The Perils of Privilege: Manufacturing Wages, Educational Attainment, and the Populist Response to Industrial Decline

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We explore an under-examined source of the populist backlash to globalization: discriminatory hiring practices in the manufacturing sector. Consistent with the theory of dual labor markets and the efficiency-wage hypothesis, a sizeable manufacturing wage premium existed in the second half of the twentieth century. We conjecture that rationing of jobs into the manufacturing sector was done on the basis of race, gender, and national origin in a way that favored white males. If this was the case, then white males ought to have had a smaller college wage premium than other groups and, therefore, would have had reasons to invest less in their own human capital development than members of other groups. Consequently, white males were relatively ill-equipped to respond when import competition and automation led to a decline in the demand for industrial workers. Consequently, less-educated white males found nationalist, sexist, racist, xenophobic, and protectionist explanations for their having been "left-behind" compelling. As a result, they were more likely to vote for candidates emphasizing such narratives. We use both individual and aggregate data at the state, county, and commuting-zone levels to examine occupational, educational, attitudinal, and electoral trends to evaluate a number of hypothesis derived from our argument.

Keywords: Globalization, Backlash, Industrial Decline, Educational Attainment, Wages

Introduction

The American political economy has experienced tectonic shifts in the last few decades. Unlike populations in other advanced industrial countries, mortality rates for non-Hispanic Whites in the US stopped declining in the late 1990s. There has been an epidemic of mortality related to drugs, alcohol, and suicide since the late 1990s (Case and Deaton, 2020) and these"deaths of despair" are concentrated among white men without college degrees. There has also been a large increase in income inequality in the United States. At the same time, electoral support for the Democratic party has been steadily declining among low income/union voters since the 1970's - especially in the South (Teixeira and Abramowitz, 2008). White working class males appear to be increasingly responsive to xenophobic, racists, and sexist narratives offered by radio and internet pundits and extremist candidates.

What has caused these deaths of despair? Why did working class white males leave the Democratic Party in droves and why did it happen when it did? Why are explicitly racist, xenophobic, and sexist appeals, once considered to be beyond agreed upon standards of decency, now common place in American politics? And what, if anything, does this all have to do with inequality?

Our answer is that all of these developments can be traced, in part, to a single phenomenon, which when combined with declining employment in manufacturing, constitute an under appreciated source of right wing populism in the United States:: discriminatory hiring policies in the middle of the last century.

Our argument is straightforward, and it begins with an observation: there was a sizeable wage premium in the United States beginning in the middle of the twentieth century. This rise in manufacturing wages was sustained, in part, by hiring practices that restricted access for women, people of color, and immigrants to high wage jobs that did not require a college education. As a result of privileged access to high paying jobs that required little education,

white men, *ceteris paribus*, had a lower college wage premium than white women and both men and women of color. When, decades later, declines in manufacturing jobs due to important competition, automation, and off-shoring led to stagnating wages and high levels of unemployment for workers without a college education, there was a set of voters ready to be mobilized in support of right-wing populist appeals.

What explains the manufacturing wage premium?

Across the political spectrum, politicians and pundits have waxed nostalgic for the post-war period when a single income could provide a family with a "middle class" life-style. While it is not clear how the "middle class life style" of the 1950s compares with today's level of consumer comfort, there is widespread belief that a working class salary went further back then. There is less consensus about why that was the case: was it shared largess of American geopolitcal hegemony? newly found union bargaining strength? the decline of international capital mobility dating from the inter-war period? Advances in skill-replacing technology in the first half of century? cultural restrictions on female workforce participation?

We believe that all of the above may have been at work in leading to a general rise in living standards for the working class, but none of these is precise enough to explain the rise in the wage premium for workers in the manufacturing sector. The standard argument offered by economists has been referred to as the "dual-labor market" or "efficiency-wage hypothesis".

