Data Facts Report - Tate Mason

Summary

Dataset: PSID - Labor Outcomes
Time Period: 1999–2017
Unit of Analysis: Individual-year

Graphics

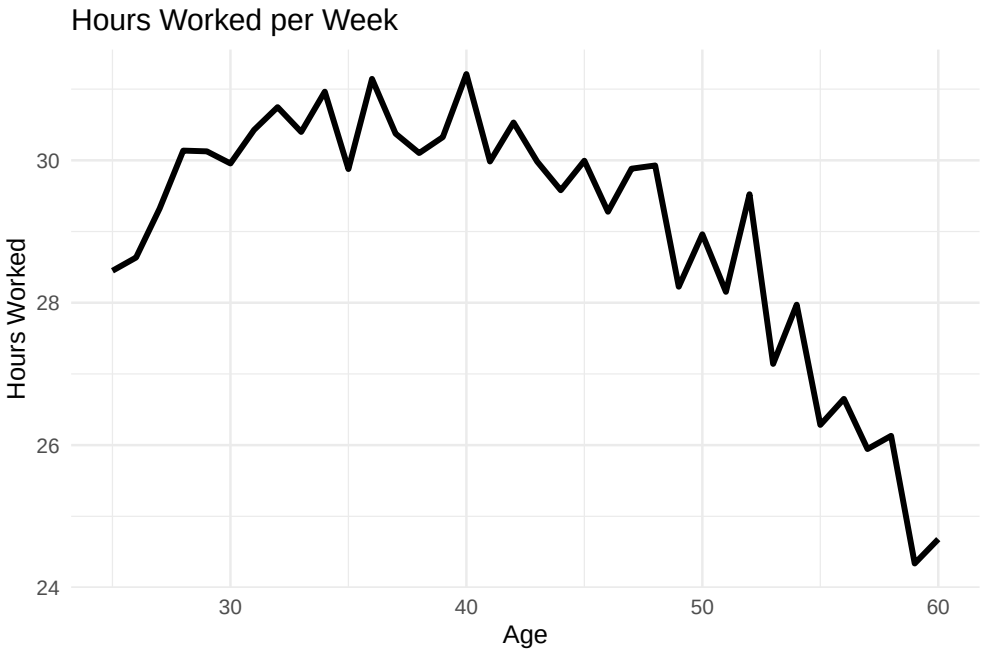

Figure 1: Labor Force Participation Rate by Age (with Age Fixed Effects)

As can be seen, in the whole sample, labor force participation peaks around age 50 and begins to decline thereafter, though at a slower rate than one may expect.

Average income peaks around age 45-50, which is consistent with the life-cycle hypothesis of income.

Average hours worked follows the hump shape we would expect.

Wages are all over the place, but seem to peak between 40-45 before declining.

Variance of hours worked is highest amongst the older members of the sample, showing that there is likely wealth effects at play.

Variance of wages is mostly stagnant, but is raising slightly with age, spliking at age 40.

Labor force participation is highest amongst the wealthiest members of the sample, and lowest amongst the poorest.

Average income, understandably, is highest amongst the wealthiest members of the sample, and lowest amongst the poorest.

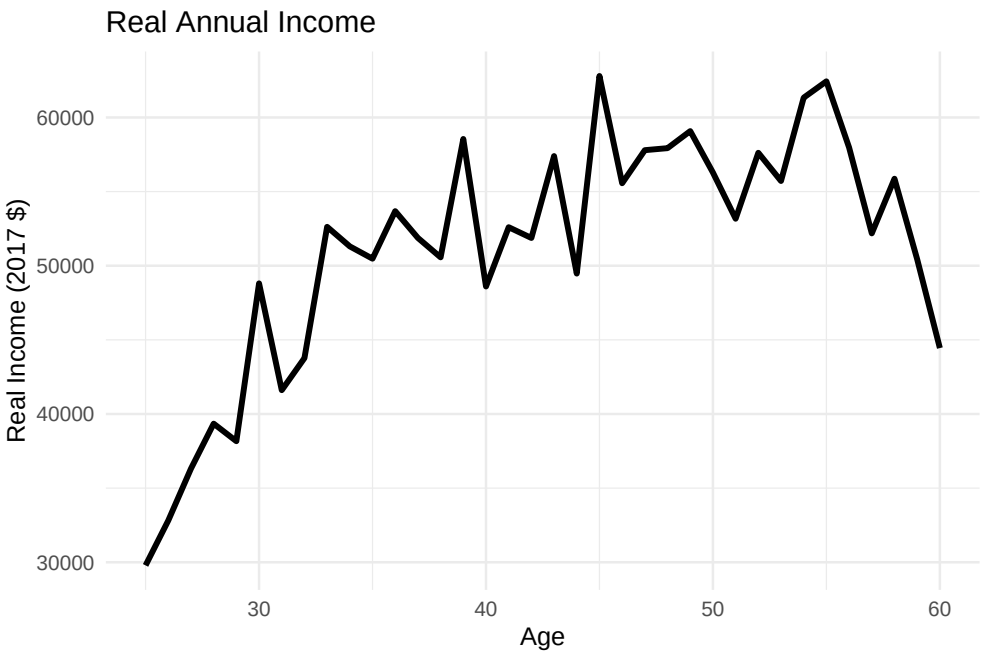

Figure 2: Average Income by Age (with Age Fixed Effects)

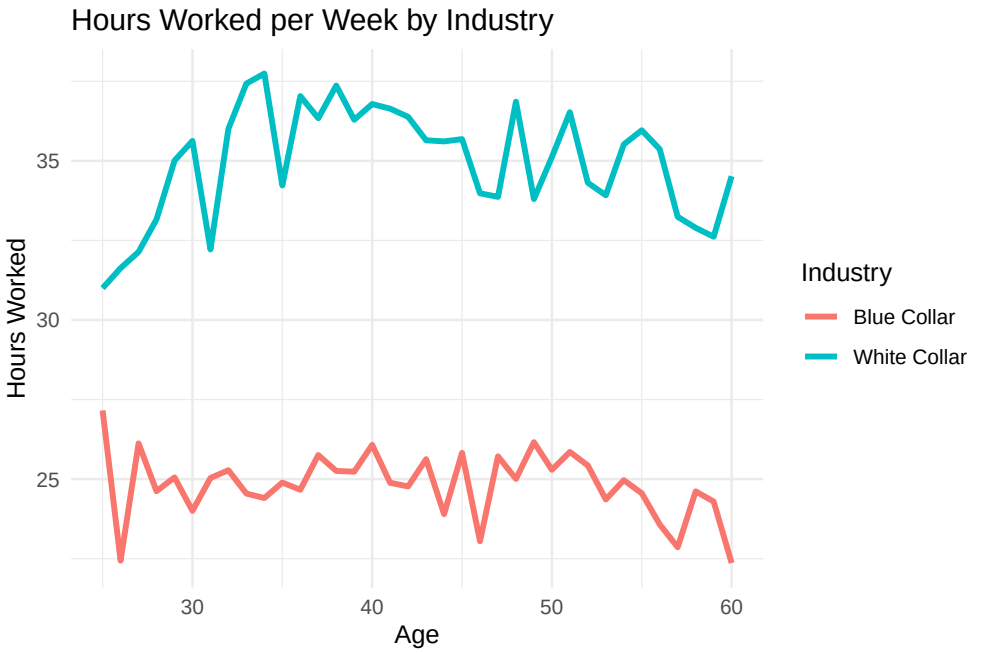

Figure 3: Average Hours Worked by Age (with Age Fixed Effects and Stratified by Industry)

