

Comment

Gustavo Suárez: One of the main responsibilities of economic research is to inform public policy debates through the collection and analysis of data. The interesting paper by Mejía and Uribe is an important contribution to understanding the heated and relevant debate on violence against union members in Colombia. At first glance, the statistical analysis of a social problem involving the loss of human life may appear callous, but ignoring systematical empirical evidence in any debate may in fact hinder the effective adoption of public policies aimed precisely at solving the problem.

The paper by Mejía and Uribe provides three sets of results about homicides rates of union members in Colombia. This discussion briefly summarizes the three sets of results to highlight areas deserving further scrutiny.

International Context

In their first set of results, the authors provide an international perspective on the severity of violence against union members in Colombia, particularly in the context of Latin America. Citing survey data from the International Trade Union Confederation up to 2009, Mejía and Uribe document that union members experience higher homicide rates in Colombia than in any other country.

The extremely high overall rate of homicides in Colombia is commonly cited as a major explanation for its high rate of homicides against union members. To understand the power of this argument, further research should compare Colombia with other countries not only in terms of the rate of homicides of union members, but also in terms of the ratio of homicide rates of union members to overall homicide rates. Although they do not make it explicit, Mejía

The views expressed here are those of the discussant and do not necessarily reflect those of the Federal Reserve System or its Board of Governors.

and Uribe are probably aware of the importance of finding the appropriate comparison group, since they focus mainly on Latin America, where homicide rates, as reported by the UN Office on Drugs and Crime, are generally very high.

Future research may be useful also to understand the Colombian experience in historical perspective. Although there are practically no homicides of union members in advanced countries, as suggested by the survey data from the International Trade Union Confederation, these countries experienced major and sometimes deadly disputes between firms and unions over the twentieth century. Some of the main examples of these disputes are found in the mining industries in developed countries.¹ The not-so-distant experiences of developed countries suggest relevant questions for the present. Did union members experience significant levels of violence in the recent past in developed countries? What can we learn from those experiences to gain a better understanding of the current situation in Colombia?

Recent Trends in Colombia

In their second set of results, Mejía and Uribe document that the homicide rates of union members have decreased faster than those for the general population since 2001. In addition, the authors document that homicide rates of unionists have decreased when compared with those of other vulnerable groups, such as journalists and elected local officials. In an impressive data collection effort, the authors buttress their analysis with the study of a wide range of series.

An interesting extension to the analysis consists of developing a unifying framework to understand the connections between all series studied by Mejía and Uribe. For example, the homicide rate among union members, defined as the ratio of union member homicides (H_U) to the unionized population (U), can be expressed as

$$(1) \quad \frac{H_U}{U} = \frac{H_U}{H_p} \times \frac{H_p}{P} \times \left(\frac{U}{P} \right)^{-1},$$

where H_p is the overall number of homicides and P denotes total population. This expression shows that decreases in homicide rates of union members

1. The infamous Ludlow massacre in the United States during the Progressive Era illustrates the deadly disputes between the corporate sector and mining unions. See, for example, Andrews (2008).

can be explained by combinations of reductions in the fraction of homicides whose victims are union members; reductions in overall homicide rates; and increases in the unionization rate. This decomposition may be used as a tool to parse out the relative contributions of changes in overall homicide rates and changes specific to the unionized sector to explain the evolution of the homicide rate for union members.

The Effect of Union Activity

In the third and final set of results, Mejía and Uribe study the relationship between violence against union members and union activity. The authors propose three different measures of union activity: unionization rates; wage agreements and pacts; and protests (for example, strikes). The empirical strategy exploits variation across different geographical units in Colombia over time. The baseline regression explains violence against union members by using measures of union activity and other important controls, including overall homicide rates, GDP per capita, proxies for government protection, and measures of guerrilla and paramilitary activity.

To address the potential endogeneity of union activity, the authors instrument unionization rates and wage agreements with measures of the degree of formality of labor markets: the percentage of full-time employees and the amount of per capita social security payments. Similarly, the authors instrument strikes and other forms of union protest with measures of industrial activity: per capita energy consumption and per capita number of industrial establishments.

The authors select plausible instruments for isolating an exogenous source of variation of union activity. However, I suggest that the authors or other researchers take a deeper look into some of challenges to their instrumental variable approach and other potential sources of bias in their regressions.

