

**TROUBLE IN STORE: PROBES, PROTESTS AND STORE OPENINGS BY  
WAL-MART: 1998-2005**

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**ABSTRACT**

Wal-Mart has increasingly become the target of protests over its scale, manifested as contention over specific expansions. Often, the protests are local and led by local organizations, and as a result, chains face uncertainty whether local activists will organize a protest. We suggest that chain stores respond to this uncertainty through a ‘test for protest’ approach. They use low-cost probes that take the form of proposals to open a store. They then withdraw if they face protests, especially when the contexts of those protests make them more costly, either in terms of legislative barriers, consumer demand, or encouragement of protests elsewhere. Wal-Mart is more likely to open stores that are particularly profitable, even if they are protested, and in such cases, they also make larger donations to community causes. We find broad support for our predictions. Our uncertainty-based account of protests as signals stands in sharp contrast to full-information models which predict that protests should be rare miscalculations.

Wal-Mart's biggest enemy, according to Forbes Magazine, is not a business rival, but Al Norman, an anti-sprawl activist who successfully repelled an effort in the early 1990s by Wal-Mart to open a new store in his home-town. Indeed, the principal obstacle to the expansion of Wal-Mart has been protests by local activists. During the period starting from 1998 and ending in 2005, Wal-Mart floated 1599 proposals to open new stores. Wal-Mart successfully opened 1040 stores. Protests arose on 563 occasions and in 65 percent of the cases where protests arose, Wal-Mart did not open a store. What explains the impact of protests against Wal-Mart?

This question is not just of interest to scholars of retailing or regional studies, but of importance to organizational researchers and students of social movements. Since Thompson (1967:29), a canonical proposition in organizational theory is that exchange agreements rest upon prior consensus regarding the domain of an organization – a set of expectations about what the organization will and will not do. Protest against Wal-Mart stores is contention over the boundaries of the firm, and has implications for organizational performance and industry structure. Although a rapidly growing literature has studied the effects of protests on corporate decisions (King and Soule, 2007; King, 2008a; Ludders, 2006; Weber, Rao, Thomas, 2009), we still know little about the strategic interaction between activists and a specific target such as Wal-Mart, and the resulting influence on organizational domains (See Davis and McAdam, 2000; Baron, 2003). Indeed, the bulk of the literature on social movements analyzes how movements arise against state apparatuses, and has not devoted as much attention to protests directed against non-state organizations (Armstrong and Bernstein, 2008; Walker, Martin and McCarthy, 2008).

Formal models of strategic competition between targets and activists which presume both parties have complete information show that, in equilibrium, protest is a rare miscalculation because both activists and targets have incentives to avoid the cost of a protest (See Baron and Diermier, 2007). Activists have incentives to choose easy targets that are likely to accede to the demands of activists

before a protest. Similarly, firms have incentives to develop reputations for toughness in order to avoid a moral hazard problem and so will be unlikely to attract targeting. Alternately, firms have incentives to avoid protests by locating their operations in geographical areas that make protests rare and unviable. Thus, these arguments suggest that protests are likely to be rare, and to the extent they occur, their success is likely to be even rarer because of the incentives against compromise.

If Wal-Mart were an easy target, then protests would have been ubiquitous. Alternately, as a capable and powerful organization, Wal-Mart might have faced few protests because they would have located their stores in places where protest is unlikely, or protesters would simply not take on Wal-Mart knowing that their chances of success were meager. Yet between 1998 and 2005, 35% of Wal-Mart's new store proposals were met with a protest. This statistic casts doubt on both the views that protests are likely to be rare or ubiquitous. Of the new store proposals that attracted no protests, Wal-Mart opened stores 83% of the time. When a proposal was met with protest, the rate of subsequent opening was only 35%. These statistics cast doubt on the idea that activists choose easy targets that accede before a protest, and that firms successfully thwart targeting by developing a tough reputation. Moreover, in sharp contrast to the low success rate of protests against the state (See Giugni, 1998; Jenness, Meyer and Ingram, 2005), a surprisingly large fraction of the protests against Wal-Mart blocked a store opening. The substantial variance in the incidence and success of protest against Wal-Mart redirects attention to our basic questions: How does a firm such as Wal-Mart attract such protests, and why does it succumb to many of these protests?

Answering these questions in a theoretically informed way requires that we also examine the unique characteristics of protests that target private business firms such as Wal-Mart. To begin with, the business firms targeted by activists have different capabilities and goals than do states. Wal-Mart, arguably, is more coherent and focused in pursuit of its expansion goals relative to public bureaucracies that may frequently reflect goal disagreement due to the tension between their bureaucratic structures

and goals derived from the democratic will of the community, and due to the relative complexity of their goals (Blau and Scott, 1962). Also critical, protests against Wal-Mart are local in nature and led by local activists rather than by a national organization.

We build on these ideas and suggest that Wal-Mart and activists spearheading protests face uncertainty, and this uncertainty is at the crux of their interaction. Activists ideologically opposed to big box stores or those driven by not-in-my-backyard (NIMBY) motivations face uncertainty about where Wal-Mart will open a store and whether they can overcome the barriers to collective action in a community. Wal-Mart is uncertain about whether protests will mobilize in a community, whether they are driven by ideological or NIMBY considerations, and whether the protesters will seek to use public institutions to block an opening or to raise costs considerably.

We suggest that Wal-Mart uses a 'test for protest' approach using low-cost probes that take the form of a proposal. We argue that for Wal-Mart the cost of filing a proposal is low. We also suggest that the cost of dropping a proposal after a protest is low. As a result, it becomes possible for Wal-Mart to resolve uncertainty about the costs of entry into a community by testing the waters in many communities by filing proposals. For potential activists, the proposal is the stimulus that may trigger organizing activity.

Since protests are costly form of collective action, they constitute signals. Protests signal to Wal-Mart that costs of obtaining regulatory approval in a community are likely to be high, and that the reception of the store by shoppers will be less positive. Protests also signal to other passive citizens in the community who share common cause with activists that they are not alone and that voice is possible.

When protests signal that the costs of entry are likely to be high, Wal-Mart is likely to drop the proposal and try elsewhere. When do protests signal that the costs of entry are likely to be high? When they are led by local organizations, or when there are successful protests in nearby communities, or

when nearby communities have imposed tough regulations, or when they occur in communities with liberal ideologies. Wal-Mart also considers the likely profitability of a store, and is more likely to persist to open in the face of protest when the proposed store is farther away from an existing store. Wal-Mart's approach is consistent with its preference that protests be local and not coalesce into a regional or national movement. When Wal-Mart opens a store in the face of protest, it also is likely to make greater donations to the community than it otherwise would have in a bid to repair its identity.

### **WAL-MART'S CONTENTIOUS GROWTH**

Wal-Mart is not only the biggest chain store in the world, but also the largest firm in the world. It operates more than 6700 stores and its 2007 revenue of 348 billion dollars worldwide is greater than the world's 2nd, 3rd, and 4th largest retailers combined (D&B Company Database, 2007). It employs more than 1.2 million workers in the United States and is the largest employer. It has international operations spread over many countries, and international revenue accounts for 18.5% of its total. Its origins can be traced back to 1962 when the Walton brothers began opening discount stores in towns with populations of 5,000 to 25,000 and sought to draw customers from a large radius offering a wide variety of name-brand goods at discounted prices, while spending very little on advertising and marketing. Wal-Mart was the fastest retailer to reach the \$1 billion revenue milestone, which it achieved in 1979. Subsequently it began to open supercenters, stores with 150,000-250,000 square feet of space that had a grocery section and offered an even wider array of products.

By 1988, Wal-Mart was included in the Dow Jones Industrial Index and exceeded \$100 billion in revenues. In that year it had 341 supercenters and started to create Neighborhood Markets, 40,000 square foot grocery markets to penetrate into small towns that could not sustain supercenters. By 2005 end, Wal-Mart had 1980 supercenters with an average footprint of 187,000 square feet, each with 50 or so departments including a grocery store.

Research shows that Wal-Mart stores have mixed effects on the communities in which they are located. In general, retail employment declines as a result of Wal-Mart entry (Basker, 2005a, Dube, Eidlin and Lester, 2005), but consumers benefit from 3% overall price declines in competing stores, and in the case of some items, the declines are as high as 13% (Basker, 2005b, Hausman and Leibtag, 2005). Wal-Mart has negative effects on local retailers (Irwin and Clark, 2006), and supercenters undermine grocery stores and other retailers. In view of their mixed impact on the local retail trade and the increase in congestion and traffic, Wal-Mart faces uncertainty as to whether local activists will organize protests and raise its costs of entry or even deter entry.

### **Uncertainty About Protest**

While Wal-Mart may be knowledgeable about the nature of consumer demand and the needs of its target consumers, it is uncertain about whether activists will mobilize protest and use public institutions such as local government bodies to block entry or to raise the costs and decrease the benefits of entry by imposing requirements and undermining the legitimacy of the store in question. Wal-Mart's uncertainty arises from location-specific factors such as the costs of organizing and mobilizing for collective action and whether there is a local political entrepreneur (which could be an individual or an organization) who can carry a protest to the city council, licensing bureau, or environmental regulation office.

Wal-Mart's difficulty in predicting protests derives partly from an uncertainty faced by potential activists, specifically whether efforts to organize and protests will be successful. For activists, protest may be seen as a discrete multi-player public goods game. Models of discrete public goods typically have two equilibria; one where there are few or no contributors, and no public good, and another where there is broad contribution and success in creating the public good. Insight into the tipping point between these two equilibria comes from the literature on critical mass models of collective action which holds that that individuals vary in their willingness to participate in collective action.

Further, that willingness increases the more others participate in collective action, because of social rewards, and because the individual risks of protest are lower when the protesting group is larger. Successful collective action therefore depends on a sufficiently large mass of individuals willing to be first-movers (Oliver and Marwell, 1988; Granovetter, 1978). Incomplete information enters the process, because the willingness to be a first mover depends on perceptions of others' willingness to act. King (2008a: 26) gives a cogent account of the uncertainty and barriers faced by those who might protest Wal-Mart:

...members of a community may want to keep large retail corporations from setting up shop in their community. ... Yet if individuals do not share a common view of the problem or are not aware that other members of their community oppose large retailers, oppositional action will not likely occur. Small business owners and other members of the community may also lack the time to start a campaign against the large retailer. ... They may fear that individual resistance to the problem may not impede the retailer. Furthermore, they may think that even if they were to form a constituent group publicly opposed to large retailers, their chances of success are very small. They are not familiar with past collective successes of this type and may not be aware of the policies or legal changes needed to preserve their small business environment.

