### SOII/CFOI

#### 2018

## Unionization, Labor Laws, and Workplace Safety Malcolm Wardlaw & Dalia Marciukaityte

Workplace injuries and illnesses are costly to firms and society. To gain a better understanding of factors affecting work safety, we propose to examine unionization. Work safety problems were one of the factors leading to the early growth of unionization. Unions fight to improve workplace safety, which can lead to safer work environment. However, unionization is costly to firms, leading to fewer resources to spend on workplace safety. Thus, it is not clear what are the long-term effects of unionization on workplace safety. In this study we plan to examine the effect of unionization on workplace safety. Unionization is regulated by labor laws, which can be changed. Thus, it is important to understand the full effect of unionization on stakeholders to design optimal labor laws.

# Estimating Heat Driven Labor Fatalities and Adaptation Effectiveness A. Patrick Behrer & Jisung Park

Exposure to extreme heat has negative effects on worker performance and output. Our project builds on this observation by attempting to document the impact of exposure to extreme heat on workplace injuries and fatalities. We move beyond existing epidemiological literature on this question by considering all workplace injuries and fatalities, not only those diagnosed as being directly related to heat. The CFOI and SOII data will be used in a panel fixed effects model with weather data from NOAA and data on socio-economic covariates from the U.S. Census and the State of California. We also aim to estimate the effectiveness of a unique policy change in California in 2007 that aimed to reduce injuries and fatalities from heat exposure in highly exposed, outdoor occupations. The CFOI and SOII data is crucial in the evaluation of this policy by providing us a consistent measure of deaths and injuries across the countries to be used in a difference-in-difference evaluation of the policy.

### 2017

## Analyzing the Relationship between Unions, OHSAS Certification, and Occupational Safety Matthew Johnson, Michael Toffel, Yanhua Zhou

This proposal describes a research project to investigate the relationship between establishments' injury and illness rates and two organizational attributes—the presence and strength of a labor union, and adoption of the OHSAS 18001 occupational health and safety management system standard. We plan to investigate both directions of these relationships: whether relatively high injury rates spurs unionization and/or the adoption of the OHSAS 18001 standard, as well as the causal effects of unionization and OHSAS adoption on establishments' injury rates. Analyzing these relationships in a rigorous way requires establishment-level panel data on injuries and illnesses, and we thus request access to the restricted-use Survey of Occupational Injuries and Illnesses (SOII) through the Bureau of Labor Statistics (BLS).

Impact of Hedge Fund Activism on Employee Safety David Larcker & Andrew Baker

This proposal by the above-listed researchers seeks restricted access to the Bureau of Labor Statistics' (BLS) annual Survey of Occupational Injuries and Illnesses (SOII). We are interested in examining the empirical effect of investments from activist hedge fund institutions on workplace safety by examining variation in establishment-level injury data in the SOII. Activist hedge funds are a relatively new form of investment vehicle that take large stakes in corporations with the express intent of driving change in management or capitalization structure. While a robust literature has developed analyzing the impact of activist campaigns on the shareholders and management committees of targeted companies, comparatively little has been written about the impact on employees. We hope to fill this gap using the broad coverage of employee workplace injuries at the establishment level provided through the SOII, matched with an outside dataset of activist hedge fund campaigns, as well as firm- and industry-level covariates provided through public repositories.

## Assessing Public Policy Intervention Impacts on Construction Fatality Rates Wayne Gray

The research proposed here examines the possible role of public policy interventions in explaining substantial differences in fatality rates in the construction sector across states in the United States. Our analysis uses data from the BLS Census of Fatal Occupational Injuries (CFOI) from 1992 to 2015. NIOSH has agreed to fund our grant proposal to carry out this work. We focus on states as the unit of analysis because several public policies that may affect fatalities are determined at the state level. These include the generosity of workers' compensation (WC) programs and the stringency of enforcement of occupational safety and health standards (for the 21 states that operate their own enforcement program in the private sector). We generate state-year fatality rates using the CFOI data combined with measures of construction employment and hours. We then use multiple regression analysis to see how fatality rates are related to the public policy measures, controlling for other factors expected to influence fatalities. We do a similar analysis using a negative binomial model with state-year fatality counts as the dependent variable. The expected research products will consist of one or more published articles in academic journals.