Average hours worked is highest among wealthiest members of the sample, and lowest amongst the poorest, which perhaps contradicts the idea that poorer individuals need to work more.

Again, wages are erratic, but the wealthiest members of the sample seem to have mostly

Figure 4: Average Wage by Age (with Age Fixed Effects and Stratified by Industry)

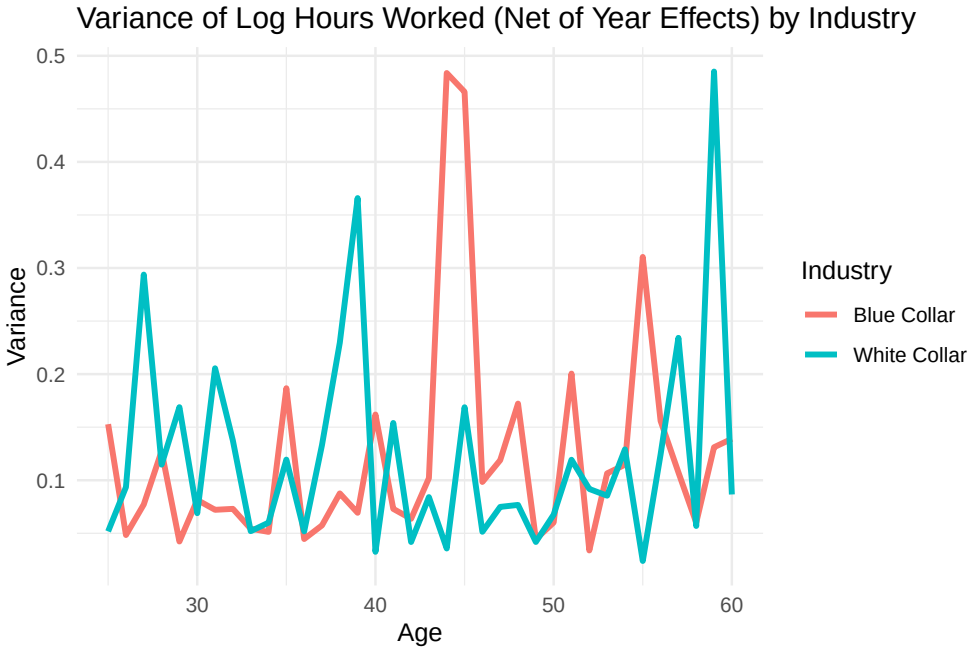

Figure 5: Variance of Hours Worked by Age (Stratified by Industry)

higher wages.

We see that the poorest members of the sample have the highest variance in hours worked, which may be due to the need to work more in some years than others or job instability.

Variance of wages is highest for the wealthiest members of the sample, which may be due

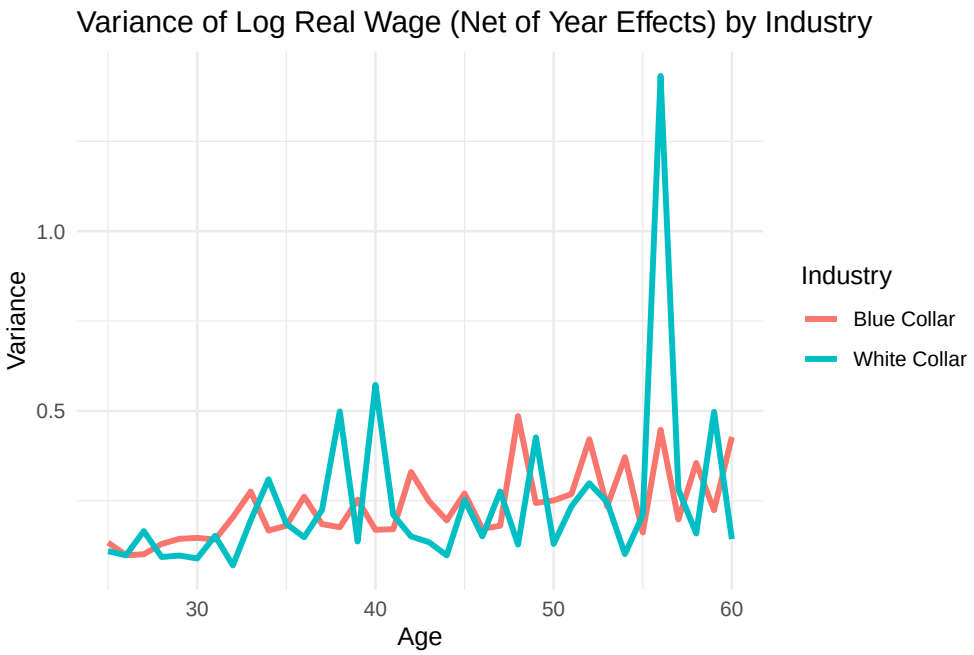

Figure 6: Variance of Wages by Age (Stratified by Industry)