Comments from citizen-protestors also support the uncertainty at the heart of our model. After protestors induced a Wal-Mart withdrawal in Norfolk, VA in 2005, they appeared to have been highly doubtful about success: "I can't believe we won," one resident told the Press. Another said upon learning of the victory, "you're kidding. I have chills going down my back. Everyone told me you can't fight city hall, but I said you have to fight even if you don't win." A third summarized, "I'm stunned. I'm really stunned." Clearly, these are nothing like the prescient agents that drive full-information models of protest.

Diermeier (2003) offers a formal model of collective action in which participation rates are high or low depending on the size of the benefit  $b$ , the costs of organizing  $c$ , and the 'price' that can be extracted from the target  $k$ , and collective action occurs whether  $b > kc$ . At the heart of our approach to the phenomenon of anti-Wal-Mart process is a belief that Wal-Mart cannot accurately evaluate whether  $b > kc$  for specific store proposals. We've explained the theoretical justification for this belief, that the resolution of  $b > kc$  depends on the perceptions of hundreds of potential protestors.

Nevertheless, it is worth examining the empirical evidence for this position. Can Wal-Mart use the characteristics of communities to accurately predict where protests are likely to occur? Our analysis indicates that it cannot.

Appendix 1 shows the results of an analysis where the dependent variable is whether or not a proposed Wal-Mart store meets protest. This model is an intermediate stage in our analysis of the likelihood of protest success, but for now it is relevant in two ways. First, some community characteristics increase or decrease the likelihood of a protest. The significant variables are fully consistent with past analyses of social movement activity, and fit into the above model. Liberal ideology (operationalized in the model by Democratic Party voters and college-educated citizens) would represent a larger “b” and does indeed increase the likelihood of protest. Social movement theorists would predict that the costs of organizing, “c”, are lower for homogenous communities and those with pre-existing social movement organizations. Again, communities with those characteristics are more likely to host protests against Wal-Mart.

The second key result of the modeling effort concerns the concerns the overall predictive power of the model and is revealed in the classification table. Simply, the model is not very good at accurately identifying where protests will occur. The model accurately predicts whether a community will be in the protest or no protest category 70% of the time when we set the predictive criterion at 0.5. This is only a small improvement on the null model (since 65% of Wal-Mart proposals met no protest, a null model which simply predicted “no protest” in every instance would be right 65% of the time). Another way to consider the accuracy of the model is that it correctly predicts protests only about 1/3 of the time (192/563), and these relatively few successes come at the cost of mis-classifying approximately 10% of the cases that did not experience protests. The meager predictive power is not a result of the parsimony of the model presented; we have examined dozens of variables in efforts to build a more accurate model of the incidence of protest. In analyses not reported for the sake of

brevity, we constructed yearly models of protests for each year from 1998 until 2005. We found that the ability of the model to correctly predict protests did not appreciably improve over time so there is no reason to believe that Wal-Mart's uncertainty decreased over time.

We take from these analyses and the complementary theory regarding the difficulty of predicting collective action that Wal-Mart is uncertain as to where protests will happen. This uncertainty is at the foundation of the theory and predictions we develop next. In brief, we expect that Wal-Mart will take an exploratory approach, launching many new store proposals in a low-cost way, as an attempt to test communities for their capacity to protest. Protests will be taken as signals about the costs and benefits of a new store, and Wal-Mart will often withdraw when protested. When Wal-Mart doesn't withdraw (perhaps because a store is particularly beneficial, or because the protest signal is weak), it will manage store-opening so as to diffuse the spillover of contention to other locales.

### **Exploratory Expansion in the Face of Uncertain Contention**

In one sense, as a multi-location firm thinking of new locations, Wal-Mart's situation is analogous to a multi-product firm that faces uncertainty about whether new products are likely to succeed and gain market share. In such cases, as Raubitschek (1998) points out, firms have incentives to proliferate products to 'hit the jackpot', and that such an approach is viable when the cost of trial is low, and when the cost of exit is low. For example, in Japan, 1000 new soft drinks are launched each year, and only 3 of them become hits. Failed drinks are withdrawn in a matter of weeks. Coke Japan launches 100 soft drinks each year in the hope one of them will be a hit. Similarly, Wal-Mart is a multi-location firm, and faces uncertainty about collective action that can raise costs of entry in a location and has to test the waters in many communities. So it "tests for protests" through low-cost probes that take the form of proposals.

The costs of testing a market by filing a store proposal are low. Wal-Mart does not need to buy land in advance or commit to expenses. It needs to prepare a proposal that contains a noise study, a

traffic study, an air study, an environmental impact study and an economic impact study. Often, these costs may be shared by a developer. For example, a noise study costs between \$5,000 to 10,000 and the other studies are comparable. Thus, the cost of a proposal is around \$150,000 dollars or so with liberal allowances for each of these studies. Municipal planning departments charge modest sums ranging from \$2,000-\$10,000 to evaluate the proposal. Proposals are essential for activists to begin organizing because there needs to be a target and threat for protests to arise. Note that the cost of withdrawal is low too for Wal-Mart because many of these proposals are in small towns, and receive local coverage rather than national coverage. Testing the water in many communities is a simple way for Wal-Mart to avoid making mistakes because it is far cheaper than making an actual investment in land and buildings to open a store against community opposition. As one Wal-Mart official said “When we are looking at investing more than \$10 million in a community, we don't want to make any mistakes (Sprawl-Busters, 1998).”

When Wal-Mart tests the waters in a community by placing a proposal, it receives a signal in the form of a protest. Signals are credible when they are partially under the control of the sender, and when they are costly enough (Spence, 1973). Protests are costly to organize, and are partially under the control of activists, and therefore, signal to Wal-Mart that the entry may be blocked or the costs of entry may be too high because of ideological opposition or not-in-my-back-yard (NIMBY) concerns. Protests signal to passive members in the community that they are not alone and that voice and action are possible, and thereby, may trigger further participation. While it is conceivable that protests against Wal-Mart may trigger counter-mobilizing by Wal-Mart supporters, they face high barriers to mobilization, at the least the typical ones of free-riding and absence of organization, plus the stigma of an unfashionable cause, and are unlikely to band together.

A fundamental implication of the argument that Wal-Mart tests markets by floating proposals that it is uncertain will be welcomed by the community is that it will incur a substantial number of

protests. This is in sharp contrast to models from positive non-market strategy which presume full information on behalf of targets and protesters (See Baron and Diermeier, 2007). Under full information protests are an anomaly. If potential protestors have the capacity to win a contention, then the corporate target should concede before the protest starts, while if the corporation has the power to win, then protestors should not bother with costly protests. Protests, therefore, would only occur if one party mis-calculates their odds of winning. As we have reported, 35% of Wal-Mart's proposals from 1998-2005 were protested, a figure which should baffle anyone who believes that Wal-Mart knows before proposing a store whether the target community will generate a sufficiently potent protest. In the next part of our theory development, we consider Wal-Mart's response when protests occur.

### **Response to Protest**

A second fundamental implication of the test for protest theory is that Wal-Mart will often not open a proposed store if it is protested. There are serious reasons to credit the null hypothesis in this case, again by referencing the full-information theory. If, as that theory suggests, protests occur when a party to a potential contention mis-calculates its odds of winning, it is reasonable to argue that it would be the protestors, decentralized and motivated partially by ideological concerns, that would make the mistake of tilting at windmills.

Further arguments from game theory suggest that Wal-Mart might fight any protest vigorously, so as to avoid developing a reputation as a "weak target" and attracting more protests (Baron, 2009). If that were true, the resources of the world's largest corporation could presumably overwhelm any of the local groups that protest Wal-Mart. Instead, we believe that the social movement context shifts Wal-Mart's reputational concerns. A reputation for bullying communities could be even more harmful for them than a reputation as a weak target. By withdrawing in the face of protests, rather than fighting them out, Wal-Mart reduces the likelihood of protest contagion. A bitter and public fight with one

community could make Wal-Mart a common enemy that a regional or national social movement could cohere around (Klandermans, 2002). Furthermore, quick withdrawals may not feed a reputation that Wal-Mart is a “weak target” if they are not widely communicated in the press (King, 2008b). In line with this, reports of Wal-Mart withdrawals in the national press were vanishingly rare (a total of 13 reports, representing roughly 2% of Wal-Mart withdrawals).

Local reports of Wal-Mart withdrawals were also infrequent, but those we found provided support for our argument that Wal-Mart interpreted protests as negative indicators in the testing of a proposed store. In Edmond, OK, in 1998, when a supercenter proposal was met with protest, a Wal-Mart representative at a public hearing explained that his company did not anticipate such emotional opposition to the store. In 2000, when Wal-Mart backed off a proposal in Fort Worth, Texas, a representative actually expressed gratitude to signatories of an anti-Wal-Mart petition: “Certainly our actions show that we are willing to respond to feedback. We appreciate the individuals that provide us with good solid information that we can work with.”

H1: Proposed Wal-Mart stores are less likely to open when they are protested.

Of course, Wal-Mart does not concede to every protest. In the next section we consider how the costs, illuminated by the signal of the protest, of opening a store are balanced against the benefits.

### **Costs Signaled by Protests**

Protest Organizations as Signals: A powerful signal for Wal-Mart that a protest will exert substantial costs of opening is the existence of a special purpose organization championing the cause of the protesters. Such organizations are very useful tools for mobilizing the diffuse interests of the anti-Wal-Mart contenders. Since “the mobilization potential of a group is largely determined by the degree of preexisting group organization” (Jenkins, 1983: 538), social movements are more likely to have an

impact when community level organizational infrastructures are available to supply activists. Many configurations, including personal networks, voluntary associations, work groups, and other existing organizations and institutions have been shown to enable individuals to act collectively (Marrett, 1980; Oliver, 1993; McAdam, 1988; McAdam, McCarthy and Zald, 1988; McCarthy and Wolfson, 1988; Gould, 1991). These infrastructures provide knowledge capital that helps the new movement develop organizationally and achieve its goals (Cress and Snow, 1996), and supply trained organization builders (Swaminathan and Wade, 2001).

In addition, equipped movement organizations may provide an apparatus to encourage and direct protests. Organizations also maintain inter-organizational relations which act as a communication network for a social movement that might otherwise suffer from isolation as it is exercised at the local level. This can be useful to communicate ideas about protest tactics between places, and increases the risk to Wal-Mart that a fierce battle may ignite protests in other places.

H2: Proposed Wal-Mart stores are less likely to open when protests are led by organizations.

