# The Effect of Small Group Health Insurance Reform on Coverage for Workers in Risky Occupations Dylan Eldred, B.S. Economics

### Intro

Healthcare continues to be a defining policy issue in the United States. Prior to the 1990s, millions of Americans were uninsured, despite most of them being employed. As a result, states adopted several policies aimed at increasing coverage. The expansion of health insurance forces states to consider a trade-off between efficiency and equality in healthcare markets. Several studies have analyzed the effect of health insurance on health and labor market outcomes, but few focus on its impact for workers in dangerous occupations. Using the rollout of Small Group Health Insurance Reform as a natural experiment, I seek to understand how these policies effect workers in risky industries. Prior to the 1990s, states were concerned with relatively low rates of insurance coverage among adults. By 1987, 23 million working age Americans were uninsured (Kastner & Simon 2002). Legislators at the time believed industry redlining was preventing workers in historically dangerous occupations from accessing care. As a result, 47 states adopted some level of reform from 1991 to 1996. These policies included rating restrictions, coverage guarantees, pre-existing condition protection, and portability laws. Although these reforms were intended to increase coverage, Simon (2002) found that coverage rates decreased during this period. She believes this is due to adverse selection, where high risk individuals crowded out low risk individuals as insurers raised premiums.

# Methodology

Similar to Simon (2004) and Gruber (1994) I employ a difference in differences (DD) approach to estimate the effect of mandated benefits on coverage rates among small firm workers in risky occupations. The difference in differences is calculated from the difference between small firm workers and large firm workers, and risky and non-risky occupations. I define "risky" as occupations with a fatality rate greater than the median.

I use the following regression model

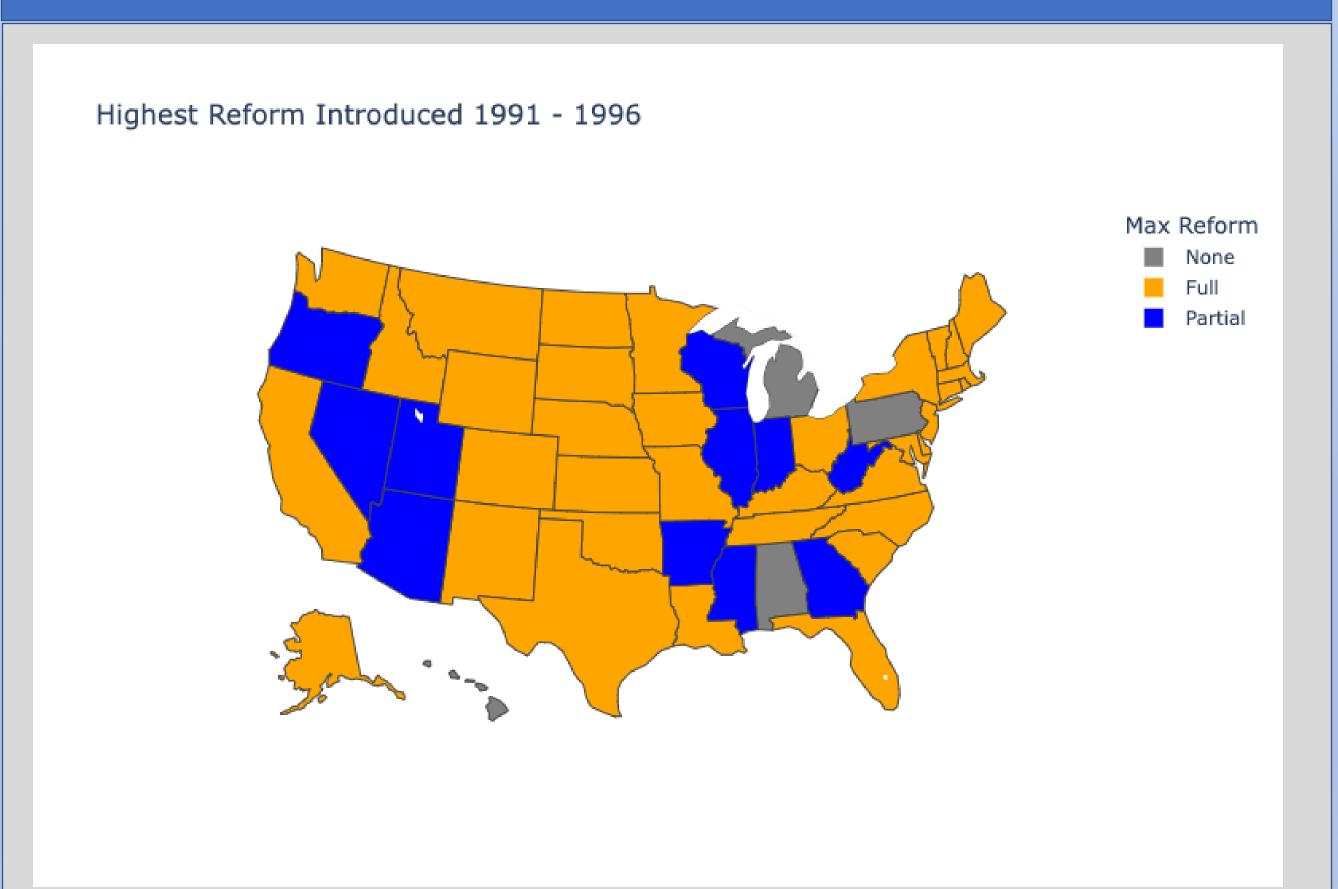
Model: Y\_i= $\phi(\beta_0+\beta_1 X+\beta_2 T+\beta_3 S+\beta_4 TS+...+\Sigma\pi POST_ij)$ Y represents the probability the worker was included in their employer's group health insurance policy.  $\phi$  represents the CDF. T , S, TS represent state, year, and state by year fixed effects, respectively.  $\pi$  represents the effect of the different levels of reform. POST is a dummy variable indicating if the reform is active that state during that year.