According to Doeringer and Piore (1971) the American labor market is comprised of a primary sector where jobs offered high wages, job security, and ladders for internal promotion. Because jobs in the secondary sector possess none of these characteristics, workers in the latter envy those in the former. Since attempts to demonstrate differences in human capital between workers in these sectors were unsuccessful, the existence of these differences were considered puzzling in light of theories of labor market competition. Similarly, there is considerable evidence about the persistence of discriminatory labor market practices that,

at first blush, should be expected to be eliminated by competitive practices (Arrow, 1973)

The efficiency-wage hypothesis has been offered as a solution to both of these puzzles. Shapiro and Stiglitz (1984) argued that employers who find it costly to monitor workers will pay wages that are "above the going rate" to primary sector workers that are identical (with respect to productivity) to secondary sector workers in order to deter shirking. Yellen (1984) argued that the efficiency-wage hypothesis explains discrimination among workers with different observable characteristics (such as race and gender). Since identical workers (from the standpoint of productivity) exist in both the primary and secondary labor pools, "the employer can indulge his taste for discrimination at zero cost."

Bulow and Summers (1986) argue, however, that Yellin's claim is incorrect because if the workers were identical in every relevant way, employers without a taste for discrimination could offer members of discriminated groups wages that are lower than the efficiency-wage for favored group members, but high enough to deter shirking (i.e. sufficiently higher than what they would earn in the secondary sector). Thus, competitive pressures would either drive bigoted employers out of the market or induce them to act in a way contrary to their prejudices: either way competition drives out discriminatory practices, even in an economy with a dual labor market. Instead, Bulow and Summers explain the persistence of discrimination by pointing out that the primary sector wages sufficient to deter shirking is increasing in the worker's "separation" or "turnover rate" (in this case, the probability that they would leave a primary sector job to either leave the workforce or take a job in the secondary sector) and there is evidence that members of groups that are discriminated against in the labor market have higher separation rates (Poterba and Summers, 1986; Marston, Feldstein and Hymans, 1976). Consequently, if the goal is to deter shirking, members of such groups would be the most costly to employ in primary sector jobs and will, in the absence of policy interventions aimed at changing the relative cost of hiring them, be relegated to secondary sector jobs.[1]

[1]Note, by the way, that this doesn't really solve the problem. Employers are still acting inefficiently.

Was there Racial and Gender Discrimination in Hiring for High Paying Jobs?

As we have seen, the the efficiency wage approach is the standard explanation for why firms might pay non-competitive wages and how wage inequalities could persist. It is even possible to explain why these wages "above the going rate" might be used to discriminate between employees of different groups - members of those groups may have high separation rates, requiring higher salaries to deter shirking. We are somewhat catholic as to whether the modified efficiency wage logic or more explicit racism on the part of imperfectly monitored hiring agents explains widespread discriminatory behavior. What is important for our argument is whether such behavior took place and whether it was extensive and intensive enough to shrink the college wage premium for white workers.

Whatever it's cause, there is plenty of evidence of discrimination against women and persons of color in hiring practices in the post-war period. It is more explicit in some places, sectors, and times than others, but there is little question that such discrimination was widespread after the war and that it was only with the Civil Rights Act of 1964 that the Federal Government became involved in any consistent manner in limiting such offenses.

For example, Frymer (2011) argues that race seems to be implicated since before the creation of the Wagner Act (Frymer, 2011). There is evidence that agricultural and domestic workers were included in the original version of the bill, but were dropped by the time the bill was considered by the legislature where segregationist southerners made up a sizeable share of the Democratic majority and dominated the leadership of committees in both the House

While there may be between group differences in separation rates, there is likely to be within group variance as well. If employers could know, with certainty, the separation rate of individual workers, they could offer each individual the wage that would deter them, in particular, from shirking. It is at least logically possible that some members of high separation rate groups have individual separation rates that are below the average separation rate of the the low separation groups. In which case employers passed up the opportunity to hire a lower cost non-shirking employee. Similarly, there may be some high separation rate individuals in the low separation rate groups who, in fact, will shirk despite being paid the group wide efficiency wage. From a moral standpoint, there is not much difference between assuming that members of some groups will have low human capital and assuming that they have a high separation rate. In either case, the failure to treat the individual as an individual runs the risk of their getting a wage that is not consistent with their opportunity cost

and the Senate. And though the Wagner Act granted new access to unionized jobs, civil rights leaders viewed other aspects of the Act as harmful to African Americans (Frymer, 2011, p.28). Of particular concern was "the potential impact of Section 9 which empowered unions to create closed shops and be the exclusive bargaining agents based on a determination by the majority of workers in a company.....The NAACP complained that unions were using the Act to "organize a union for all the white workers, and to either agree with the employers to push Negroes out of the industry or , habing effected an agreement with the employer, to proceed to make a union lily-white." (Frymer 2011 page 27; the NAACP quote is from Raymond Wolter Negroes and the Great Depresssion: The Problem of Economic Recovery, page 179).