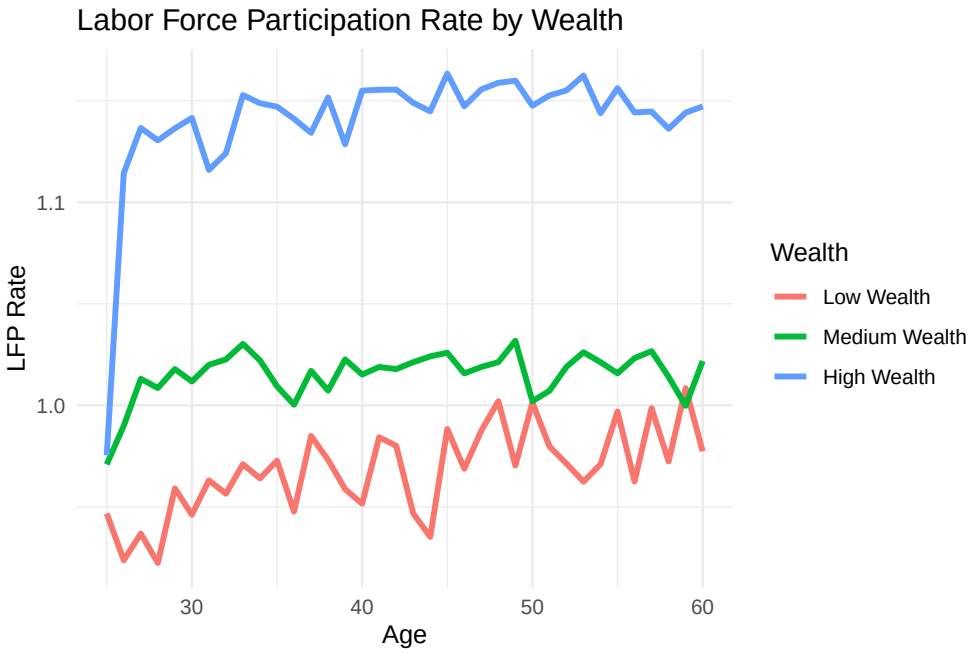

Figure 7: Labor Force Participation Rate by Age (with Age Fixed Effects and Stratified by Wealth)

to non-wage income comprising much of their wealth.

White collar workers have a higher labor force participation rate at nearly all ages, though both groups follow a similar pattern at different magnitudes.

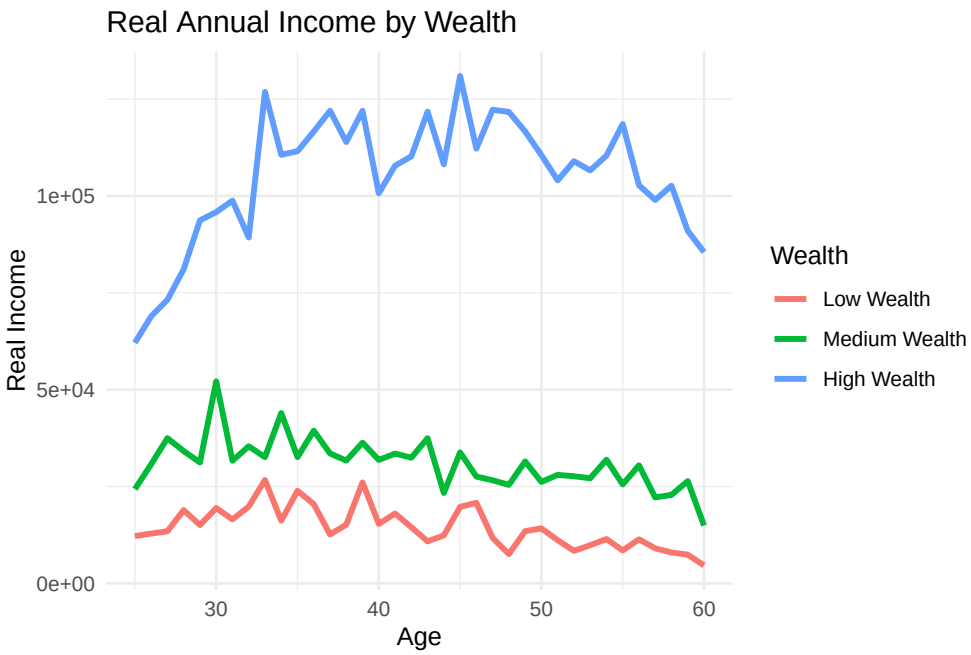

Figure 8: Average Income by Age (with Age Fixed Effects and Stratified by Wealth)

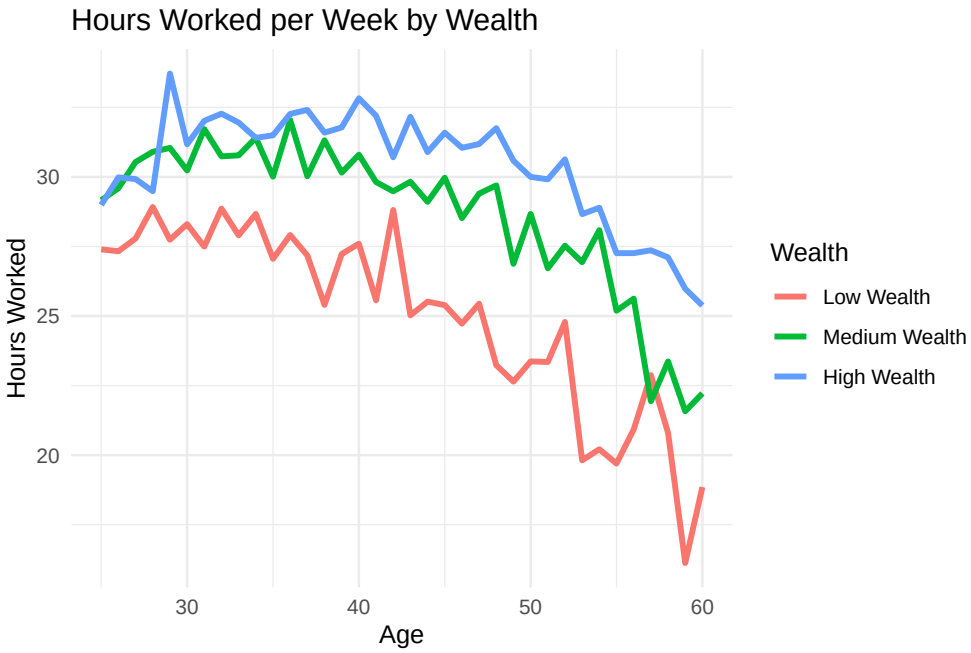

Figure 9: Average Hours Worked by Age (with Age Fixed Effects and Stratified by Wealth)

Average income is higher for white collar workers at all ages, and peaks later for white collar workers. This may be due to the fact that white collar workers tend to have more opportunities for advancement.