Spatial Contagion As Signal: Spatial contagion is of particular significance for movements against geographically dispersed organizations such as Wal-Mart. Identity movements are certainly capable of spreading their messages over geographic distance through the work of mobile activists and media sources (Roscigno and Danaher, 2001). Because the majority of an individual's ties reach over short distances, personal networks are best at spreading social movements across relatively small, often spatially contiguous areas. Spatial contagion has been observed for social movement activity such as rioting (Myers, 1997, 2000), strikes (Connell and Cohn, 1995), and armed resistance (Gould, 1995; Oliver and Myers, 2003). Most importantly for our study, social movement organizing activity has been shown to spread through spatial contagion (Hedstrom, 1994; Hedstrom, Sandell, and Stern, 2000). The fundamental process underlying such spatial contagion is information transmission, that is,

the message and actions of the social movement must become known so that they can spread. Rioting, for example, spreads because it is reported in the news, and it spreads through spatially heterogeneous contagion because local news are reported in more detail than national news (Myers, 1997). Similarly, trade unions spread because their organizers seek to use social contacts to start unions in other locales, and they spread through spatially heterogeneous contagion because social contacts are denser over short distances (Hedstrom, 1994).

If protest is limited to one community, Wal-Mart may circumvent it by opening a store in a neighboring community. Just as an oilman may drain the oil from underneath neighboring properties with a deep well, Wal-Mart may drain retail business from a community by locating in a neighboring community. A successful protest in a neighboring area is likely to have a powerful impetus for protest because activists can learn tactics from neighboring areas (Olzak, Shanahan and West, 1994; Soule, 1997; Oliver and Myers, 2003). In turn, successful protests in the neighboring area also bolster the identity mobilization effort in a focal community against Wal-Mart. Anti-Wal-Mart protestors realize this, giving them yet more motivation to operate spatially. Wal-Mart also has incentives for protests to be local and not coalesce into a broad movement at the state-level or national level. One way of undercutting such contagion is to drop a protested proposal in a community when protests in neighboring communities have been successful.

H3: Proposed Wal-Mart stores are less likely to open when protested when there have been successful protests in nearby communities.

Institutional Escalation As Signal: Wal-Mart's contagion concerns are not merely that protest will spread, but that specific regulatory responses against new big box stores will spread from municipality to municipality. The "nuclear option" of regulatory responses against Wal-Mart is a size-cap restriction, which limits retail stores in the municipality to a given size chosen to preclude big box retailers. If protestors succeed in encouraging size-cap regulation, it is particularly bad for Wal-Mart

because it eliminates the whole of the municipality as a potential location for as long as the restriction stands. Given the evidence that protest tactics diffuse spatially (Soule, 1997), and that this process extends to regulations on chain retailers (Ingram and Rao, 2004), protesters will be more likely to pursue size-cap regulation if it has been used nearby. Other evidence on the diffusion of regulation suggests that the success of those efforts will also be higher when similar regulations have been implemented nearby (Walker, 1969; Soule and Zylan, 1997). Fear of such institutional escalation should make Wal-Mart more likely to accede to a protest by withdrawing a proposal when there are proximate examples of size-cap regulation.

H4: Proposed Wal-Mart stores are less likely to open when protested when size-cap regulations have been implemented nearby.

Liberal Ideology as Signal: Anti-Wal-Mart protests have a historical antecedent in a social movement in the first half of the twentieth century that aimed to limit the growth of chain stores (Ingram and Rao, 2004). In the 1920s and 1930s, anti-chain contention was based on an ideology of localism (or alternatively, anti-corporatism) that saw chains and economic concentration more generally as a threat to autonomous and self-sustaining communities, and therefore to opportunity, progress and democracy itself. The sentiment is effectively summarized by Louis Brandeis in a dissenting opinion in the case of *Liggett V. Lee*, where the Supreme Court ruled against a Florida anti-chain tax law that discriminated between chains that operated in multiple counties. Brandeis supposed that the people of Florida:

...may have believed that the chain store, by furthering the concentration of wealth and of power and of promoting absentee ownership, is thwarting American ideals; that it is making impossible equality of opportunity; that it is converting independent tradesmen into clerks; and that it is sapping the resources, the vigor and the hope of the smaller cities and towns. (*Liggett*, 288 U.S. 568-569; quoted in Schragger, 2005).

Schragger (2005) reconciles the ideological underpinnings of the earlier anti-chain contention and the contemporary protests against Wal-Mart. The political geography of the two episodes is strikingly different. Chains in the 1920s were characterized as “Wall Street invading Main Street” and the rural south was the epicenter of protest. Wal-Mart on the other hand began in the rural south and has experienced protest as it expands to more urbanized locations in the North East and West. Schragger observes that “those liberal, cosmopolitan opinion-making institutions of a previous era, which had viewed the anti-chain store backlash as backward and reactionary, are now leading the charge against big box stores.” As the location of contention has changed, so has its content. Anti-Wal-Mart protestors:

“tend not to emphasize the “small dealers and worthy men” who were at the center of the anti-chain store movement. Instead their focus is on the poor, not the petit bourgeoisie. And while contemporary critics of consumerism and consumer culture often assert that the national preoccupation with consumerism is destructive of democracy, those critics tend to be drawing more from a Marxist critique of materialism than from a Brandesian celebration of the independent retailer” (Schraagger, 2005: 176).

Figure 1 draws direct evidence of the ideological underpinnings of local anti-Wal-Mart contention by considering the content of claims. The basis of the data is 506 reports of contentious claims made at the local level, mostly in response to proposals for new Wal-Mart stores.

Insert Figure 1 here

The six items on the left of the chart might be categorized as liberal issues. They evidence some continuity between the anti-Wal-Mart protests and the first wave of anti-chain contention, as almost half of all contention is with regard to the preservation of community and the protection of local businesses. But beyond the labels of community and local business, these claims are not completely consistent with those of the earlier anti-chain episode, because what they celebrate about

communities and fear from the chains is different. It is not uncommon for anti-Wal-Mart contenders to complain about the aesthetic threat to their property values, an argument that seems pale compared to the earlier arguments of progressive decentralists regarding the importance of vibrant communities for opportunity and progress. And when the National Trust for Historic Preservation declares the whole state of Vermont to be endangered to discourage new Wal-Mart stores, it seems that some anti-Wal-Mart contenders fear the infusion of the “Red-State” culture that they associate with Wal-Mart more than the implications of corporate concentration. Indeed, a New York Times article reporting the designation of Vermont as endangered notes as evidence of Wal-Mart’s controversial status that it is favored by religious music fans and Dick Cheney (Belluck, 2004).

Beyond community and local business, the contemporary episode demonstrates the progress of contention, as a new set of claims have emerged around causes such as consumer and employee rights, the environment and international trade practices. On the right of the graph are six issues that are not so clearly liberal, such as traffic, crime, tax subsidies, complaints over specific business relationships (e.g., a sour transaction with a local supplier) and retail saturation (retail saturation is a general claim that there is too much retailing, distinguished from the local business category, which contains an evaluation about which type of retailing—chain or independent—is preferable). The biggest category on the right hand side of the graph, “other” represents mostly claims that local zoning laws or regulatory procedures have been violated.

Liberal ideology may increase the motivation of anti-Wal-Mart forces to push protests to success, making those protests more potent cost signals to Wal-Mart. Liberal communities may also be more likely to host local governments and other institutions that are sympathetic to the goals of anti-Wal-Mart protests. Protests in more liberal communities may also have more of a negative impact on potential revenues for a store if opened. Kleine, Kliene and Kernan (1993) use social identity theory to predict that the frequency an act of consumption is performed depends on the *salience* of the identities

the act represents. Thus, protests may interact with political ideology by making certain identities (e.g., as someone invested in the issues on the left of Figure 1) more salient for shoppers. This effect can be reinforced by social networks, which may create ideological norms against patronizing a store whose character as a violator of the environment, or enemy of local business, has been made salient by protest.

H5: Proposed Wal-Mart stores will be less likely to open when protests arise in communities with more liberal ideologies.

Store Profitability: Whereas protests signal political and market costs of opening a store, these should be weighed against the potential benefits of the store to Wal-Mart. The quick withdrawal in the face of protest that we predict as part of the test for protest theory derives from the position that withdrawals are of low cost to Wal-Mart. That is generally true, and has been becoming more true over time because as Wal-Mart has continued its expansion in the United States, it has by necessity placed new stores closer and closer to existing stores and increasing cannibalization, which means that the incremental profits of an additional store are lower when it is closer to existing stores (Holmes, 2008). This suggests that the cost to Wal-Mart of withdrawing a proposal is higher if the proposed store is farther away from existing stores.

Correspondingly, the indirect cost to Wal-Mart of fighting a protest is also lower when the proposed store is farther away from existing stores, because public bad will from fighting protestors in a community can be expected to transfer over short distances to hurt sales in nearby stores. This logic was illustrated in 2005, when Wal-Mart withdrew a proposal to build a superstore in Newport News, Virginia in response to community resistance. Mayor Joe Frank said after meeting with Wal-Mart officials that they “felt it was just not a project they wanted to pursue. You don't put off the community you want to do business in [Wal-Mart has other stores in the area].” When proposed stores

are farther from existing stores, they are more beneficial to Wal-Mart to open, and less costly to Wal-Mart to fight for, suggesting:

H6: Proposed Wal-Mart stores are more likely to open despite protests when they are farther from existing Wal-Mart stores.

Donations as Pro Social Behaviors when Stores are Opened After Protests: When Wal-Mart does open a store that was protested (because the store was particularly profitable or the protest signal weak), we expect that it will nevertheless make a concession to the protestors, both to create local goodwill and to reduce the likelihood that disgruntled protestors will form regional or national movements. Another way of understanding such concessions is to realize that the price that protestors extract from a corporate target need not be in the currency of their protest demands (Dermeier, 2003).

A simple and legitimate way for Wal-Mart to concede to protesters is to make a donation to community causes. Such donations represent a case of pro-social behavior to restore a favorable image. Goffman (1959) suggested that individuals resort to defensive impression management techniques to restore their 'face' after their identity has been spoiled. Since then, neo-institutional researchers have proposed that organizations use socially acceptable procedures to carry out controversial activities (Meyer and Rowan, 1977; Scott, 2007). Tedeschi and Ross (1981) have shown that individuals use enhancements to improve the perceived merit or desirability of a controversial action. In short, impression management by firms helps repair legitimacy (Elsbach and Sutton, 1992). In this regard, donations may be seen as gifts to the community that signal Wal-Mart's responsiveness to the community (Fombrun and Shanley, 1990). Wal-Mart's donations are targeted to local community causes like the Little League and represent a tactic of cooptation and cultivating a community-friendly image.

H7: Wal-Mart's donations to the community are likely to increase after a protest against store opening.

## DATA AND METHODS

Our first dependent variable is whether proposed stores were actually opened. We tested the hypotheses regarding the effectiveness of protest on store opening using a dataset of all the places where Wal-Mart proposed to open new stores from 1998 to 2005. Our unit of analysis is place, which refers to a city, town, village or unincorporated census area. Place is generally a smaller unit than county and there were 25,375 places in the U.S. in 2000. A new store proposal was defined as a proposal to open a discount store, a supercenter, or a neighborhood market. A relocated store (i.e. moving an existing store to a new location in the same community) was not treated as a new store. We started our observation in 1998 because one of our data sources (the Sprawl-Busters database of protests) began to collect anti-Wal-Mart protest data from 1998 onwards. We ended in 2005 because we need a time interval of at least two years to determine whether a propose store was opened<sup>1</sup>.