Further evidence of discrimination can be seen in the fact that it was common place for management to bring black workers in to break strikes. This practice both gave an additional reason for white union workers to have antipathy toward black workers, but the very fact that there was a "reserve army" of unemployed workers available to serve as strike breakers is evidence that they had been excluded from jobs they were able to do.

Preliminary Evidence

The Effect of Manufacturing Wages on Educational Attainment

Goldin and Katz (2008) show that there was a secular rise in college graduate rates for birth cohorts until 1950 at which point male cohorts experienced a steep decline in graduates which were not recovered from until the 1970 birth cohort. The graduation rates of female cohorts stalled in 1950 before continuing their rise again with cohorts born around 1960. In Figure 1 we use information from the the Current Population Survey to show see that the decline in male graduation rates beginning with the 1950 cohort identified by Goldin and Katz was entirely a white male phenomenon: the increase in graduation rates among white females, and both male and female non-white males paused until the mid-sixties at which point all

three groups continued to rise. By the 1970 birth cohort all three groups had graduation rates higher than white males.

Figure 1: College Graduate Rates by Cohort, Race, and Gender

The relative decline in white male graduation rates is consistent with our story, but to determine whether differential access to high paying manufacturing jobs, and therefore, a lower college wage premium for white men, is behind this relative decline we adopt an approach Goldin and Katz (2008) used to demonstrate that in the early 20th century the opportunity cost of education was high enough to deter secondary education where manufacturing wages were high and manufacturing jobs were sufficiently abundant.

By the second half of the twentieth century, however, secondary education was common place and the the American economy had changed so that productivity gains exhibited a pronounced "skill bias" Acemoglu (2002). We, therefore, believe that the rising manufacturing wage premium would reduce the college wage premium and lead to a reduction in college, rather then the high school, graduation rates. As a result, we replicate Goldin and Katz' analysis (table 6.1 in 2008) using data from the second half of the 20th century, but

using the college graduate rate as the dependent variable.

Table 1: Relationship between County-level Graduation Rates and Manufacturing Wages

	County-level Graduation Rate (BA)			
	White Male ('12)	Other ('12)	White Male ('16)	Other ('16)
	(1)	(2)	(3)	(4)
% Employed in Mftg.	−13.069	−0.097	−25.588*	−0.241**
	(13.505)	(0.112)	(13.845)	(0.119)
Mftg. Wage (thousands)	0.224***	0.001***	0.142***	0.001*
	(0.041)	(0.0003)	(0.036)	(0.0003)
% Emp. x Mftg Wage (thousands)	−0.555**	−0.002	−0.260	0.001
	(0.253)	(0.002)	(0.245)	(0.002)
Avg. Cty. Income (in thousands)	0.502***	0.005***	0.526***	0.005***
	(0.034)	(0.0003)	(0.031)	(0.0003)
South	0.068	−0.022***	0.781	−0.016***
	(0.642)	(0.005)	(0.634)	(0.005)
New England	−2.119	0.021*	−1.873	0.025**
	(1.452)	(0.012)	(1.429)	(0.012)
Middle Atlantic	−3.578***	−0.017**	−3.101***	−0.014*
	(0.944)	(0.008)	(0.929)	(0.008)
County GDP	0.00000***	−0.000**	0.00000***	−0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
Constant	2.726	0.030*	4.208**	0.054***
	(2.145)	(0.018)	(2.006)	(0.017)
Observations	794	794	797	797
Adjusted R^2	0.555	0.489	0.588	0.516
Note:				*p<0.1; **p<0.05; ***p<0.01