White collar workers work more hours at all ages by nearly 20 hours per week, which is a

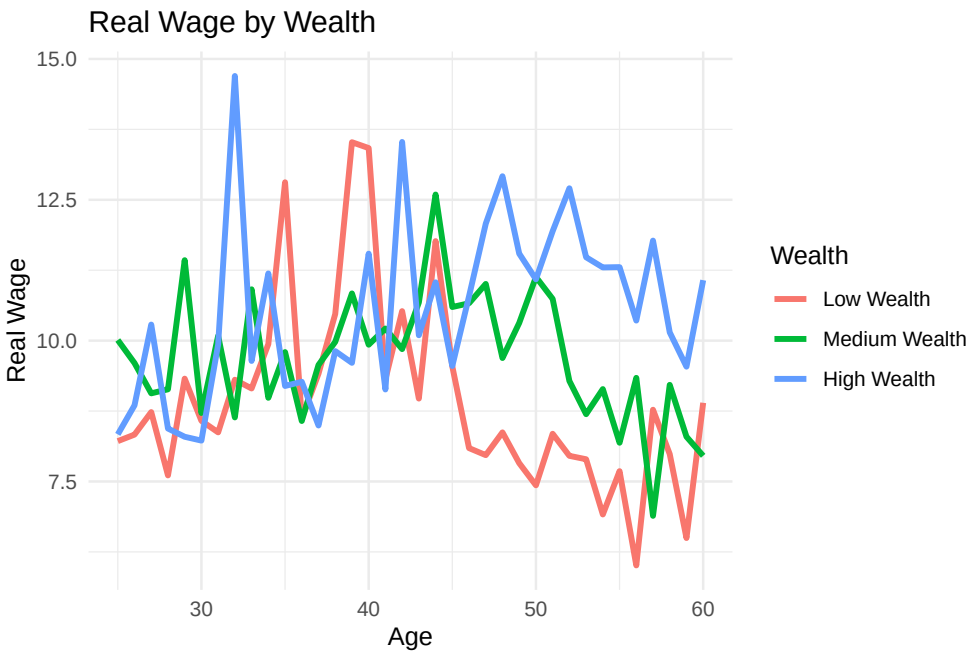

Figure 10: Average Wage by Age (with Age Fixed Effects and Stratified by Wealth)

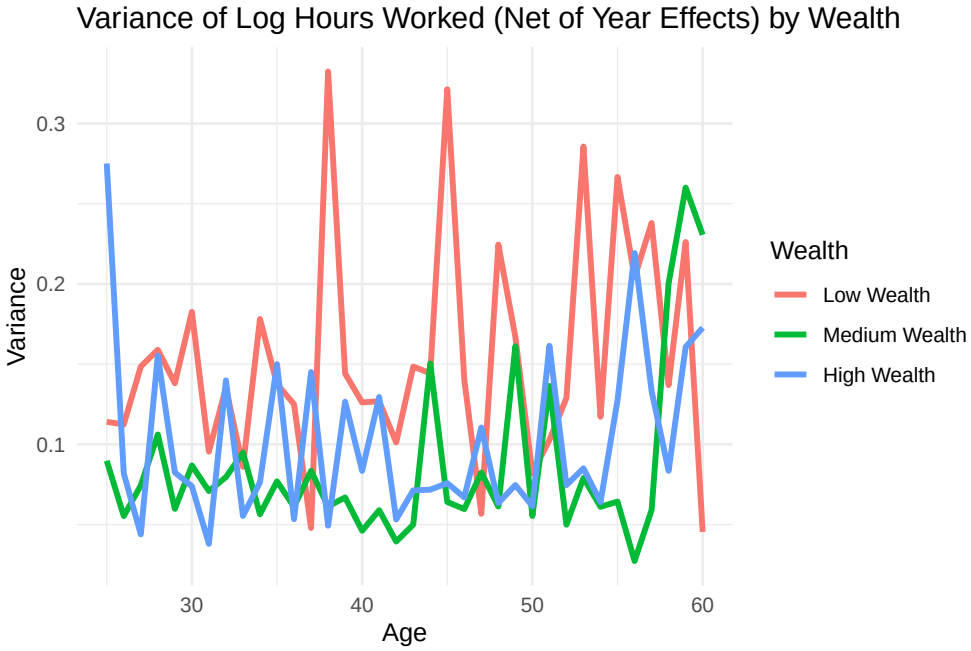

Figure 11: Variance of Hours Worked by Age (Stratified by Wealth)

significant difference. This may be due to blue collar hours being more erratic or blue collar workers having more part-time jobs.

Blue collar workers have a higher average wage at nearly all ages, which is somewhat surprising. This may be due to the fact that blue collar workers tend to have more unionized

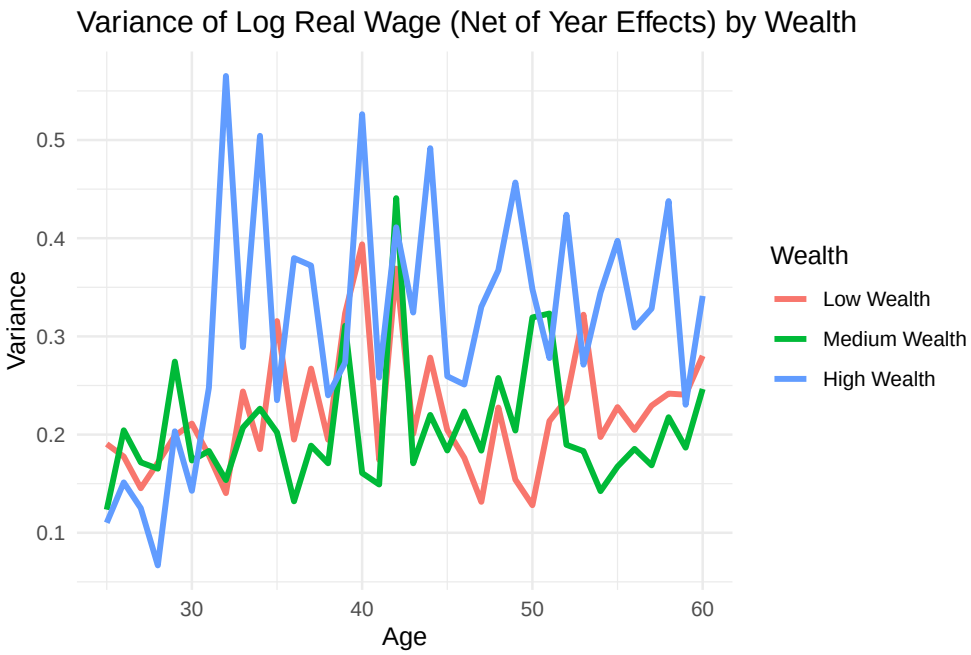

Figure 12: Variance of Wages by Age (Stratified by Wealth)

