

Decomposition of Explained and Unexplained Pay Gaps

Dependent Variable	EXPLAINED BY OBSERVABLE CHARACTERISTICS			UNEXPLAINED PREMIUM WAGES, BY CHARACTERISTICS		
	Percent Difference	Standard Error	T-Statistic	Percent Difference	Standard Error	T-Statistic
Age						
Age	1.285	0.0409	7.86	1.841	0.2954	3.8
Age squared	0.821	0.0247	-6.54	0.822	0.0601	-2.67
Year						
2006	1.000	0.0002	0.54	0.999	0.0036	-0.27
2007	1.000	0.0002	-0.09	1.001	0.0035	0.41
2008	1.000	0.0002	0.03	0.997	0.0036	-0.94
2009	*			*		
Marital status						
Widowed	1.000	0.0003	0.86	1.001	0.0005	1.45
Divorced	1.000	0.0003	0.32	1.004	0.0023	1.77
Separated	1.000	0.0004	-0.74	1.002	0.0013	1.42
Never married	1.002	0.0015	1.55	1.000	0.0045	-0.06
Married	*			*		
Sex						
Male	1.001	0.0006	1.11	0.957	0.0099	-4.28
Interaction term — Married Man	1.001	0.0016	0.79	0.989	0.0071	-1.61
Education						
High school degree or less	1.048	0.0087	5.62	1.040	0.0114	3.58
Associate's degree	1.001	0.0010	1.26	0.997	0.0021	-1.38
Some college, no degree	1.000	0.0010	0.13	1.003	0.0028	0.91
Bachelor's degree	*			*		
Master's degree	1.002	0.0024	0.92	1.001	0.0004	2.66
Ph.D. or professional degree	1.006	0.0018	3.36	1.000	0.0003	0.75
Race						
White	*			*		
Black	0.995	0.0018	-2.63	1.001	0.0006	1.4
Asian	1.000	0.0003	-0.71	1.002	0.0017	1.35
American Indian	0.998	0.0008	-2.92	1.000	0.0002	1.72
Hispanic	1.000	0.0035	-0.06	1.018	0.0056	3.22
Citizenship/Nativity						
Native, born in the United States	0.997	0.0134	-0.23	0.957	0.0463	-0.91
Native, born in Puerto Rico	1.000	0.0001	-1.49	1.000	0.0000	-0.93
Native, born abroad of American parents	*			*		
Foreign born, U.S. citizen	1.002	0.0018	1.09	0.993	0.0058	-1.15
Foreign born, not a citizen	1.007	0.0146	0.49	1.007	0.0162	0.4
Metropolitan area size						
Non-metropolitan area	1.002	0.0015	1.43	1.011	0.0058	1.97
100,000 to 249,999 residents	1.000	0.0001	0.19	1.005	0.0022	2.49
250,000 to 499,999 residents	1.000	0.0005	0.66	1.001	0.0028	0.47
500,000 to 999,999 residents	1.000	0.0004	-0.66	1.001	0.0028	0.55
1 to 2.49 million residents	1.002	0.0015	1.42	0.999	0.0057	-0.18
2.5 to 4.9 million residents	1.004	0.0077	0.5	1.001	0.0014	0.45
5 million + residents	*			*		

* Omitted category

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Decomposition of Explained and Unexplained Pay Gaps (continued)