First, the authors document that the instrumental variables (IV) estimate of the coefficient of interest is generally statistically insignificant across different measures of union activity. However, many readers may find striking that generally no other explanatory variable is statistically significant. The results leave us with no positive evidence on the determinants of union activity. Our understanding of the results could be improved by investigating this puzzle. Two possible explanations that require further scrutiny are the small sample of the regressions or a case of serious but not extreme multicollinearity.²

2. Notice that the *R* squares of the OLS regressions appear to be especially large.

Second, the authors focus on solving the potential endogeneity problem of the explanatory variable that they are most interested in: union activity. However, they themselves argue that another important determinant of the dependent variable is also endogenous: government protection, measured in terms of the rate of police arrests.³ Unfortunately, the endogeneity of other control variables generally makes the IV estimate of the coefficient on union activity inconsistent.⁴

Third, the analysis of some of the first-stage regressions suggests some tensions in the way that the authors interpret their instruments. As instruments for unionization rates, for example, the authors propose two measures of the degree of formality of labor markets: social security payments and the proportion of full-time employees with open-ended contracts. The results of the corresponding first-stage regression appear to give mixed signals about the interpretation proposed by the authors that union activity is stronger where formal employment is more prevalent. In particular, the proportion of full-time employees with open-ended contracts predicts higher unionization rates but social security payments predict lower unionization rates.

Fourth, the authors focus exclusively on biases arising from endogeneity of explanatory variables. However, the broader literature on the economics of crime has given a lot of attention to measurement error as an additional important source of bias.⁵ Certain types of measurement error may also bias OLS estimates of the coefficient of interest. For example, consider a case in which underreporting of homicides against union members is more severe where union activity is weaker because union members and their families have fewer channels and support networks to report homicides and thereby create public awareness of the link between homicides and union activity. In this case, measurement error is likely to bias the coefficient on union activity upward.⁶

Finally, debates about delicate topics that deal with human life almost inevitably force researchers to choose their words very carefully. Mejía and Uribe identify the hypothesis of “targeted” violence against union members

3. A similar case can be made about the endogeneity of the overall homicide rate.

4. As a simple robustness test, the authors may consider comparing their regressions with and without the other potentially endogenous explanatory variables that are not instrumented.

5. See Gibbs and Firebaugh (1990) and Levitt (1996).

6. Another measurement aspect of the data may require an explicit discussion by the authors: the assignment of violent events by geographical units (*departamentos*) within Colombia. Are violent events assigned to the home *departamento* of the union member or are they assigned to the *departamento* where the event takes place?

with a positive relationship between union activity and homicide rates against union members. In that interpretation, union members are “targeted” where unions are more visible or stronger. However, targeted violence could be interpreted very differently. For example, union members could also be “targeted” where unions are weaker, which suggests a negative relationship between union activity and homicide rates against union members. Would their test be able to identify a situation in which both types of “targeted” violence against union members take place?

Looking Ahead

The work of Mejía and Uribe suggests several interesting avenues for future research, perhaps beyond the scope of the paper. First, the authors focus on one direction of the relationship between homicide of union members and union activity. The converse relationship is a very interesting question in its own right, namely, is violence against union members deterring union activity in Colombia? In general, economists are still looking for a solid understanding of the determinants of union activity, so empirical contributions in this area are needed.

Second, as documented in figure 6 of the paper, the Colombian government has increased the amount of money spent on protecting union members. Have the government’s expenditures been effective in reducing the homicide rate among union members? Have they been effective in protecting all union members or only union leaders? And how do the expenditures in Colombia compare with those in other countries?

To conclude, the extremely interesting work of Mejía and Uribe is a major contribution to a very relevant debate for Colombia and to the understanding of labor relations and crime. The contribution of this paper is especially important because Mejía and Uribe compile a substantial amount of hard-to-find data on the topic of violence against union members and illustrate the relevance and limitations of those data. In addition, the authors help us understand the problem in terms of the main themes and methods of the broader literature of the economics of crime. Given the importance and the controversial nature of the topic, we should expect some researchers to disagree with the conclusions of this work and other researchers to explore extensions of it. In any case, the work of Mejía and Uribe will be a necessary reference for all of those future studies.

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