#### Data

- \*Occupational fatality data is from the Census of Fatal Occupational Injuries (COFI) from the Bureau of Labor Statistics
- \*COFI collected data on workplace fatalities from 1992 2001 and are \*Occupational data comes from the March Supplement of the Current Population Survey (CPS)
- \*The Annual Social and Economic Supplement (ASEC) includes data on income, insurance coverage, and welfare program involvement \*Sample includes 200,000 male workers, aged 18-65

Table 1				
VARIABLES PROBIT COEFFICIENT		VARIABLES PROBIT COEFFICIENT		
Small*Risky*Full	0.0717	Risky*Full	-0.0448*	
	(0.0445)		(0.0267)	
Small*Risky*Partial	0.0148	Risky*Partial	-0.0139	
	(0.0529)		(0.0308)	
Small*Risky*Barebones	-0.105**	Risky*Barebones	0.0563**	
	(0.0415)		(0.0247)	
Small*Full	-0.0315	Risky*Small	-0.0667**	
	(0.0279)		(0.0271)	
Small*Partial	-0.0352	Small Firm	-0.967***	
	(0.0327)		(0.0181)	
Small*Barebones	0.0552**	Risky Occupation	0.0619***	
	(0.0260)		(0.0175)	
		Constant	-2.191***	
Observations 225,207			(0.0813)	
Robust standard errors in parentheses				
*** p<0.01, ** p<0.05, * p<0.1				

# Figure 1



## Results

Overall, there was an associated increase in coverage in the full and

partial reform states, with a decrease in coverage in barebone states.

This differs from Simon's (2004) findings where coverage decreased overall for small firm workers. On the other hand, coverage for workers in risky firms, independent of firm size, increased.

To isolate the effect of reform on a given worker, I sum the coefficients on the 3-level interaction terms: Small\*Risky\*POST, Small\*POST, and Risky\*POST, where POST represents Full, Partial, or Barebones reform.

on the 3-level interaction terms: Small\*Risky\*POST, Small\*POST, and Risky\*POST., where POST represents Full, Partial, or Barebones reform. For small firm, risky occupation workers in the full reform states, there was a decrease in coverage by –0.46 percent. For partial reform workers, there was a -3 percent decrease. In barebones reform states, these same workers experienced a 0.65 percent increase in coverage. For workers in the small firm as a whole, we noticed a decrease in coverage, as seen in

## Conclusion

These results could be used to further research into worker selfselection, particularly with respect to the Roy Model (1951). Having access to health insurance through an employer makes certain jobs more attractive to workers. A defining feature of the U.S healthcare system is the function of employers in the market for health insurance. Several studies have found that increases in the availability of insurance is associated with increased labor mobility and decreased job-lock (Gruber & Madrian 1997). These policies may have spillovers into the labor market, affecting the types of workers that choose to work certain jobs. The effect of mandatory benefits highlights an important aspect of U.S. health policy. Lawmakers disagree over how to ameliorate market failures in the healthcare industry. Public health insurance plans funded via taxation can result in deadweight loss since taxpayers are required to contribute regardless of if they value the benefits or not. On the other hand, mandates are colloquially referred to as a "benefits tax" (Gruber 1994). Mandated benefits can result in lower deadweight loss in instances where workers value the benefit, as lower wages balance the increase in costs paid to labor. Neoclassical labor economics predicts that if workers value a mandated benefit more than the amount it costs to provide that benefit, we would see a decrease in wages as firms try to offset the costs of the benefit itself.