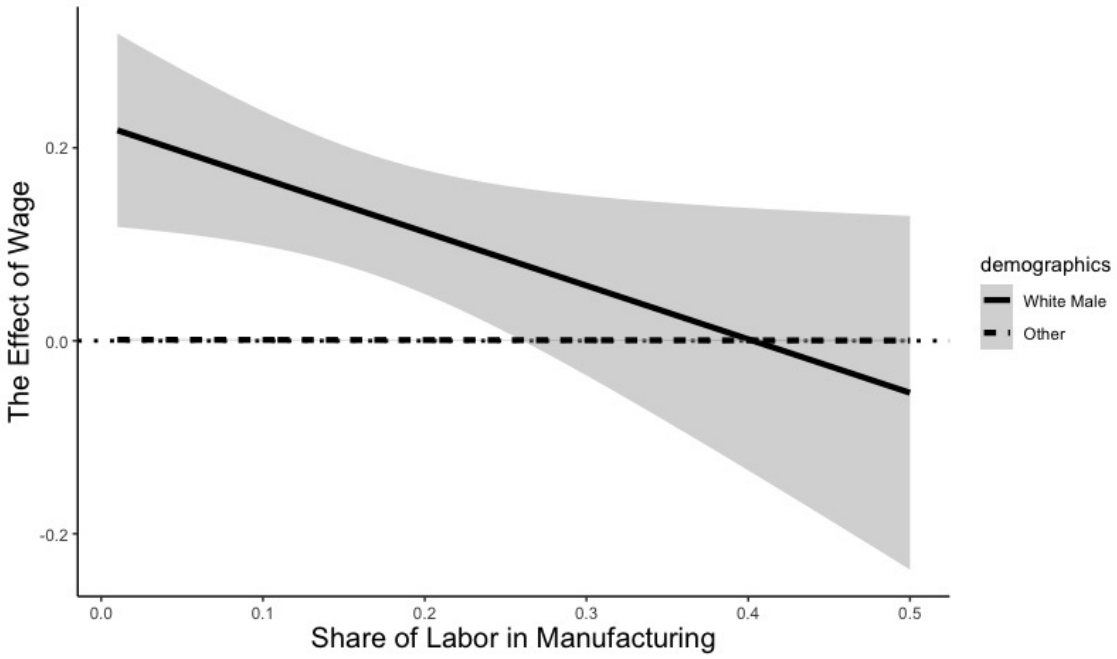
Table 1 reports our results. Like Goldin and Katz we regress graduation rates on the share of employment in manufacturing wage, the manufacturing wage, and their interaction and control for income at the country and state levels and include regional dummy variables.

Note that in column (1) the coefficient on *Manufacturing Wage* is positive and statistically significant, indicating that where manufacturing jobs are scarce, educational attainment is actually positively correlated with wages. Note, however, that the coefficient on the interaction terms is negative and more than twice the magnitude of the coefficient on manufacturing wages. Consequently, the effect of manufacturing wages would be negative if manufacturing jobs were sufficiently abundant. Figure 2 shows that this happens where manufacturing makes up about 40% of a county's employment, though none of the negative coefficients are statistically significant.

Like Goldin and Katz, the sign and significance of the coefficients on the manufacturing and interaction variables are consistent with the opportunity cost argument, but their relative magnitudes do not produce the negative association between manufacturing wages and graduation rates as we hypothesis. As we predicted, however, there is evidence that white men respond differently to rising manufacturing wages than others. Figure 2 shows that the estimated effect of manufacturing on graduation rates is close to zero regardless of the share employed in manufacturing.

We also examined the relationship between educational attainment and manufacturing wages at the individual level. Table 2 reports both linear probability and logistic regression results for a model using Current Population Survey data that regresses whether the respond reports holding a Bachelors degree on manufacturing wages, the size of the manufacturing sector and whether the respondent is a white male. Not reported are controls for respondent Age, Region, and their county's average personal income and taxable income. Figure 3 plots the estimated effect of an increase in the manufacturing wage on the propensity for the respondent to report having a Bachelors degree. As our argument predicts, except when almost no employment comes from manufacturing, an increase in manufacturing wages reduces the propensity of white males to earn a Bachelors degree and this effect gets bigger the greater the county's employment depends on manufacturing. In sharp contrast, an increase in manufacturing does not seem to raise the opportunity cost of education for individuals

Figure 2: The Estimated Effect of Rising Manufacturing Wages on College Graduate Rates



who are not white males. In fact, an increase in the manufacturing wage makes individuals who are not white males *more* likely to report that they have earned a Bachelors degree. Indeed, if anything, this tendency become more pronounced as the county depends more heavily on employment in manufacturing.