We compiled the dataset from three different sources. First, we started with a list of all Wal-Mart store openings from 1962 to 2005.<sup>2</sup> We estimated the proposal time for each of the opened stores as 789 days before the opening, a figure that represents the average time between proposal and opening for stores where both dates are available. Second, we collected protest data from Sprawl-Busters, an anti Wal-Mart organization that has been collecting the news about anti big-box store protests from various sources since 1998.<sup>3</sup> From the Sprawl-Busters database, we selected all the protests that targeted at Wal-Mart's store proposals from 1998 to 2005. We also collected reports of protests from other activists' websites. A protest against a proposed Wal-Mart store can be reported

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<sup>1</sup> To allow more time to observe store opening, we examined proposals from 1998 to 2004 and to 2003 and got similar results as those reported here.

<sup>2</sup> These data was published by Wal-Mart Inc. on its website and then removed. We thank Panle Jia for sharing the data with us. This dataset can also be downloaded from <http://www.econ.umn.edu/~holmes/data/WalMart/index.html>, accessed on March 16, 2009.

<sup>3</sup> Sprawl-Busters has been collecting the information of anti big-box store protests from a variety of sources, including media reports, governments' information releases, court results, independent institutions' research reports, and the activists' self-reports.

multiple times, and we coded the multiple reports as one protest as long as they were targeted at the same store proposal. Third, we conducted a media search for reports about Wal-Mart's store proposals and protests from 1998 to 2005 using the Lexis-Nexis and the America's News databases. We matched the data of proposed stores and protests obtained from the three sources and dropped the duplicated cases. In total, Wal-Mart made 1599 new store proposals in 1207 places, 563 of which saw protests, and 1040 ultimately resulted in store openings. Figure 2 illustrates the geographical distribution of the store proposals, protests, and protest success (i.e., the places that saw protests and where Wal-Mart failed to open stores by the end of 2007).

Insert Figure 2 here

The multiple sources of our data with different interests in the contention, including the representations of Wal-Mart, protestors and the media, mitigate the concern about selection bias that would loom large if we relied on only one source. Overall, 94% of proposed stores appeared in more than one of our sources. A particular concern with our data is the reliance on Sprawl-Busters to identify protests. Given the advocacy of that organization, we worried about the possibility that they might over-represent the incidence and success of anti-Wal-Mart protests by reporting phantom incidents of protests, in cases where there may not have been a real protest or even a real proposed store<sup>4</sup>. Thus, we were particularly concerned about the 10% of Sprawl-Busters reported incidents that were not confirmed in Lexis-Nexis or America's News and did not result in actual Wal-Mart store openings. We gain some confidence from the fact that Sprawl-Busters often reported these incidents with specificity, 50% of the time listing specific organizations that led local protests, and 68% of the time listing specific tactics. These levels of specificity suggest to us that there were real events underlying the reports, because mis-reporting protest incidents with such specificity would raise the real possibility that Wal-

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<sup>4</sup> We were not concerned that Sprawl-Busters would attempt to inflate the perceived efficacy of Anti-Wal-Mart efforts by omitting reference to protests that failed to stop stores because they report protests as they happen, before it is known whether or not the protest will succeed in stopping the store opening.

Mart could disconfirm the reports and discredit Sprawl-Busters. Nevertheless, we performed supplementary analysis where we omitted the 10% of Sprawl-Busters reported protests that were not confirmed in other sources. The results were substantively the same as those we report below.

### **Dependent Variable and Estimation**

Our dependent variable is the opening of a proposed Wal-Mart store. Opening is a dummy variable that is coded 1 if a proposed store was successfully opened by the end of 2007. We used a probit model to estimate the effect of protests on the openings of Wal-Mart stores. However, we confronted a non-random assignment problem: protests are not likely to happen randomly; communities choose whether to organize protests in the first place and consider their chances of success when they do so. An added issue is that protests also are conditional on a proposal from a Wal-Mart, and in turn, these proposals are also not distributed randomly.

Thus, standard econometric methods that assume random treatment cannot accurately estimate causal relationships in this circumstance. There are two main approaches to estimate causal effects of nonrandomized treatment: methods based on controlling for observed differences (e.g., multivariate regression and propensity score matching) and those based on instrument variables (IV) (Gozalo and Miller, 2007). The IV approach relies on the identification of variables that affect treatment and only affect the outcome through the treatment. Moreover, the validity of IV variables cannot be empirically verified (Angrist, Imbens, and Rubin, 1996). In our research context, we do not have obvious IVs, and thus we focus on the approach that controls for observed confounding variables.

We adopted the inverse probability treatment weighting (IPTW) method that is recently developed and widely adopted by biostatisticians to resolve the nonrandom assignment problem in observational data (Robins, Herman, and Brumback, 2000; Azoulay, Ding, and Stuart, 2007). The IPTW relies on the logic of counterfactuals and compares each treated subject or observation to a

pseudo-population and the difference both groups represents the average treatment effect. More

specifically, each observation in the sample is assigned a stabilized weight<sup>5</sup>,  $sw_i = \frac{P(A = a_i)}{P(A = a_i | L = l_i)}$ ,

where  $a_i = \{0,1\}$  indicates potential treatment (i.e., protest or not) and  $l_i$  represents the observed confounding variables. For those places that protested Wal-Mart's proposals, they receive the

weight,  $sw_i^T = \frac{\frac{1}{n}(\sum_{i=1}^n a_i)}{p_{i11}}$ , where  $p_{i11}$  is the predicted probability of place  $i$  to protest if Wal-Mart

proposed to open a store. The numerator is the sample proportion of places that actually protested.

Similarly, for those places that did not protest, they receive the weight,  $sw_i^C = \frac{1 - \frac{1}{n}(\sum_{i=1}^n a_i)}{p_{i01}}$ , where

$p_{i01}$  is the predicted probability of place  $i$  not to protest if Wal-Mart proposed to open a store. In this way, the IPTW method simultaneously counterbalances the estimation bias caused by Wal-Mart's selection of a place to propose and the activists' choice to protest.

We adopted the Heckman two-stage selection model (Heckman, 1979) to calculate the probability of the incidence of protests, because protests can only be observed in places where Wal-Mart proposed to open new stores and Wal-Mart is unlikely to randomly propose new stores. Instead, Wal-Mart is likely to consider the size of local market, economic conditions, transportation costs, and even potential resistance. The Heckman two-stage selection model (Heckman, 1979) that accounts for the sample selection problem through estimating a selection effect coefficient (called the inverse Mills ratio) in a first-stage probit model and then controlling the coefficient to a second-stage model. To conduct the first-stage probit model, we collected additional data from 1998 to 2005 about all American places where Wal-Mart could have made store proposals. We predicted the likelihood that

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<sup>5</sup> Stabilized weight enhances the efficiency of estimation.

Wal-Mart actually proposed to open a store in a place in a year by using the place's ln-transformed population, median household income, distance to the nearest Wal-Mart's distribution center, the percentage of union membership in the private employment sector in the state, and calendar year as explaining variables. In the second stage, we estimated a probit model of protests by controlling the sample selection coefficient, including all independent and control variables, and reporting geographically clustered robust standard errors. Thus, the Heckman probit model estimates the chance of protest conditional on a selection model of proposal. Appendix 1 presents the result of this model of protests.

Another methodological issue is the potential interdependence between observations. Although most places in our sample experienced only one proposal during our study period, there are some places where Wal-Mart made multiple proposals. To account for the correlation in the error terms due to the clustering within the same place, we used geographically clustered robust standard errors.

### **Independent and Control Variables**

*Protest* serves as an independent variable in the store opening analysis to test Hypothesis 1. We operationalized protests as occurring if our sources reported that individuals or organizations did any of the following in response to a proposed Wal-Mart store: encouraged public hearings, collected citizens' signatures to initiate a referendum, demanded additional studies of Wal-Mart's impact on local businesses, traffic and environment, highlighted environmental hazards, deployed zoning restrictions, lobbied for store-size cap legislations, or filed lawsuits against Wal-Mart or local government. In supplemental analyses, we examined whether any of these forms of protest were more effective than any other and found that they were not. This somewhat surprising result may occur because the incidence of any form of protest is sufficient to signal to Wal-Mart that a community has a capacity for

collective action, and might eventually employ other forms of protest. It is certainly true that in some of the longer protest episodes, protestors employed many of the protest forms on this list.

To test whether protests are more effective in certain communities, we created a list of interaction variables between protests and community characteristics. All continuous community-level variables that involve into interaction effects were centered by mean to alleviate the concern of multicollinearity. To test Hypothesis 2, we created a dummy variable, *protest organization*, which was coded 1 if a protest was led by either pre-existing or newly-formed organizations, such as citizen's groups, local businesses' organizations, unions, women's organizations, student's groups, schools, or churches.

To test Hypothesis 3, we controlled the contagion effect of *protest success in nearby communities* by including the geographical distance weighted count of prior protests that successfully defeated Wal-Mart. We also tried a variety of other variables to define protest success in nearby communities, like successful protests within the same SMA area, within 100 miles, or within 200 miles. We also tried to weight these variables by the effect of time decay (i.e., decay by days or only count those protests within the past 365 days). All these variables are highly correlated and generate similar results. Thus, we report only the result of the prior success weighted by geographical distance.

To test Hypothesis 4, we included a variable to measure the *hazard of institutional escalation* by including a dummy variable that indicates whether an enacted legislation that restrains store size exists elsewhere within the same state in the prior year. We collected the data about the municipal-level store size legislation from the Institute for Local Self-Reliance.

To test Hypothesis 5, we measured *liberal ideology* using two variables. One is a place's *Pro Democrat* political orientation, measured as the county-level vote margins of those supporting a Democrat presidential candidate over those supporting a Republican candidate during the nearest past presidential election. The data were collected from the county-level presidential election results from 1996 to 2004 reported by the U.S. News and World Report. The other is the percentage of people

with *college education* out of the total population 25 years or older in a place (Lipset, 1960). The data were collected from the 2000 Population Census.

To test Hypothesis 6, we included a variable to measure the potential *profitability* of a proposed store, measured by the ratio of a proposal place's distance to the closest Wal-Mart store and its distance to the closest distribution center. Reflecting the hypothesis, the ratio is a good indicator of profitability because longer distance to existent stores means lower threat of cannibalization (Holmes, 2008). The costs of cannibalization by closely-packed stores may be offset by efficiencies of distribution, so we simultaneously consider the distance to a distribution center. Since the distribution of distance is highly skewed, we used the log-transformed distance.