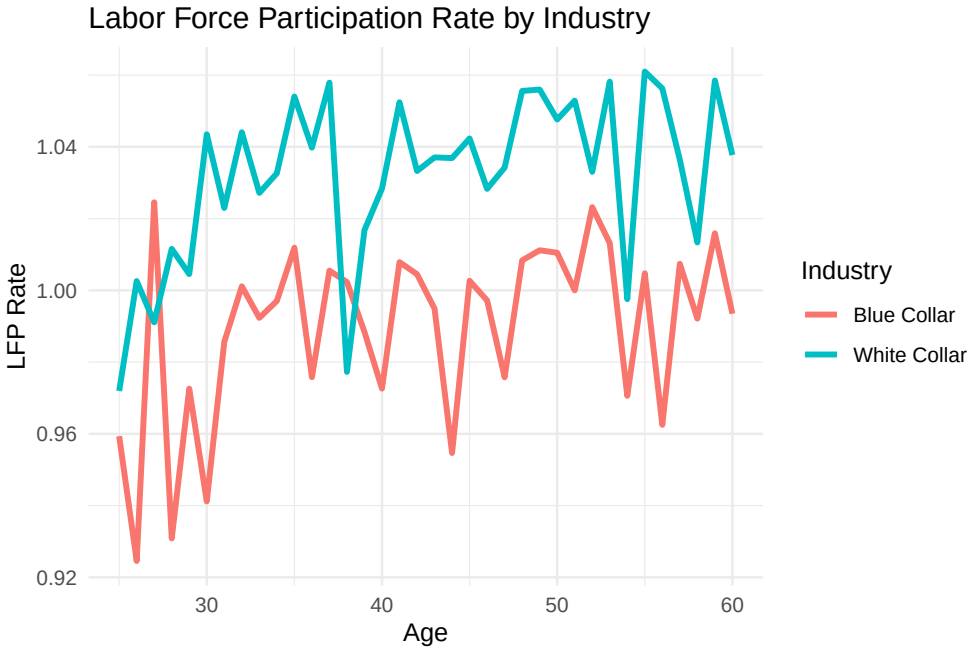

Figure 13: Labor Force Participation Rate by Age (with Age Fixed Effects and Stratified by Industry)

jobs, which tend to pay higher wages, or a strange data quirk.

Variance of hours worked is higher for white collar workers at nearly all ages, which could be attributed to the fact that white collar workers could have very different hours depending

Figure 14: Average Income by Age (with Age Fixed Effects and Stratified by Industry)

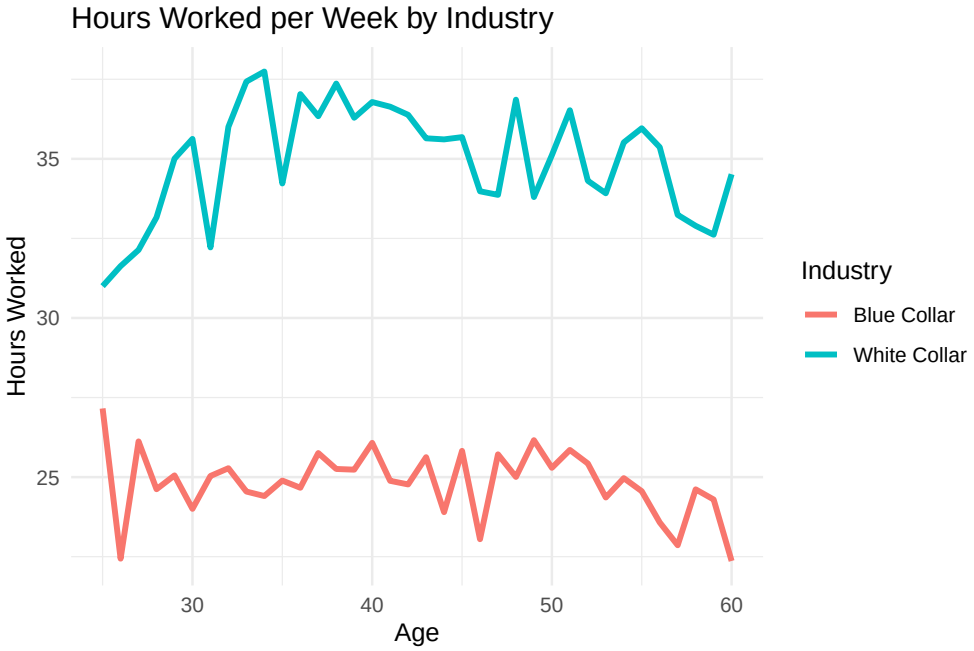

Figure 15: Average Hours Worked by Age (with Age Fixed Effects and Stratified by Industry)

on their job, while blue collar workers tend to have more consistent hours due to things like union contracts.

Variance of wages is mostly in lockstep until age 56 when white collar workers see a one time spike. I cannot hypothesize a reason for this spike.

Figure 16: Average Wage by Age (with Age Fixed Effects and Stratified by Wealth)

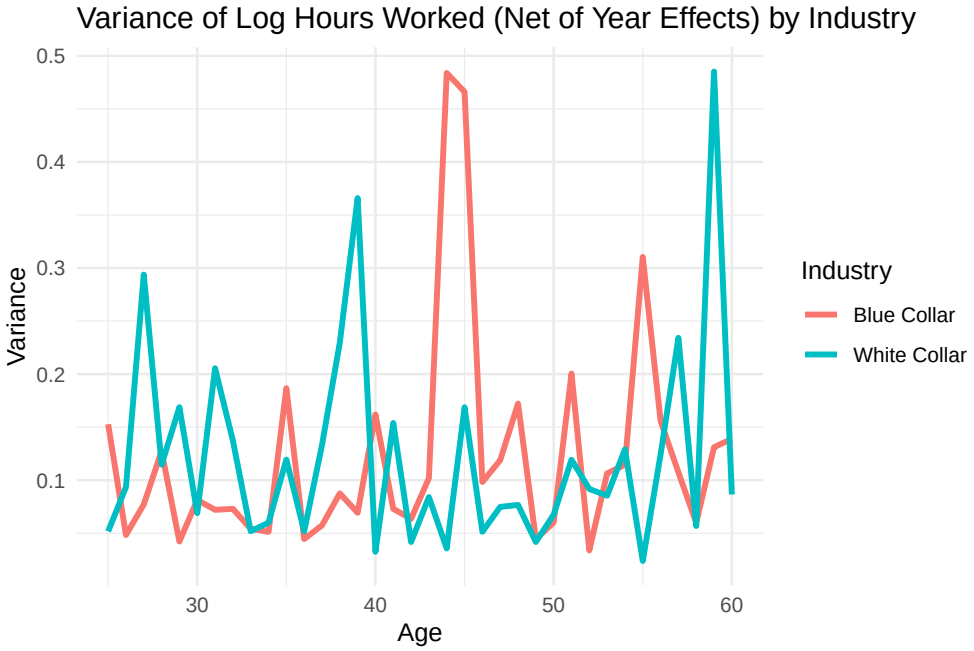

Figure 17: Variance of Hours Worked by Age (Stratified by Industry)

Labor force participation is highest for high school graduates who did not attend college, followed by college graduates, and lowest for high school dropouts. This is somewhat surprising, as one would expect college graduates to have the highest labor force participation rate.