In sum, the evidence suggest that an increase in manufacturing wages raises the opportunity cost of a college education, but only for white males. This is consistent with our argument that individuals who are not white males did not have an equal opportunity to earn high wages in the manufacturing sector.

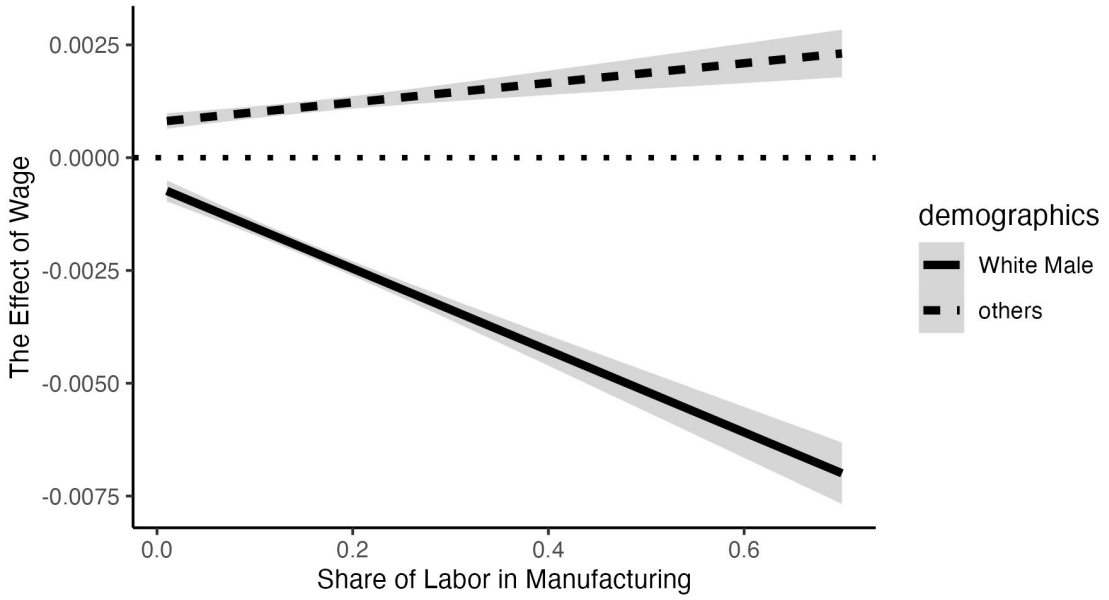
The Effect of Manufacturing Employment Losses on The Vote For Trump

At the start of this paper we argued that the fact that white males had privileged access to high paying jobs in the middle of the last century would have led them, rationally, to invest less in their own human capital development than individuals without that privilege. In

Table 2: Relationship between Respondent Graduation Status and Manufacturing Wages

	Dependent variable:	
	Bachelor's degree (binary)	
	LPM	Logistic
	(1)	(2)
Mftg Wage	0.001^{***}	0.003^{***}
	(0.0001)	(0.0004)
Size of Mftg	-0.038^{***}	-0.241^{***}
	(0.011)	(0.054)
White Male	0.055^{***}	0.214^{***}
	(0.004)	(0.020)
Mftg Wage x Size of Mftg	0.002^{***}	0.014^{***}
	(0.0005)	(0.002)
Mftg Wage x White Male	-0.001^{***}	-0.006^{***}
	(0.0001)	(0.001)
Size of Mftg x White Male	0.090^{***}	0.430^{***}
	(0.017)	(0.087)
Mftg Wage x Size of Mftg x White Male	-0.011^{***}	-0.057^{***}
	(0.001)	(0.004)
Constant	0.180^{***}	-1.488^{***}
	(0.004)	(0.021)
Observations	946,333	946,333
Adjusted R^2	0.092	
Akaike Inf. Crit.		1,094,206.000
Note:	*p<0.1; **p<0.05; ***p<0.01	

Figure 3: The Estimated Effect of Rising Manufacturing Wages on Propensity to Earn a Bachelor's Degree



effect, we are arguing that the existence of widespread racial prejudice in hiring practices in the last century perturbed the informational signals individuals received about the relative returns on educational investments. When subsequent changes to the economy occurred it left those who invested less in education in difficult positions. We have provided some suggestive evidence that it did lead them to be less likely to earn a college degree. But we also argued that, coupled with a decline in the demand for relatively low-skilled manufacturing jobs, the reduced propensity for white men to go to college would have wide ranging effects for themselves, and for society. We believe these consequences included declining life expectancy, increased drug and alcohol addiction, suicide, (Case and Deaton, 2020) and an increased propensity identify with white nationalist identity (Jardina, 2019) and the propensity to vote for right-wing populist political candidates.