Besides hypothesized variables, we include a list of control variables. We controlled for *population size, unemployment rate, income per capita, and the percentage of urban population* in a place. We controlled the *migration* level in a place by including the percentage of a county's population over 5 years old in 2000 that had a residence in a different county five years ago. All these data were collected from the 2000 Population Census. We also created dummy variables to indicate the region of a place. Following the Census Bureau's classification, we divided the nation into four regions: *Northeast, South, West, and Mid West*.

We also control *community homogeneity* using a list of variables that capture the social demographic characteristics of a place. *Race homogeneity* is measured by a Herfindahl index for each

place  $i$ :  $\sum_j \left( \frac{\text{population}_{ij}}{\text{population}_i} \right)^2$ , where  $j$  represents either of the following six race groups, White, Black,

Hispanics, Asian, Native Indian, and others. Similarly, we also examined a place's *occupation homogeneity, education homogeneity, income homogeneity, and religion homogeneity*, but none of them is significant or affect the hypothesized effects, so we do not include them in the estimations presented here.

A set of variables about a place's retail economy are also included. We measured the percentage of civil labor force employed in *the retail sector* using the data from the Census of 2000. We also controlled the state-level count of stores that are affiliated with *Wal-Mart's two major competitors*, Target and K-Mart, lagged by one year. The data were collected from Target and K-Mart's annual reports as well as K-Mart store closing lists before and after its bankruptcy.

We controlled three other variables that are possibly related to store opening. The first is the density of *union* measured by the percentage of workers that are union members in a state's private sectors in the previous year. The union data were obtained from the Current Population Survey. The second is the number of *churches per capita* in a county in 2000, collected from the Association of Religion Data Archives. The third is a dummy variable to indicate if a place is enrolled with the *Main Street Program* in a year. The Main Street Program is a national nonprofit organization that aims at organizing the community-based training, guidance, and support to revitalize the traditional commercial district. The program was initially developed by the National Trust in the late 1970s and has since then developed into a national program enrolling more than 1,200 communities in 35 states. We obtained the data about the Main Street Program's local branches from its membership directories and the state-level Main Street Program offices.

We created two variables to control the characteristics of local governments. One is the *government's debt per capita*, measured by the total outstanding debt of a county government divided by the county's population. The data were collected from the Census of Government in 1997 and 2002. The other is the structure of local government. We created a dummy variable, *city manager*, to indicate whether a local government adopts the council-manager form of government (for contrast is the mayor-council form of government). The data were collected from the Municipal Yearbook and local governments' websites.

Koopmans and Olzak (2004) propose that specialized gatekeepers such as media or editors select some messages which can evoke reactions from others, and argue that such resonant messages become relevant, prominent, and speed diffusion of a social movement. So we controlled the influence of *media's attention* on anti Wal-Mart protests using two variables. One is the annual count of editorials with "Wal-Mart" as a key word, lagged by one year<sup>6</sup>. The other is the annual percentage of editorials that holds an unfavorable attitude about Wal-Mart. The data were collected from the America's News database. Finally, we controlled for a time trend, in case the incidence of store opening increases or decreases during the period we analyze. A complete list of all variables, measures and data sources were provided in Appendix 2. Table 1 reports the descriptive statistics of all variables.

Insert Table 1 about here

## RESULTS

### Effectiveness of Protests

Table 2 presents the analysis of the impact of protest on Wal-Mart store openings. Model 1 reports the model with control variables, and model 2 reports the main effect of protest. In support of Hypothesis 1, protests significantly decrease the openings of Wal-Mart stores ( $b=-1.875$ ,  $p<.01$ ). The size of this coefficient indicates that when other variables are held at their means, a protest reduces the chance of a Wal-Mart store opening by 64%.

Insert Table 2 about here

Model 3 includes protest organization which is significantly effective in reducing Wal-Mart store opening ( $b=-0.843$ ,  $p<.01$ ). When other variables are held at their means, a protest led by an organization can further reduce the chance of Wal-Mart store opening by 23% when compared with those without leading organizations. The result provides strong support for Hypothesis 2. Model 4

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<sup>6</sup> We chose to use editorials rather than the total number of newspaper reports because editorials reflects media's attitude and less likely to be a function of on-going protests.

examines hypothesis 3 by including the interaction between protest and the protest success in neighboring communities. The interaction term is insignificant, but the main effect of protest success in neighboring area and the main effect of protest are both significant and negative. Successful protests nearby decrease the likelihood that a proposed store will open, regardless of whether that store is the target of protests. Model 5 tests the interaction effect between protest and institutional hazard. Consistent with hypothesis 4, protests are more effective where the hazard of institutional escalation is high ( $b=-0.689$ ,  $p<.01$ ). When other variables are held at their means, a protest that happens in an area with a high hazard of institutional escalation (i.e., where hostile legislation exists elsewhere within the same state) can further reduce the chance of Wal-Mart store opening by 14% when compared with those in an area without a high hazard of escalation.

To test hypothesis 5, model 6 includes the interaction effects between protest and the two variables representing liberal ideology. There is no evidence suggesting that protests are more or less effective in places with more college educated population, but protests do reduce store openings in pro-Democrat places ( $b=-1.221$ ,  $p<.05$ ). Model 7 tests the interaction effect between protest and profitability. Consistent with hypothesis 6, protests are less successful in preventing store opening where the potential profitability of a proposed store is high ( $b=1.039$ ,  $p<.05$ ). Finally, model 8 reports a full model with all of the interactions, and is consistent with the previous nested models.

### **The Analyses of Wal-Mart's Donations**

Our second dependent variable is the amount of money that Wal-Mart donates to communities when stores are opened. Wal-Mart's donations are targeted to local community causes like the Little League and represent a tactic of cooptation and cultivating a community-friendly image. We predicted with hypothesis 7 that protests would increase the need for cooption and therefore the magnitude of the donations. We collected data about Wal-Mart's donation at its store openings from 2004 to 2007 from Wal-Mart's website of news releases. We began from the year 2004 because Wal-Mart started to

publish the amount of money it donated to local charities as part of the announcement of a store opening from 2004. In total, we had the data on 968 incidences of donation with complete information that are associated with openings of either a new store or a relocated store.

Insert Table 3 about here

Since the amount of donation is a non-negative amount, we adopted the Tobit model. Model 9 in table 3 represents the analysis of the amount of money that Wal-Mart donated at a store opening. Consistent with our expectation, Wal-Mart donated significantly more money for the openings of stores that had been protested before ( $b=1.886, p<.05$ ). The marginal effect analysis shows that, on average, Wal-Mart donated \$1,886 more for stores that were protested. It is also notable that the proportion of editorial about Wal-Mart that are negative increases donations substantially. Even when stores open, anti-Wal-Mart protests and discourse brings concessions from the retailer.

### **Robustness Checks for Protest Effectiveness Analysis**

The IPTW approach used in our paper depends on the assumption that there are no unobserved confounders. Although this is an untestable assumption, Azoulay et al. (2007) report that techniques that assume selection on observables do well if there is a comprehensive list of controls, observations are drawn from similar contexts, and outcomes are measured in the same way for treatment and control groups. We believe that these criteria are satisfied in our study.

Nonetheless, we also undertook additional tests to demonstrate the robustness of our results. Our starting point was to assume that the events of proposal (A), protest(B), store opening(C) can be modeled by three probit equations:  $A_i = I(A^* = X_i a + \varepsilon_i > 0)$ ;  $B_i = I(B^* = Y_i b + \eta_i > 0)$  and  $A_i = 1$ , and is missing otherwise;  $C_i = I(C^* = Z_i c + \mu_i > 0)$  and  $A_i = 1$ , and is missing otherwise. If there are unobserved factors that Wal-Mart takes into consideration when making proposals (i.e., the chances of

protest incidence and store opening), then  $\varepsilon_i$  is correlated with  $\eta_i$  and  $\mu_i$ . If there are unobserved factors that activists take into consideration when deciding whether to protest (i.e., the chance of store opening), then  $\eta_i$  is correlated with  $\mu_i$ . We assumed the error terms  $(\varepsilon, \eta, \mu) \sim N_3(0, V)$ .

In such cases, a useful strategy is to estimate multivariate probit models with sample selection and explicitly account for the correlation of error terms across equations. In the well-known bivariate case estimated with the Stata command `heckprob`, there is one equation describing the binary outcome of interest and a second equation that characterizes whether the first outcome is observed or not. If the cross-equation error terms are correlated, sample selection is ‘endogenous’, in which case simply estimating a univariate probit model for the binary outcome of interest leads to inconsistent estimators of the parameters of interest. Models with multiple outcomes of interest and possibly more than one selection equation are obvious generalizations of the bivariate case (See Jenkins et al. 2006). We considered a situation with three binary outcomes: proposal to open a store, protest, and store opening, and have sample selection in the first case. We estimated this trivariate probit with maximum simulated likelihood (Jenkins et al. 2006) using Matlab. We do not provide detailed results for the sake of brevity, but found a broadly similar pattern of support for our hypotheses. The correlations among the error terms of the equations were informative. Thus, we found that the correlation of the error term of the proposal and protest equation was insignificant  $b=.003$ , and  $s.e.=.020$ , thereby, lending credence to our argument that Wal-Mart did face uncertainty about protests – otherwise, it would have sought to propose places where protests were unlikely, in which case, unobservables would have been driving the correlation between error term, and the correlation would have been significant. The correlations of the error terms for the other equations were also insignificant: proposal and opening ( $b=.0023$ ,  $s.e.=.0807$ ), and protest and opening ( $b=-.0006$ ,  $s.e.=.2964$ ).

## DISCUSSION AND CONCLUSION

As big-business organizations penetrate and constitute the basic social fabric, they have increasingly become the targets of social movement activists who seek to address social problems (Davis et al., 2005; King and Soule, 2007). Nowhere is this phenomenon more significant than in the contention against Wal-Mart, the world's largest company. We have argued that a theoretical understanding of the strategic interaction between activists and businesses must reflect the fundamental uncertainties both sides face. Individual protestors are typically unsure of their community's capacity to organize a protest, and as to whether a protest once organized would be effective. Correspondingly, an organization, even one as capable as Wal-Mart, cannot be confident where and when it will meet protest. We expect the result of these uncertainties to be a low-cost trial and low-cost exit strategy, where the corporation tests markets with proposals, and withdraws them if they receive a strong protest signal of subsequent costs. The result in the Wal-Mart case is that protests against store proposals were quite common, and usually succeeded in dissuading store openings.