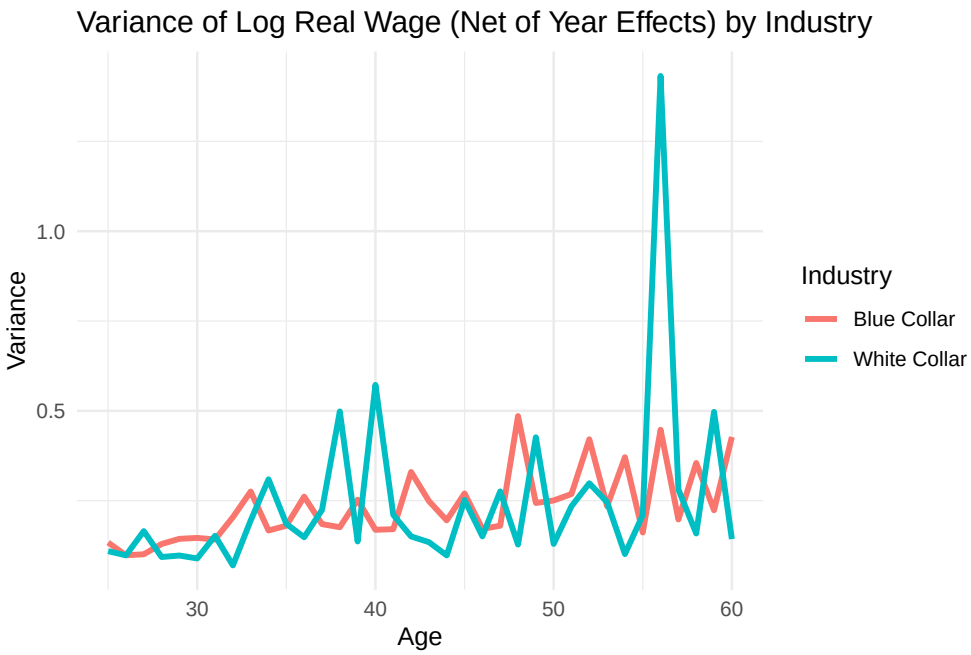

Figure 18: Variance of Wages by Age (Stratified by Industry)

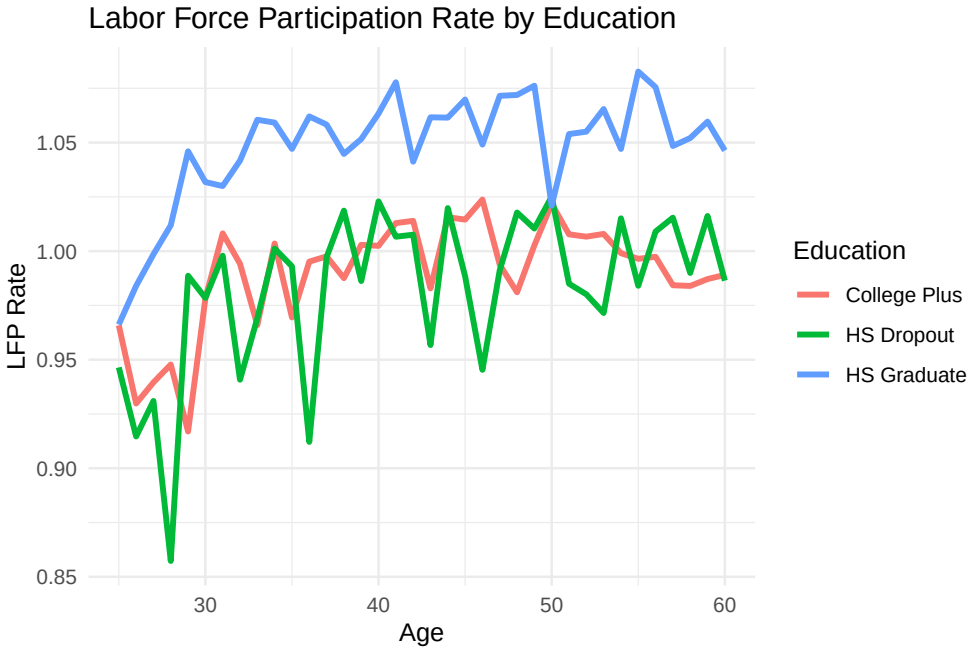

Figure 19: Labor Force Participation Rate by Age (with Age Fixed Effects and Stratified by Education)

We see that there is a rank order of income by education level, with college graduates earning the most, followed by high school graduates, and then high school dropouts.

Hours worked is similarly ranked, with college graduates working the most, followed by

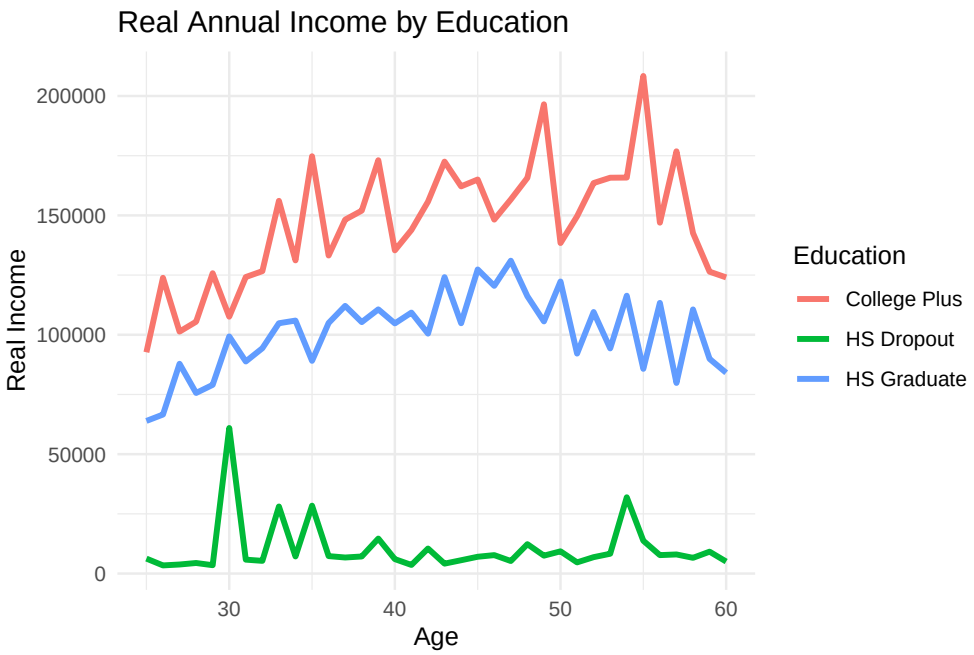

Figure 20: Average Income by Age (with Age Fixed Effects and Stratified by Education)