Much work remains to fully evaluate our argument, but in the current context we will attempt to gauge the consequences of (at least when viewed with the benefit of hindsight) under-investment in education on the propensity to vote for Donald Trump in the 2016 presidential

election. To do so, we merged data from the Cooperative Congressional Election Study with David Autor's (2013) data on decadal declines in manufacturing employment to evaluate the way educational attainment modifies the effect of economic change on vote choice (Autor, Dorn and Hanson, 2013*b*).

Specifically, we regressed respondents' declared vote for Trump on decadal declines in manufacturing employment (Autor's ΔL inverted so that it reflects declines in employment in the manufacturing sector) conditioned by educational attainment. We control for respondent age and ideology and their country's average personal income.

We conducted two sets of tests in order to try to determine whether the effects of educational attainment are egocentric or sociotropic. We included job losses from all three decades because we are somewhat catholic with respect to the question of whether only relatively recent job losses matter, whether historical losses are also important, or whether it is the cumulative losses that have mounted over decades that matter. Column 1 in Table 3 shows that recent manufacturing job losses (2000 to 2007) are associated with an increased propensity to report having voted for Donald Trump in 2016. There is a much smaller positive effect from job losses in the 1980s. In contrast, manufacturing job losses in the 1990s are associated with a decreased propensity to vote for Trump that is roughly the same magnitude as the positive effect from more recent losses. When interpreting this result it is important to remember that from the standpoint of job losses in the 1990's, job losses in the beginning of the current century are "post treatment." In other words, the coefficient on job losses for the 1990's should be interpreted as "holding constant subsequent losses," what is the effect of losses during the 1990's? One would expect losses in manufacturing to be auto-correlated. That is, locations that experienced losses in one period are more likely to experience similar losses in the future. From this perspective, we might interpret the coefficient on job losses in the '90s to mean, "what is the effect of job losses in the 90's on support for Trump, other than through the propensity to produce further losses in the subsequent decade?"

Table 3: The Effect of Manufacturing Decline on the Vote for Trump, conditioned by Education

	Dependent variable:		
	Vote for Trump		
	(1)	(2)	(3)
Job Loss ('80s)	0.087*	0.013	−1.274***
	(0.048)	(0.059)	(0.185)
Job Loss ('90s)	−0.446***	−0.609***	−1.812***
	(0.062)	(0.077)	(0.239)
Job Loss ('00s)	0.422***	0.478***	2.020***
	(0.054)	(0.066)	(0.187)
BA		−0.045***	
		(0.004)	
Pct BA ('10)			−0.172***
			(0.025)
Job Loss ('80s) x BA		0.187*	
		(0.098)	
Job Loss ('90s) x BA		0.514***	
		(0.131)	
Job Loss ('00s) x BA		−0.224**	
		(0.112)	
Job Loss ('80s) x Pct BA ('10)			4.726***
			(0.608)
Job Loss ('90s) x Pct BA ('10)			5.406***
			(0.822)
Job Loss ('00s) x Pct BA ('10)			−6.082***
			(0.671)
Constant	0.075***	0.088***	0.084***
	(0.004)	(0.005)	(0.007)
Observations	180,072	180,072	153,824
Adjusted R^2	0.376	0.378	0.375
Note:			*p<0.1; **p<0.05; ***p<0.01

Our central concern, however, is whether manufacturing job losses are modified by educational attainment. The coeffcient on the interaction term between BA and job losses in the 90's in Column 2 of Table 3 suggests that is negative and roughly half the size of the positive coefficient on job losses in the 90's. This suggests that while having a bachelors degree does not erase the effect of recent job losses on the propensity to vote for Trump, it does reduce the effect of recent job losses by about half. Note that having bachelors degree also modifies the effects of more temporally distant job losses as well.

