—the Secretary of Labor and the Directors of the Office of Management and Budget and the Office of Personnel Management. The Agent has designated the industrial coverage and minimum size establishment as follows: manufacturing, 100 or 250 employees; transportation, communications, electric, gas, and sanitary services, 100 or 250 employees; mining and construction, 250 employees; wholesale trade, 100 employees; retail trade, 250 employees; finance, insurance, and real estate, 100 employees; and selected services, 50 or 100 employees. The pay-setting role of the PATC survey is described in George L. Stelluto's, "Federal pay comparability: facts to temper the debate," *Monthly Labor Review*, June 1979, pp. 18–28.

[2] In 1983, a total of 101 work levels produced publishable data out of 107 levels within scope of the survey. Widely varying duties and responsibilities may be embodied in work levels within each of the broad categories of table 2; for example, Group B includes clerical and technical positions, such as accounting clerk IV and engineering technician IV, as well as the entry and developmental levels of professional occupations.

Wages of appliance repair technicians vary widely among metropolitan areas

HARRY B. WILLIAMS

Pay levels for technicians repairing major consumer electrical products in 19 metropolitan areas averaged from $7.93 an hour in Buffalo to $10.43 in San Francisco-Oakland, according to a November 1981 Bureau of Labor Statistics survey.[1] These technicians worked in appliance repair facilities operated by electrical repair shops, department stores, retail television and radio stores, appliance retailers, and appliance wholesalers.

About two-thirds of the technicians specialized in repairing either television sets, radios, and tape players (brown goods) or larger household appliances such as refrigerators, freezers, and washers (white goods); their average earnings in individual areas typically were between $7 and $9 an hour. A group of approximately 4,350 technicians—called service technicians—routinely worked on both brown and white goods during the survey period and could not be classified as either television-radio or electrical appliance technicians. Because of their dual skills, service technicians usually averaged more per hour than television-radio or electrical appliance technicians; however, separate data for service technicians met Bureau publication criteria only in Newark, where 208 full-time service technicians employed in combination (inside and outside) work averaged $10.31 an hour.

Among the 19 areas surveyed, pay levels were highest for full-time technicians in the San Francisco-Oakland area, where TV-radio repairers averaged $9.87 and electrical appliance repairers, $9.72. The lowest averages were found in Memphis at $6.65 for TV-radio repairers and $6.12 for electrical appliance repairers. (See table 1.) Average wages for part-time workers in the same occupations most frequently were between $5.75 and $8.75 an hour.

Full-time apprentice technicians often earned 30 to 50 percent less, on average, than the qualified technicians. Averages for electrical appliance apprentices, in 9 areas, ranged from $4.58 an hour in Boston to $7.95 an hour in Chicago. Hourly earnings of TV-radio apprentices, in 12 areas, averaged from $4.01 in Memphis to $8.10 in San Francisco-Oakland. TV-radio apprentices averaged more than their electrical appliance counterparts in 4 of 6 areas for which data permit comparison.

Electrical appliance technicians, however, usually averaged more than their TV-radio counterparts. Their pay advantages, typically between 2 and 10 percent, were largely explained by three factors: industry, union status, and size of repair facility. To illustrate, nearly one-third of the electrical appliance technicians worked in department stores or for appliance wholesalers—the two highest-paying industry branches. Such establishments employed slightly more than one-tenth of the television-radio technicians. Also, union contracts covered slightly more than one-third of the survey's white-goods technicians and apprentices compared with one-fourth of those servicing brown goods. The study showed that technicians in shops with union contracts nearly always averaged more per hour than their nonunion counterparts. Additionally, four-fifths of the white-goods technicians, compared with slightly over two-fifths of their brown-goods counterparts, were in establishments with at least 10 repairers. Technicians in shops with at least 10 repairers usually averaged more than those in smaller shops. But, when comparisons were limited to establishments employing both types of technicians (about 13 percent of the establishments studied), brown-goods technicians commonly received as much as, or more than, white-goods technicians.

Separate earnings data were developed for three cate-

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