Our predictions and findings are a notable contrast to full information models of protest (Baron and Diermier, 2007) which predict that protests against private firms ought to be rare miscalculations since activists should target soft targets who accede to their demands before a protest and avoid firms which develop a reputation for toughness. From the perspective of the extensive literature on social movements, the political economists' treatment of protestors as a unitary actor is lacking. Protests are populated by heterogeneous individuals who are necessarily unsure of the proclivities of their potential protest cohorts. Mobilization is wrought with uncertainty for the protestors, so it must be likewise for the targets of protests. On the other hand, corporations look more like the strategic actors of game theory than do the states which are more often the targets in social movement analysis. Wal-Mart's goals are simpler, and its organization more coherent and capable, than any state. By emphasizing uncertainty while maintaining a focus on the strategic orientation of protest targets, we are integrating the strengths of the two literatures that examine

contention against private organizations. Our results also expand the reach of research on social movements, and also enlarge organizational research. We discuss both in turn below.

Contributions to Social Movements Research: Our findings extend research on social movements on three counts. First, our study considers a challenging empirical issue - the self-selection of communities into the ‘treatment’ or protest condition and control or ‘no-protest’ condition. In the context of private politics, protests are not distributed randomly across communities. Instead, communities choose whether to organize protests and in turn, this hinges on whether a private firm is seeking to enter the community in the first place. Since there is non-random assignment of communities into the protest and no-protest conditions, standard econometric methods that assume random treatment cannot accurately estimate causal relationships. We rely on a new class of techniques – inverse probability treatment weighted (IPTW) models to address selection. The IPTW method simultaneously counterbalances the estimation bias caused by Wal-Mart’s selection of a place to propose and the activists’ selection of a place to protest IPTW models use a counterfactual logic – they compare treated subjects to a pseudo-population of controls who were not treated, and the differential is the causal effect of treatment (protest) on outcome (opening a store).

Second, protests are likely to be more successful in communities with a pro-democrat orientation. This finding is consistent with previous work that shows that anti-business political ideology slowed the deregulation of interstate banking (Kroszner and Strahan; 1999). It also reinforces the argument that that external political atmosphere tips the power balance between activists and their targets (McAdam, 1995) and that activists’ claims gain resonance where they are consistent with local dominant cultures and values (Bernstein, 1997).

Third, in addition to other studies that show that spatial contagion (successful protests in neighboring communities) underlies the incidence of protests, our study also demonstrates that such spatial contagion reduces store openings in the focal community. The results also show that tough

institutional regulations in nearby communities also induce Wal-Mart to withdraw. When a community faces Wal-Mart, the contest is asymmetric as local activists are facing a large, powerful and centralized foe who can easily threaten them by locating a store in a proximal community and still undermine Main Street businesses. In such cases, successful protests in neighboring communities not only fuel protest in a focal community but also increases its success rate by inoculating the entire region against Wal-Mart. The Wal-Mart case also shows that institutional escalation in the form of size-cap regulation was an important way that one community's contest with Wal-Mart could affect another's. Wal-Mart's whole approach to protest is consistent with a strategy that seeks to keep protests local, and to minimize the diffusion of the most potent anti-Wal-Mart regulations.

Contributions to Organizational Theory: Our study also enlarges the literature on organizations. Although Thompson (1967) highlighted the importance of domain consensus for the growth of individual firms, organizational theorists have emphasized the internal constraints to growth rather than external constraints such as the dearth of legitimacy. The large body of work in organizational ecology emphasizes the legitimacy of the organizational form as bolstering the fates of individual organizations, and recent work has tended traced the legitimacy of the form to cognitive consensus as to the meaning of the category (Hannan, Pólos and Carroll, 2007). Our study, by contrast, illuminates how large and visible firms such as Wal-Mart may be singled out for de-legitimation, even though (or because) they may be prototypical instances of a category. By showing how local communities are the sites of protests against Wal-Mart's entry, our study highlights how there is spatial variation in normative dissensus about the category and directs attention to the geography of legitimacy. Although we studied store openings, future research can study closures of organizations such as abortion clinics in response to protest to understand the geography of illegitimacy.

In a related vein, our study also speaks to calls to understand selection of organizing attempts. Much of organizational research studies the selection of fully functioning organizations and studies

their death rates, but selection also occurs at birth, when attempts to establish new organizations fail (Aldrich and Ruef, 2006; Carroll and Hannan, 2000). By studying how proposals to establish new Wal-Mart stores attract protests and eventually succumb to tactics that emphasize environmental concerns and impose size-caps on new stores, our study also injects contention into selection.

Finally, our study also indicates that even when it enters a community after a protest, Wal-Mart is affected as it makes greater donations to community causes, presumably to strengthen its identity and social standing in the community. Unlike the state which may repress protest, business organizations also engage in “good-will-buying” actions and developing allies in the community. Such good-will buying actions may also be perceived by activists as victories of a type. The bottom line is that protests against Wal-Mart are affecting the retailer both directly and indirectly. Indeed, with a 64% rate of protest success in stopping store openings, and increased donations to communities when stores do open the conclusion must be that community protests are shaping the domain and behavior of the world’s largest company. This form of contention has until now been mostly ignored by scholars of organizations and social movements. Yet, it may be at the crux of the co-evolution of economy and society in the democratic-capitalist world.

## REFERENCE

- Aldrich, Howard E. and Martin Ruef. 2006. *Organizations Evolving*. Thousand Oaks, CA: Sage.
- Armstrong, Elizabeth A., and Mary Bernstein. 2008. "Culture, power, and institutions: A multi-institutional politics approach to social movements." *Sociological Theory* 26:74-99.
- Angrist, Joshua D., Guido W. Imbens, and Donald B. Rubin. 1996. "Identification of Causal effects Using Instrumental Variables." *Journal of Econometrics* 71:145-160.
- Azoulay, Pierre, Waverly Ding, and Toby E. Stuart. 2007. "The Determinants of Faculty Patenting Behavior: Demographics or Opportunities?" *Journal of Economic Behavior and Organization* 63:599-623.
- Baron, David P. 2003. "Private Politics." *Journal of Management Strategy and Economics* 12:31-66.
- Baron, David P. 2009. "A Positive Theory of Moral Management, Social Pressure, and Corporate Social Performance." *Journal of Economics and Management Strategy* 18:7-43.
- Baron, David P. and Daniel Diermeier. 2007. "Strategic Activism and Nonmarket Strategy." *Journal of Economics and Management Strategy* 16:599-634.
- Basker, Emek. 2005a. "Job Creation or Destruction? Labor-Market Effects of Wal-Mart Expansion." *Review of Economics and Statistics* 87:174-183.
- Basker, Emek. 2005b. "Selling a Cheaper Mousetrap: Wal-Mart's Effect on Retail Prices." *Journal of Urban Economics* 58:203-229.
- Belluck, Pam. 2004. "Preservationists call Vermont endangered, by Wal-Mart." *New York Times*, May 25, accessed on line.
- Bernstein, M. 1997. "Celebrating and suppression: The strategic uses of identity by the lesbian and gay movement." *American Journal of Sociology* 103:531-565.
- Blau, Peter M. and W. Richard Scott. 1962. *Formal organizations: A comparative approach*. San Francisco: Chandler Pub. Co.
- Carroll, Glenn R. and Michael T. Hannan. 2000. *The Demography of Corporations and Industries*. Princeton, NJ: Princeton University Press.
- Conell, Carol and Samuel Cohn. 1995. "Learning from Other People's Actions: Environmental Variation and Diffusion in French Coal Mining Strikes, 1890-1935." *American Journal of Sociology* 101:366-403
- Cress, Daniel and David A. Snow. 1996. "Mobilization at the Margins: Resources, Benefactors, and the Viability of Homeless Social Movement Organizations." *American Sociological Review* 61:1089-1109.
- D&B Million Dollar Database. 2007. Dun & Bradstreet Corporation.

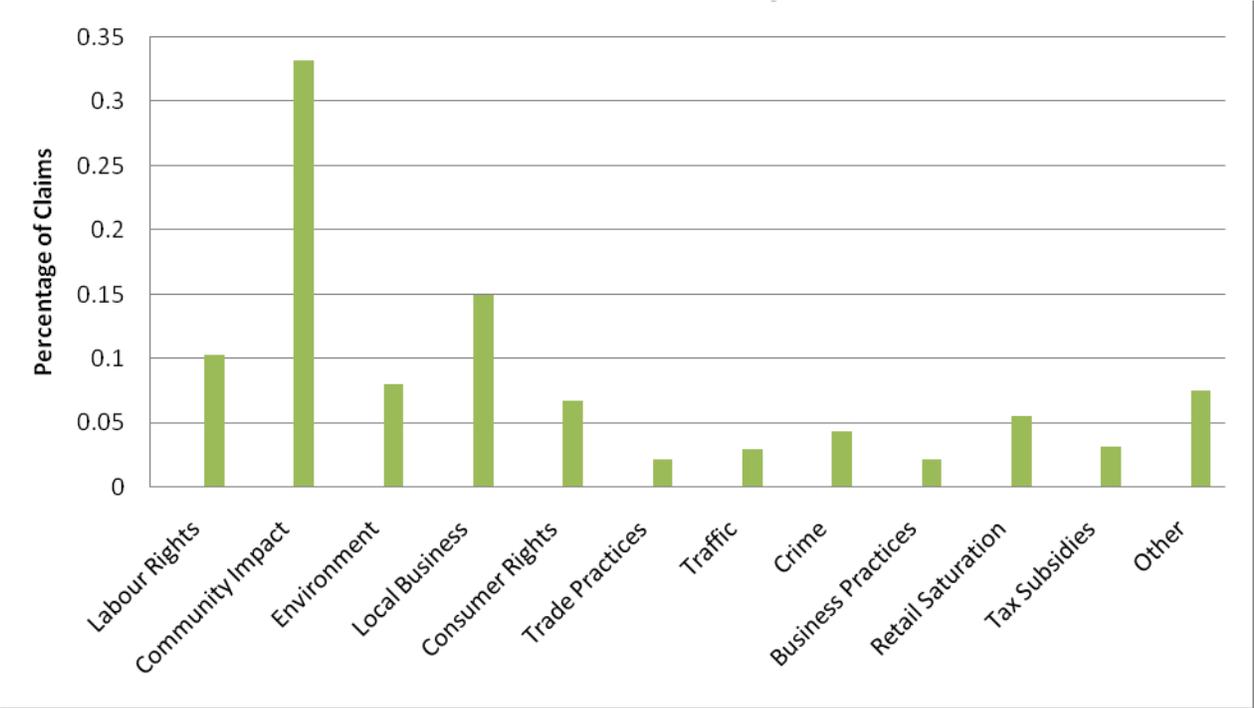
- Davis, Gerald F. and Doug McAdam. 2000. "Corporations, classes, and social movements after managerialism " *Research in Organizational Behavior* 22:193-236.
- Davis, Gerald F., Doug McAdam, W. Richard Scott, and Mayer N. Zald. 2005. "Social Movements and Organization Theory." New York: Cambridge University Press.
- Diermeier, Daniel (2003) "Consumer Boycotts", Unpublished Paper, Kellogg School of Management.
- Dube, Arindrajit, Barry Eidlin, and Bill Lester. 2005. "Impact of Wal-Mart Growth on Earnings throughout the Retail Sector in Urban and Rural Counties." Working Paper: Institute of Industrial Relations, University of California, Berkeley.
- Elsbach, K. D., and R. I. Sutton. 1992. "Acquiring organizational legitimacy through illegitimate actions: A marriage of institutional and impression management theory." *Academy of Management Journal* 35:699-738.
- Fombrun, Charles, and Mark Shanley. 1990. "What's in a name? Reputation building and corporate strategy." *Academy of Management Journal* 33:233-258.
- Giugni, Marco G. 1998. "Was it worth the effort? The outcomes and consequences of social movements." *Annual Review of Sociology* 24:371-393.
- Goffman, Erving. 1959. *Behavior in public places: Notes on the social organization of gatherings*. New York Free Press.
- Gould, Roger V. 1991. "Multiple Networks and Mobilization in the Paris Commune, 1871." *American Sociological Review* 56:716-729.
- Gould, Roger V. 1995. *Insurgent Identities: Class, Community, and Protest in Paris from 1848 to the Commune*. Chicago, IL: University of Chicago Press.
- Gozalo, Pedro L. and Susan C. Miller. 2007. "Hospice Enrollment and Evaluation of Its Causal Effect on Hospitalization of Dying Nursing Home Patients." *Health Services Research* 42:587 - 610.
- Granovetter, Mark. 1978. "Threshold models of collective behavior." *American Journal of Sociology* 83:1420-1443.
- Hannan, Michael T., László Pólos, and Glenn R. Carroll. 2007. *Logics of Organization Theory*. Princeton, NJ: Princeton University Press.
- Hausman, Jerry and Ephraim Leibtag. 2005. "Consumer Benefits from Increased Competition in Shopping Outlets: Measuring the Effect of Wal-Mart." in *NBER Working Paper No. 11809*.
- Heckman, James J. 1979. "Sample Selection Bias as a Specification Error." *Econometrica* 47:153-161.
- Hedstrom, Peter. 1994. "Contagious collectivities: On the spatial diffusion of Swedish trade unions, 1890-1940." *American Journal of Sociology* 99:1157-1179.