Finally, Column 3 of Table 3 looks at the modifying effects of the the educational attainment of the respondents' county in 2010, rather than their personal situation. Once again, the coefficient on recent job losses is positive and statistically significant. The coefficient on the interaction term between recent job losses (00's) and percent with BA is negative, statistically significant, and large relative to the coefficient on job losses.

Figure 4

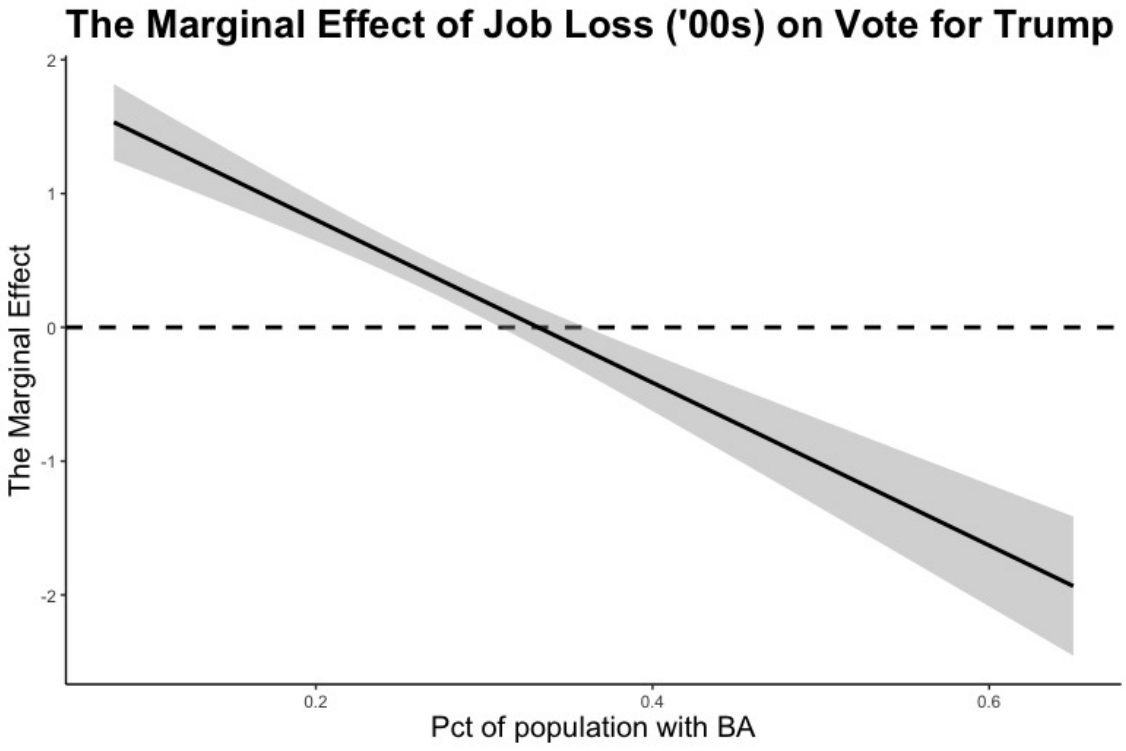


Figure 4 plots the marginal effect of recent job losses on the propensity to vote for Trump,

conditional upon the percentage of people in the respondent's county who hold at least a Bachelor's degree. In counties where educational attainment is low (about .30 of the population has a Bachelors degree or more in the average county in 2010), recent losses in manufacturing employment are associated with an increased propensity to vote for Trump. In contrast, in highly educated counties, manufacturing job losses are associated with a decreased propensity to vote for Trump.

In this section we have presented preliminary evidence that individuals living in locations experiencing substantial manufacturing job losses in the early twenty-first century had an increased propensity to vote for Donald Trump in 2016.[2] Many, though certainly not all, of these job losses were the result of import competition from China, which was a newly admitted member of the World Trade Organization (Autor, Dorn and Hanson, 2013*a*). But the effect of those relatively recent job losses were modified both by educational decisions - many of which were made decades before - of both voters and their neighbors neighbors.

Conclusion

We have argued that the educational decisions that were consequential in the election of 2016 had their roots in practices taking place decades earlier. Beginning with a cohort of voters born in 1950, white men began going to college less frequently. We have argued that this reduced enrollment in college is explained, at least in part, by the post-war abundance of high paying jobs that did not require a college education. We have also argued that the privileged access that discriminatory hiring practices afforded them, was one of the reasons why the availability of such jobs affected white men's educational investment decisions more than others. In future work we plan to trace many more consequences of those discriminatory practices.