Dependent Variable	EXPLAINED BY OBSERVABLE CHARACTERISTICS			UNEXPLAINED PREMIUM WAGES, BY CHARACTERISTICS		
	Coefficient	Standard Error	T-Statistic	Coefficient	Standard Error	T-Statistic
State						
Alaska	0.999	0.0005	-2.08	1.001	0.0002	4.23
Alabama	1.001	0.0008	1.06	1.000	0.0003	1.16
Arkansas	1.000	0.0008	0.34	1.000	0.0012	0.02
Arizona	1.000	0.0005	-0.79	1.002	0.0015	1.12
California	1.003	0.0030	1.02	0.984	0.0060	-2.63
Colorado	1.000	0.0004	0.2	1.000	0.0006	-0.73
Connecticut	0.999	0.0010	-0.74	0.999	0.0012	-1.03
District of Columbia	0.999	0.0019	-0.29	1.002	0.0009	2.12
Delaware	1.000	0.0001	-1	1.000	0.0002	0.6
Florida	1.001	0.0013	0.99	0.997	0.0031	-0.9
Georgia	1.000	0.0005	0.78	1.001	0.0013	1.1
Hawaii	0.999	0.0005	-1.15	1.000	0.0001	1.81
Iowa	1.001	0.0009	1.56	0.998	0.0011	-1.83
Idaho	1.000	0.0001	-0.24	1.000	0.0002	-0.31
Illinois	1.001	0.0025	0.48	0.997	0.0034	-0.85
Indiana	1.000	0.0010	-0.29	1.000	0.0018	0.18
Kansas	1.001	0.0005	1.42	0.999	0.0009	-1.49
Kentucky	1.000	0.0002	-0.48	1.000	0.0006	-0.49
Louisiana	1.002	0.0015	1.62	0.997	0.0019	-1.78
Massachusetts	1.002	0.0012	1.32	0.996	0.0020	-2.2
Maryland	1.011	0.0079	1.35	1.000	0.0032	-0.15
Maine	1.000	0.0001	1.26	0.999	0.0003	-1.9
Michigan	0.998	0.0013	-1.29	1.002	0.0021	1.09
Minnesota	1.002	0.0016	1.1	0.997	0.0021	-1.48
Missouri	1.000	0.0010	0.05	1.000	0.0018	0.25
Mississippi	1.000	0.0003	0.17	1.000	0.0003	0.56
Montana	1.000	0.0002	-1.95	1.000	0.0001	-2.06
North Carolina	1.002	0.0009	1.6	0.997	0.0020	-1.65
North Dakota	1.000	0.0001	-1.57	1.000	0.0001	-1.48
Nebraska	1.000	0.0002	1.49	0.999	0.0005	-1.92
New Hampshire	1.000	0.0002	0.15	1.000	0.0004	-1.21
New Jersey	1.000	0.0009	0.54	0.997	0.0019	-1.77
New Mexico	1.000	0.0005	0.44	1.000	0.0001	-0.14
Nevada	1.001	0.0005	2.11	0.997	0.0009	-3.65
New York	1.003	0.0021	1.48	0.992	0.0035	-2.2
Ohio	*			*		
Oklahoma	0.999	0.0013	-0.83	1.000	0.0001	0.11
Oregon	1.001	0.0005	1.4	0.998	0.0010	-1.99
Pennsylvania	1.000	0.0007	0.27	0.999	0.0024	-0.42
Rhode Island	1.000	0.0001	-1.04	1.000	0.0002	1.42
South Carolina	1.001	0.0007	1.82	0.997	0.0012	-2.18
South Dakota	1.000	0.0000	0.35	1.000	0.0001	0.82
Tennessee	1.000	0.0004	-0.74	1.001	0.0011	1.31
Texas	1.001	0.0020	0.71	0.997	0.0046	-0.56
Utah	0.999	0.0009	-1.46	1.000	0.0002	0.39
Virginia	1.010	0.0069	1.4	0.999	0.0025	-0.58
Vermont	1.000	0.0000	0.13	1.000	0.0001	-0.43
Washington	1.000	0.0003	-0.69	0.998	0.0011	-1.93
Wisconsin	1.004	0.0020	1.85	0.994	0.0024	-2.33
West Virginia	1.000	0.0005	0.6	1.000	0.0001	0.6
Wyoming	1.000	0.0001	-0.9	1.000	0.0001	-3.9

* Omitted category

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Dependent Variable	EXPLAINED BY OBSERVABLE CHARACTERISTICS			UNEXPLAINED PREMIUM WAGES, BY CHARACTERISTICS		
	Coefficient	Standard Error	T-Statistic	Coefficient	Standard Error	T-Statistic
Occupation						
Management occupations	*			*		
Business and financial operations occupations	0.994	0.0034	-1.91	1.000	0.0008	0.37
Computer and mathematical science occupations	1.002	0.0019	1.22	1.000	0.0003	1.54
Architecture and engineering occupations	1.003	0.0014	1.96	1.000	0.0001	-0.66
Life, physical, and social science occupations	0.998	0.0021	-0.86	0.999	0.0009	-0.97
Community and social service occupations	1.000	0.0004	-0.08	1.002	0.0006	3.39
Legal occupations	0.998	0.0018	-1.16	1.000	0.0006	0.62
Education, training, and library occupations	1.000	0.0007	-0.06	1.006	0.0015	3.8
Arts, design, entertainment, sports, and media occupations	1.000	0.0001	0.02	1.001	0.0006	2.23
Health-care practitioner and technical occupations	1.007	0.0024	2.76	0.992	0.0030	-2.81
Health-care support occupations	0.999	0.0038	-0.29	1.009	0.0041	2.12
Protective service occupations	1.028	0.0050	5.76	0.965	0.0028	-12.03
Food preparation and serving related occupations	1.014	0.0060	2.43	1.001	0.0065	0.15
Building and grounds cleaning and maintenance occupations	1.011	0.0027	4.33	0.997	0.0031	-0.85
Personal care and service occupations	1.002	0.0018	1.33	1.004	0.0020	2.22
Sales and related occupations	1.027	0.0178	1.51	1.000	0.0177	0.01
Office and administrative support occupations	0.995	0.0016	-3.43	1.007	0.0021	3.41
Farming, fishing, and forestry occupations	1.000	0.0004	-0.98	1.003	0.0008	4.17
Construction and extraction occupations	1.011	0.0041	2.7	0.996	0.0044	-0.88
Installation, maintenance, and repair occupations	1.000	0.0007	0.72	1.004	0.0017	2.08
Production occupations	1.003	0.0051	0.56	1.019	0.0061	3.07
Transportation and material moving occupations	1.000	0.0055	-0.05	1.021	0.0064	3.36
Constant				0.851	0.1056	-1.3
Total	1.285	0.0324	9.97	1.220	0.0316	7.67

Number of observations: 275,086

* Omitted category

Note: These coefficients have been transformed into percent changes, i.e. the coefficient of 1.040 on the High School Degree or less variable in the unexplained difference means that the unexplained difference in wages for high school educated workers in the federal government accounts for 4.0 percent of the total unexplained difference in wages between the federal government and private sector. The total coefficients are the total percent difference in hourly wages that are explained by observable characteristics or that remain unexplained. They are the products of the coefficients in each column.

Source: Heritage Foundation calculations using data from the U.S. Department of Labor; Bureau of Labor Statistics, 2006–2009 Current Population Surveys.