- Hedstrom, Peter, Rickard Sandell, and Charlotta Stern. 2000. "Meso-level networks, and the diffusion of social movements." *American Journal of Sociology* 106:145-172.
- Holmes, Thomas J. 2008. "The Diffusion of Wal-Mart and Economies of Density." National Bureau of Economic Research Working Paper 13783. Cambridge, MA.
- Ingram, Paul and Hayagreeva Rao. 2004. "Store wars: The enactment and repeal of anti-chain-store legislation in America." *American Journal of Sociology* 110:446-487.
- Irwin, Elena G. and Jill Clark. 2006. "Wall Street vs. Main Street: What are the Benefits and Costs of Wal-Mart to Local Communities?" *Choices* 21.
- Jenkins, J. Craig. 1983. "Resource mobilization theory and the study of social movements." *Annual Review of Sociology* 9:527-553.
- Jenkins, Stephen P., Lorenzo Cappellari, Peter Lynn, Annette Jäckle, and Emanuela Sala. 2006. "Patterns of Consent: evidence from a general household survey." *Journal of the Royal Statistical Society* 169:701 - 722.
- Jenness, Valerie, Davis S. Meyer, and Helen Ingram. 2005. "Social Movements, Public Policy, and Democracy: Rethinking the Nexus." in *Routing the opposition*, edited by D. S. Meyer, V. Jenness, and H. Ingram. Minneapolis: University of Minnesota Press.
- King, Brayden G. 2008a. "A Social Movement Perspective on Stakeholder Collective Action and Influence." *Business Society*, 47,1:21-49.
- King, Brayden G. 2008b. "A Political Mediation Model of Corporate Response to Social Movement Activism." *Administrative Science Quarterly*, 53: 395-421.
- King, Brayden G and Sarah A. Soule. 2007. "Social Movements as Extra-institutional Entrepreneurs: The Effect of Protests on Stock Price Returns." *Administrative Science Quarterly* 52:413-442.
- Klandermans, Bert. 2002. "How Group Identification Helps to Overcome the Dilemma of Collective Action." *American Behavioral Scientist* 45:887-900.
- Kleine, Peter E. III, Susane S. Kleine and Jerovme B. Kernan. 1993. "Mundane Consumption and the Self: A Social-Identity Perspective." *Journal of Consumer Psychology*, 2: 209-235.
- Koopmans, R., and Olzak, S. 2004. "Discursive opportunities and the evolution of right-wing violence in Germany." *American Journal of Sociology* 110:198-230.
- Kroszner, Randall S. and Philip E. Strahan. 1999. "What Drives Deregulation? Economics and Politics Of The Relaxation Of Bank Branching Restrictions." *Quarterly Journal of Economics* 114:1437-1467.
- Lipset, Seymour M. 1960. Political Man. Garden City, NJ: Anchor.
- Luders, Joseph E. 2006. "The Economics of Movement Success: Business Responses to Civil Rights Mobilization." *American Journal of Sociology* 111:963-998.

- Marrett, Cora Bagley. 1980. "Influences on the Rise of New Organizations: The Formation of Women's Medical Societies." *Administrative Science Quarterly* 25:185-199.
- McAdam, Doug. 1998. "The Future of Social Movements." Pp. 229-245 in *From Contention to Democracy*, edited by Marco Giugni, Doug McAdam, and Charles Tilly. Lanham, MD and Oxford, England: Rowman and Littlefield.
- McAdam, Doug. 1995. "'Initiator' and 'Spin-off' movements: Diffusion Processes in Protest Cycles." Pp. 217-239 in *Repertoires and Cycles of Collective Action*, edited by M. Traugott. Durham and London: Duke University Press.
- McAdam, Doug, John McCarthy, and Mayer Zald. 1988. "Social Movements." in *Handbook of Sociology*, edited by N. Smelser. Beverly Hills, CA: Sage.
- McCarthy, John D. and Mark Wolfson. 1988. "Exploring Sources of Rapid Social Movement Growth: The Role of Organizational Form, Consensus Support, and Elements of the American State." in *the Workshop on Frontiers in Social Movement Theory*. University of Michigan, Ann Arbor, MI.
- McCarthy, John D., Clark McPhail, and Jackie Smith. 1996. "Images of Protest: Selection Bias in Media Coverage of Washington, D.C. Demonstrations." *American Sociological Review* 61:478-499.
- Meyer, John W, and Brian Rowan. 1977. "Institutionalized organizations: Formal structure as myth and ceremony." *American Journal of Sociology* 83:340-363.
- Myers, Daniel J. 1997. "Racial Rioting in the 1960s: An Event History Analysis of Local Conditions." *American Sociological Review* 62:94-112.
- Myers, Daniel J. 2000. "The Diffusion of Collective Violence: Infectiousness, Susceptibility, and Mass Media Networks." *American Journal of Sociology* 106:178-208.
- Oliver, Pamela E. and Gregory M. Maney. 2000. "Political Process and Local Newspaper coverage of Protest Events: From Selection Bias to Triadic Interactions." *American Journal of Sociology* 106:463-505.
- Oliver, Pamela E., and Gerald Marwell. 1988. "The Paradox of Group Size in Collective Action: A Theory of the Critical Mass. II." *American Sociological Review* 53:1-8.
- Oliver, Pamela E. and Daniel J. Myers. 2003. "Networks, Diffusion, and Cycles of Collective Action." Pp. 173-203 in *Social Movements and Networks: Relational Approaches to Collective Action*, edited by M. Diani and D. McAdam. Oxford: Oxford University Press.
- Oliver, Pamela E. 1993. "Formal Models of Collective Action." *Annual Review of Sociology* 19:271-300.
- Olzak, Susan, Suzanne Shanahan, and Elizabeth West. 1994. "School desegregation, interracial exposure, and antibusing activity in contemporary Urban America." *American Journal of Sociology* 100:196-214.

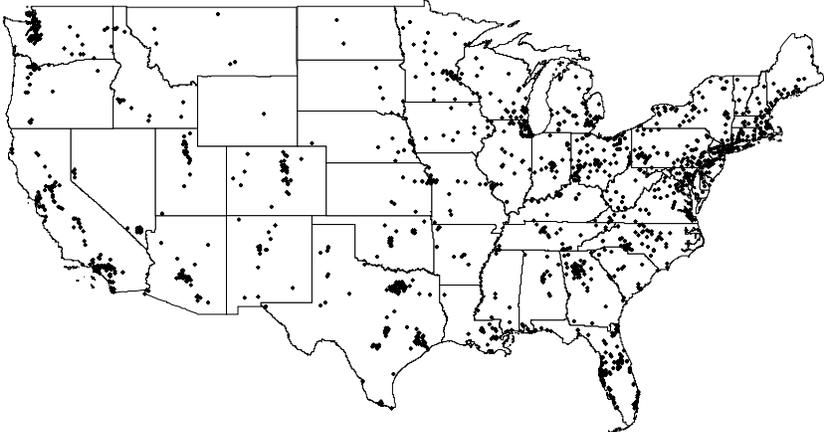
- Raubitschek, Ruth (1988) "Hitting the Jackpot: Product Proliferation by Multiproduct firms under uncertainty", *International Journal of Industrial Organization*, 6:469-488.
- Robins, James M, Miguel Angel Herman, and Babette Brumback. 2000. "Marginal structural models and causal inference in epidemiology." *Epidemiology* 11:550-560.
- Roscigno, Vincent H. and William F. Danaher. 2001. "Media and mobilization: The case of radio and southern textile worker insurgency, 1929 to 1934." *American Sociological Review* 66:21-48.
- Schragger, Richard C. 2005. "The Anti-Chain Store Movement, Localist Ideology, and the Remnants of the Progressive Constitution, 1920-1940." *Iowa Law Review* 90:101-184.
- Scott, W.R. 2007 *Institutions and Organizations*, Sage, Thousand Oaks, CA.
- Soule, Sarah A. 1997. "The Student Divestment Movement in the United States and Tactical Diffusion: The Shantytown Protest." *Social Forces* 75:855-882.
- Soule, Sarah A. and Yvonne Zylan. 1997. "Runaway train: The diffusion of state-level reforms in ADC/AFDC eligibility requirements." *American Journal of Sociology*, 103-733-62.
- Spence, Michael. 1973. "Job Market Signaling." *Quarterly Journal of Economics*:355-375.
- Sprawl Busters. 1998. "Wal-Mart "Not Acceptable". November 20, 1998. Online access <http://www.sprawl-busters.com/search.php?readstory=117>
- Swaminathan, Anand and James B. Wade. 2001. "Social Movement Theory and the Evolution of New Organizational Forms." Pp. 286 - 313 in *The Entrepreneurship Dynamic: Origins of Entrepreneurship and the Evolution of Industries*, edited by C. B. Schoonhoven and E. Romanelli.
- Tedeschi, James T., and Marc Riess. 1981. "Verbal strategies in impression management." in *The Psychology of everyday explanations of social behavior*, edited by C. Antaki. London, UK: Academic Press.
- Thompson, James D. 1967. *Organizations in Action: Social Science Bases of Administrative Theory*. New York: McGraw-Hill.
- Walker, Jack. 1969. "The diffusion of innovation among American states." *American Political Science Review*, 63: 880-99.-
- Edward Walker, Andrew W. Martin and John D. McCarthy, 2008. "Confronting the State, the Corporation and the Academy: The Influence of Institutional Targets on Social Movement Repertoires" *American Journal of Sociology*. 114:35-76.
- Weber, Klaus, Hayagreeva Rao, and L. G. Thomas. 2009. "From Streets to Suites: How the Anti-Biotech Movement Affected German Pharmaceutical Firms." *American Sociological Review* 74:106-127.