[2]Many, though certainly not all, of these job losses were the result of import competition from China, which was a newly admitted member of the World Trade Organization (Autor, Dorn and Hanson, 2013*a*). But the effect of those relatively recent job losses were modified both by educational decision, many of which were made decades before - both by the voter and the voter's neighbors.

Data Sources and Descriptive Statistics

Determinants of County-Level Graduation Rates

County-level graduation rate among "white male" "other" in 2012/2016.
Unit: Percent (range: [0,100])
Source: American Community Survey.

% Employed in Mftg.
Unit: Percent (range: [0,1])
Source: Quarterly Census of Employment and Wages (Bureau of Labor Statistics)

Mftg. wage (thousands)
Unit: USD (in thousands. unadjusted)
Source: Quarterly Census of Employment and Wages (BUREAU OF LABOR STATISTICS)

Avg. Cty. Income
Unit: USD (in thousands. unadjusted)
Source: Bureau of Economic Analysis

County GDP
Unit: USD (in 2012 USD)
Source: Bureau of Economic Analysis

Table 4: Descriptive Statistics

Statistic	N	Mean	Min	Max
Pct of White Male with a BA or higher	7,358	31.667	7.280	92.650
Pct of Other with a BA or higher	7,358	0.270	0.056	0.714
Mftg. Wage (thousands)	25,033	47.205	7.641	315.474
Avg. Cty. Income (in thousands)	27,783	39.632	14.929	225.987
County GDP	27,783	5,400,464.000	6,311.000	681,549,961.000

‘ ‘Other" includes white female and non-whites.

Determinants of Respondent Graduation Rates

Bachelor's Degree
Unit: (dichotomous)
Source: Current Population Survey

% Employed in Mftg.
unit: Percent (range: [0,1])
Source: Quarterly Census of Employment and Wages (Bureau of Labor Statistics)

Mftg. wage
Unit: USD (in thousands. unadjusted)

Source: Quarterly Census of Employment and Wages (Bureau of Labor Statistics)

white male
Unit: dichotomous.
Source: Current Population Survey

taxable income
Unit: USD (unadjusted)
Source: Current Population Survey

Avg. Cty. Income
Unit: USD (in thousands. unadjusted)
Source: Bureau of Economic Analysis

Age
Unit: year
Source: Current Population Survey

Table 5

Statistic	N	Mean	Min	Max
BA	5,828,192	0.233	0.000	1.000
Mftg. wage (thousands)	1,002,537	23.497	5.258	171.419
White Male	5,871,134	0.401	0	1
Taxable Income (thousands)	3,426,481	22,559.730	0.000	2,967,999.000
Avg. Cty. Income (thousands)	2,914,020	42,065.950	12,088.000	191,220.000
Age	5,871,134	48.331	25	80

Determinants of Vote for Trump

Vote for Trump in 2016 presidential election Source: CCES

Job loss ('80s).('90's)('00s)
Unit: Percent (range: [0,1])
Source: County Business Patterns data

Bachelor's Degree
Source: Cooperative Congressional Election Study.
Unit: NA (dichotomous)

Pct of those with a BA degree or higher.
Unit: Percent (range: [0,1])
Source: American Community Survey.

Avg. Cty. Income (in thousands)
Unit: USD (in thousands. unadjusted)
Source: Bureau of Economic Analysis

Conservative.
Unit: NA (dichotomous)
Source: Cooperative Congressional Election Study.

Age
Unit: Year
Source: Cooperative Congressional Election Study.

Table 6

Statistic	N	Mean	Min	Max
Voted for Trump (2016)	184,811	0.364	0.000	1.000
Job loss ('80s)	524,670	0.019	−0.069	0.104
Job loss ('90s)	524,670	0.020	−0.064	0.192
Job loss ('00s)	524,670	0.028	−0.046	0.144
BA	531,291	0.350	0.000	1.000
Pct College ('10)	452,133	0.304	0.079	0.699
Avg. Cty. Income (thousands)	525,217	47.486	16.347	220.645
Conservative	529,549	0.341	0.000	1.000
Age	531,358	49.458	18	109

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