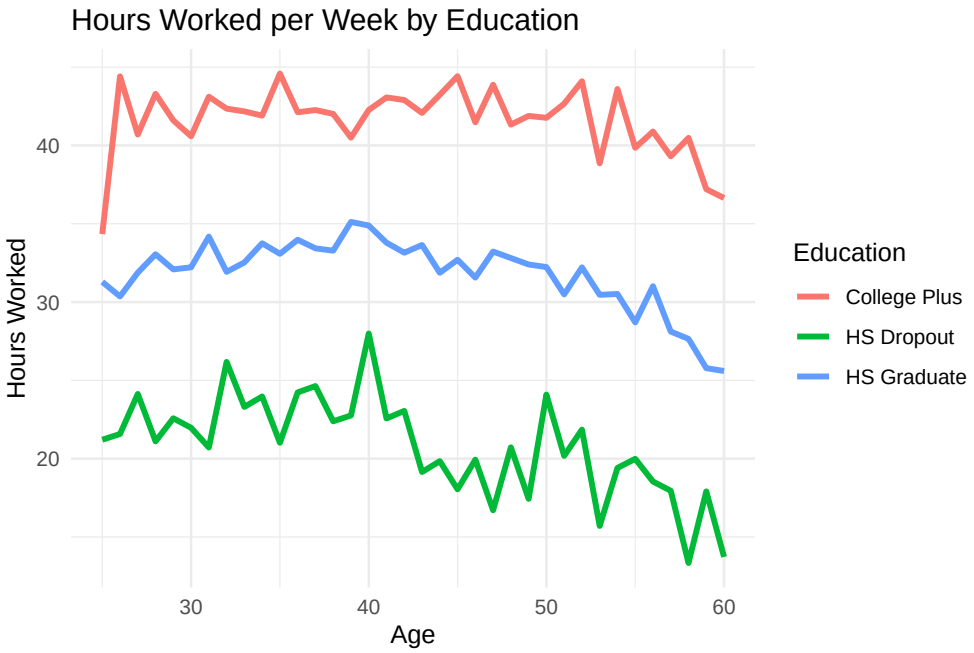

Figure 21: Average Hours Worked by Age (with Age Fixed Effects and Stratified by Education)

high school graduates, and then high school dropouts.

Wages are much tighter, with college graduates being in the middle or bottom of the pack until age 40, when they shoot up until joinging the pack again around 55. This may be

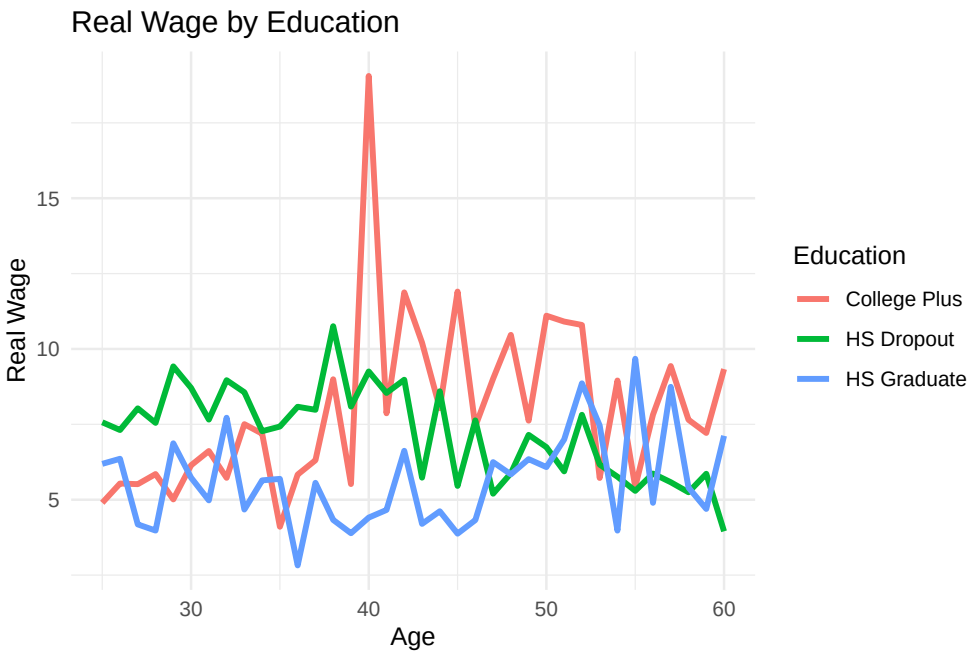

Figure 22: Average Wage by Age (with Age Fixed Effects and Stratified by Education)

due to college (+) jobs being more erratic in pay early on, but then stabilizing later in life.

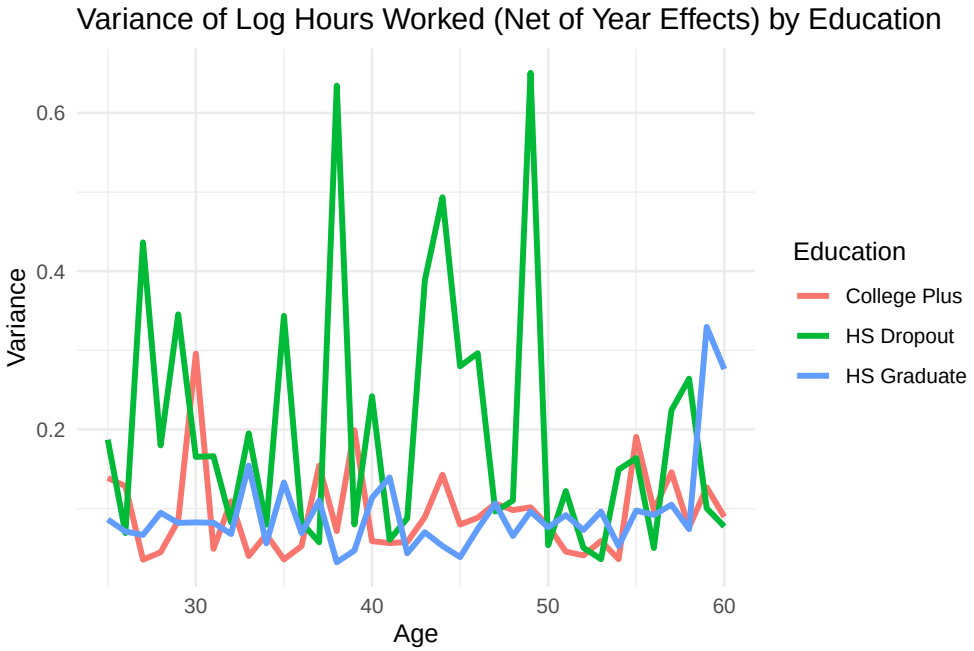

Figure 23: Variance of Hours Worked by Age (Stratified by Education)

Variance of hours worked is significantly higher for high school dropouts, which is likely due to the fact that they are more likely to have part-time or erratic jobs.

