

Do you think you are paid fairly?

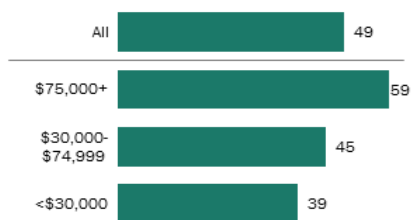
An analysis of factors that affect annual salary

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According to PewResearch, only 49% of American workers report they are satisfied with their jobs. More importantly, people in respectable management roles report a significantly higher (62%) satisfaction compared to manual labor workers (48%). Seeking to understand the labor market better, we study the factors that impact annual salaries among employed Americans.

Job satisfaction varies by family income

% of employed adults saying they are very satisfied with their current job

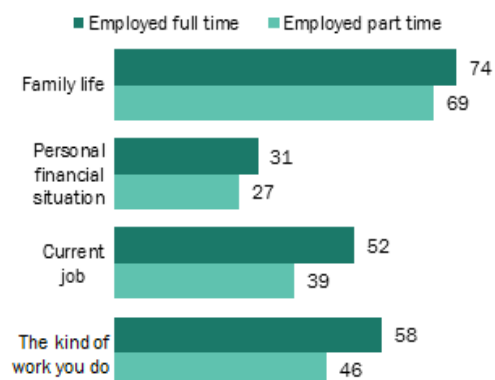


Source: Survey of U.S. adults conducted May 25-June 29, 2016.
"The State of American Jobs"

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Full-time workers report being more satisfied than part-time workers with various aspects of life

% saying they are very satisfied with each aspect of their life



Note: "Current job" and "The kind of work you do" were asked of different samples.

Source: Survey of U.S. adults conducted May 25-June 29, 2016.
"The State of American Jobs"

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With the aim of understanding how fairly workers in the US are paid for their services, **we hypothesize that the more skillful and experienced an individual, the better wage he/she should earn regardless of other factors.** Our research hence comes to how much skill contributes to annual salary compared to other identity variables.

We built our own dataset from Integrated Public Use Microdata Series (IPUMS), which provides social and economic census and survey data dated back to the 1940s. In this study, we employed 21 variables: number of children, gender, age, marital status, birth year, race, US citizenship, years in the US, English speaker (or not), race:white (or not), education level, school type (public or private school), degree field, employment status, occupation, industry, total personal income, total personal wage income, total personal investment income, cognitive disability, and vision or hearing disability.

We divide the **variables** into **two categories**: skillset variables (data regarding subjects' knowledge and skills required to succeed at their job such as education, degree field, industry) and background variables (data regarding identity information such as race, age, and gender). Using total personal income and wage income as outcome variables, we were

able to run regression analysis to compare the impact of each variable as well as each set of variables on annual income.

Results:

<i>Dependent variable: INCTOT</i>		<i>Dependent variable: INCTOT</i>	
	(1)		(1)
EDUC	12555.675*** (1095.262)	SEX	-14241.569*** (5120.300)
IND	-2.184** (0.982)	Age_avg	918.939*** (198.087)
SPEAKENG	4971.133 (3583.212)	NCHILD	1886.411 (2547.023)
COGDIS	-19189.291 (16029.046)	MAR_STATUS	-2773.401** (1404.432)
VISDIS	11777.729 (15898.526)	CITIZEN	4704.846 (3169.470)
		RACWHT	18271.889*** (6785.502)
Observations	1,000	Observations	1,000
R ²	0.123	R ²	0.068
Adjusted R ²	0.119	Adjusted R ²	0.062
Residual Std. Error	78293.861 (df=994)	Residual Std. Error	80751.919 (df=993)
F Statistic	27.887*** (df=5; 994)	F Statistic	12.080*** (df=6; 993)
Note:	*p<0.1; **p<0.05; ***p<0.01	Note:	*p<0.1; **p<0.05; ***p<0.01

Skillset variables coefficients

Background variables coefficients

In our analysis, we found that in general skill set variables affect salary more than demographic ones. This shows a generally good trend for society being more fair and embracing for people with different backgrounds.

Citations:

Steven Ruggles, Sarah Flood, Ronald Goeken, Josiah Grover, Erin Meyer, Jose Pacas and Matthew Sobek. IPUMS USA: Version 12.0 [dataset]. Minneapolis, MN: IPUMS, 2022.
<https://doi.org/10.18128/D010.V12.0>

How Americans View Their Jobs. Pew Research Center's Social & Demographic Trends Project (April, 2023). Retrieved April 17, 2023, from
<https://www.pewresearch.org/social-trends/2016/10/06/3-how-americans-view-their-jobs/>

Details of our research is found in the following link:

https://github.com/hzha494/Factors_affecting_salary

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