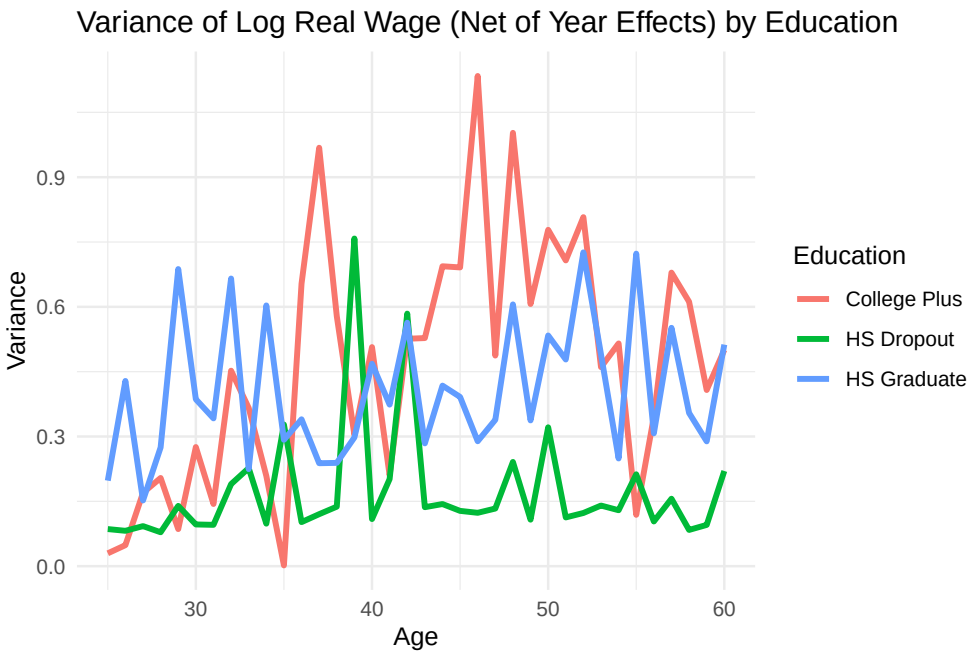

Figure 24: Variance of Wages by Age (Stratified by Education)

Variance of wages is highest for college graduates, perhaps becuase there is a very wide range of wages for college graduates, as well as the fact that post-grad degree holders are included in this group, and thus have a much higher variance in wages.

Table of Data Facts

Year	Group	Category	Sample Size	Observations	College (%)	White Collar (%)
1999	All	All	1847	3795	22.6	57
	Education	HS Dropout	807	1288		
	Education	HS Grad	873	1288		
	Education	College +	873	1288		
	Industry	Blue Collar	507	629		
	Industry	White Collar	507	629		
	Wealth	Bottom 25%	1847	3795		
	Wealth	Middle 50%	1847	3795		
	Wealth	Top 25%	1847	3795		
2001	All	All	1855	4078	24.1	55.7
	Education	HS Dropout	883	1358		
	Education	HS Grad	883	1358		
	Education	College +	883	1358		
	Industry	Blue Collar	541	646		
	Industry	White Collar	541	646		
	Wealth	Bottom 25%	1855	4078		
	Wealth	Middle 50%	1855	4078		
Wealth	Top 25%	1855	4078			
2003	All	All	1844	4209	24.1	28.2
	Education	HS Dropout	892	1384		
	Education	HS Grad	892	1384		
	Education	College +	892	1384		
	Industry	Blue Collar	597	773		
	Industry	White Collar	597	773		
	Wealth	Bottom 25%	1844	4209		
	Wealth	Middle 50%	1844	4209		
	Wealth	Top 25%	1844	4209		
2005	All	All	1814	4231	22.1	26.4
	Education	HS Dropout	872	1380		
	Education	HS Grad	872	1380		
	Education	College +	872	1380		
	Industry	Blue Collar	607	793		
	Industry	White Collar	607	793		
	Wealth	Bottom 25%	1814	4231		
	Wealth	Middle 50%	1814	4231		
	Wealth	Top 25%	1814	4231		
2007	All	All	1799	4349	21.2	25.0
	Education	HS Dropout	866	1387		
	Education	HS Grad	866	1387		
	Education	College +	866	1387		
	Industry	Blue Collar	642	839		
	Industry	White Collar	642	839		
	Wealth	Bottom 25%	1799	4349		
	Wealth	Middle 50%	1799	4349		
	Wealth	Top 25%	1799	4349		

Year	Group	Category	Sample Size	Observations	College (%)	White Collar (%)
2009	All	All	1767	4421	29.3	26.2
	Education	HS Dropout	929	1522		
	Education	HS Grad	929	1522		
	Education	College +	929	1522		
	Industry	Blue Collar	627	856		
	Industry	White Collar	627	856		
	Wealth	Bottom 25%	1767	4421		
	Wealth	Middle 50%	1767	4421		
	Wealth	Top 25%	1767	4421		
2011	All	All	1713	4441	28.0	27.5
	Education	HS Dropout	921	1536		
	Education	HS Grad	921	1536		
	Education	College +	921	1536		
	Industry	Blue Collar	557	777		
	Industry	White Collar	557	777		
	Wealth	Bottom 25%	1713	4441		
	Wealth	Middle 50%	1713	4441		
	Wealth	Top 25%	1713	4441		
2013	All	All	1701	4475	27.8	27.6
	Education	HS Dropout	928	1555		
	Education	HS Grad	928	1555		
	Education	College +	928	1555		
	Industry	Blue Collar	566	782		
	Industry	White Collar	566	782		
	Wealth	Bottom 25%	1701	4475		
	Wealth	Middle 50%	1701	4475		
	Wealth	Top 25%	1701	4475		
2015	All	All	1650	4365	27.3	28.1
	Education	HS Dropout	921	1512		
	Education	HS Grad	921	1512		
	Education	College +	921	1512		
	Industry	Blue Collar	566	782		
	Industry	White Collar	566	782		
	Wealth	Bottom 25%	1650	4365		
	Wealth	Middle 50%	1650	4365		
	Wealth	Top 25%	1650	4365		
2017	All	All	1908	4684	49.3	NA
	Education	HS Dropout	880	1399		
	Education	HS Grad	880	1399		
	Education	College +	880	1399		
	Industry	Blue Collar	551	764		
	Industry	White Collar	551	764		
	Wealth	Bottom 25%	1908	4684		
	Wealth	Middle 50%	1908	4684		
	Wealth	Top 25%	1908	4684		