Figure 1. Content of Local Contentious Claims against Wal-Mart

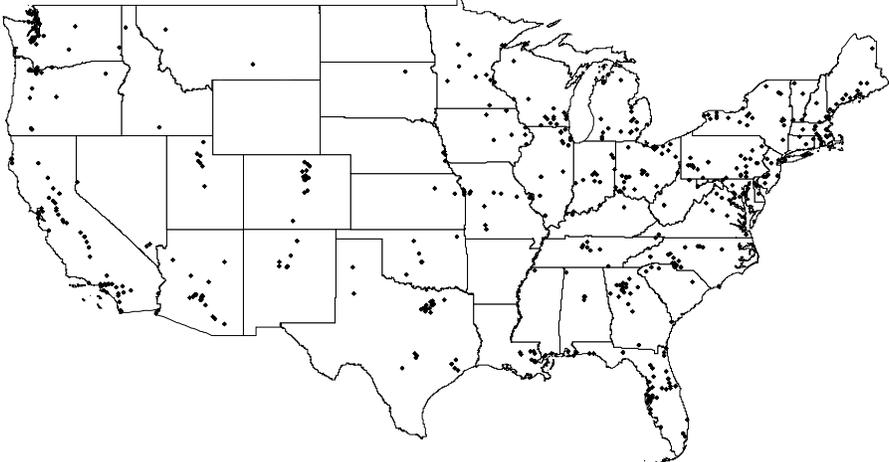


**Figure 2. Places of Proposal, Protest, and Protest Success, 1998-2005**

Wal-Mart Proposed Places, 1998-2005



Anti Wal-Mart Protest Places, 1998-2005



Protest Success Places, 1998-2005



**Table 1. Descriptive Statistics of Protest Incidence and Wal-Mart Opening**

<b>Variable</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min</b>	<b>Max</b>
Population (100,000)	1.490	3.923	0.001	81.782
Unemployment %	0.059	0.031	0	0.417
Urban %	0.946	0.179	0	1
Income per capita (\$1000)	20.739	6.278	5.377	109.219
Northeast	0.131	0.337	0	1
South	0.323	0.468	0	1
West	0.189	0.392	0	1
Wal-Mart's competitors (100)	1.204	1.053	0	4.4
Migration %	0.224	0.074	0.065	0.540
Union density	0.126	0.060	0.028	0.269
Church per capita (%)	0.093	0.058	0.035	0.449
Retail worker %	0.117	0.023	0.034	0.283
Gov. debt per capita	3.320	3.935	0.112	112.383
Main Street Program	0.126	0.332	0	1
Editorial	4.271	0.815	3.497	5.765
Unfavorable editorial %	0.435	0.081	0.351	0.619
Year	2001.712	2.330	1998	2005
City manager	0.568	0.495	0	1
Race homogeneity	0.683	0.193	0.230	0.998
Pro Democrat	-0.044	0.224	-0.744	0.798
College educated %	0.158	0.069	0.016	0.445
Distance weighted success	2.086	1.658	0.000	9.469
Protest	0.352	0.478	0	1
Protest organization	0.169	0.375	0	1
Opening	0.649	0.478	0	1
Institution hazard	0.316	0.465	0	1
Profitability	0.412	0.209	0.002	1.593

**N=1599**

**Table 2. IPTW Probit Regression of Wal-Mart Store Opening**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Pro Democrat	-0.320 (0.275)	-0.219 (0.302)	-0.093 (0.304)	-0.220 (0.301)	-0.182 (0.303)	0.279 (0.336)	-0.203 (0.300)	0.223 (0.338)
College educated %	-1.581 (0.978)	-0.318 (1.152)	-0.140 (1.161)	-0.369 (1.151)	-0.346 (1.158)	-0.727 (1.244)	-0.207 (1.167)	-0.398 (1.308)
Distance weighted success	-0.216*** (0.062)	-0.244*** (0.062)	-0.233*** (0.063)	-0.226*** (0.066)	-0.254*** (0.063)	-0.247*** (0.062)	-0.243*** (0.062)	-0.250*** (0.067)
Profitability	0.407 (0.240)	0.482 (0.259)	0.426 (0.262)	0.487 (0.259)	0.451 (0.259)	0.449 (0.264)	-0.035 (0.331)	-0.085 (0.318)
Institutional hazard	-0.672*** (0.136)	-0.810*** (0.138)	-0.849*** (0.138)	-0.815*** (0.139)	-0.509*** (0.149)	-0.808*** (0.140)	-0.797*** (0.138)	-0.543*** (0.154)
Protest		-1.875*** (0.139)	-1.501*** (0.156)	-1.870*** (0.139)	-1.684*** (0.161)	-1.894*** (0.141)	-1.876*** (0.139)	-1.332*** (0.180)
Protest organization			-0.843*** (0.204)					-0.825*** (0.208)
Protest* Distance weighted success				-0.042 (0.070)				0.016 (0.074)
Protest* Institution hazard					-0.689*** (0.261)			-0.691*** (0.278)
Protest* College educated %						0.943 (1.524)		0.862 (1.586)
Protest* Pro Democrat						-1.221** (0.583)		-0.709 (0.605)
Protest* Profitability							1.039** (0.517)	0.940** (0.514)

Standard errors in parentheses

\*\* p<.05, \*\*\* p<.01 (one-tailed tests for hypotheses; otherwise two-tailed tests)

**Table 2 (cont'd). IPTW Probit Regression of Wal-Mart Store Opening**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Population	0.118*** (0.040)	0.143*** (0.043)	0.136*** (0.043)	0.142*** (0.042)	0.144*** (0.043)	0.148*** (0.043)	0.145*** (0.042)	0.143*** (0.044)
Unemployment %	-0.777 (1.729)	-1.173 (1.840)	-1.078 (1.850)	-1.282 (1.824)	-1.556 (1.764)	-1.233 (1.813)	-1.487 (1.841)	-1.683 (1.770)
Income per capita	-0.001 (0.010)	-0.019 (0.014)	-0.017 (0.014)	-0.019 (0.014)	-0.019 (0.014)	-0.019 (0.013)	-0.021 (0.014)	-0.018 (0.015)
Urban %	0.563*** (0.205)	0.626*** (0.242)	0.574** (0.240)	0.631*** (0.242)	0.628*** (0.239)	0.593** (0.239)	0.589** (0.242)	0.527** (0.235)
Migration	1.188 (0.836)	2.487** (0.973)	2.207** (0.976)	2.497** (0.971)	2.779*** (0.975)	2.550*** (0.980)	2.562*** (0.972)	2.580*** (0.990)
Northeast	1.128*** (0.174)	1.611*** (0.176)	1.669*** (0.174)	1.612*** (0.176)	1.632*** (0.178)	1.636*** (0.181)	1.623*** (0.176)	1.721*** (0.181)
South	1.673*** (0.158)	2.393*** (0.186)	2.494*** (0.192)	2.392*** (0.186)	2.419*** (0.187)	2.359*** (0.181)	2.406*** (0.184)	2.505*** (0.189)
West	1.150*** (0.179)	1.786*** (0.211)	1.924*** (0.212)	1.777*** (0.210)	1.809*** (0.216)	1.786*** (0.209)	1.802*** (0.216)	1.964*** (0.220)
Race homogeneity	0.564 (0.351)	1.121*** (0.392)	1.210*** (0.398)	1.104*** (0.391)	1.162*** (0.396)	1.096*** (0.391)	1.121*** (0.390)	1.227*** (0.403)
Retail worker %	1.414 (2.071)	0.557 (2.253)	1.387 (2.251)	0.591 (2.248)	0.495 (2.241)	0.561 (2.255)	0.851 (2.289)	1.580 (2.266)
Wal-Mart's competitors	0.059 (0.068)	0.078 (0.068)	0.080 (0.070)	0.079 (0.068)	0.104 (0.071)	0.077 (0.069)	0.082 (0.068)	0.109 (0.074)
Union	4.809*** (1.188)	6.397*** (1.264)	6.432*** (1.239)	6.428*** (1.262)	6.638*** (1.286)	6.398*** (1.264)	6.550*** (1.262)	6.808*** (1.270)
Church per capita	1.928 (1.005)	1.543 (1.063)	1.442 (1.088)	1.565 (1.067)	1.777 (1.058)	1.662 (1.051)	1.674 (1.050)	1.842 (1.061)
Main Street Program	0.060 (0.184)	0.238 (0.189)	0.248 (0.190)	0.238 (0.189)	0.205 (0.192)	0.276 (0.191)	0.228 (0.187)	0.228 (0.191)
Gov. debt per capita	0.013 (0.017)	-0.001 (0.014)	0.004 (0.018)	-0.001 (0.014)	-0.003 (0.010)	-0.001 (0.015)	-0.000 (0.013)	-0.000 (0.013)
City manager	0.012 (0.104)	0.074 (0.116)	0.062 (0.117)	0.071 (0.116)	0.074 (0.116)	0.074 (0.116)	0.065 (0.116)	0.057 (0.116)
Editorial total	-0.304** (0.155)	-0.271 (0.175)	-0.303 (0.178)	-0.266 (0.177)	-0.253 (0.178)	-0.291 (0.173)	-0.257 (0.175)	-0.279 (0.179)
Unfavorable editorial %	1.441 (0.915)	1.740 (1.021)	2.166** (1.022)	1.759 (1.024)	1.706 (1.020)	1.775 (1.013)	1.850 (1.021)	2.241** (1.021)
Year	0.254*** (0.068)	0.322*** (0.077)	0.341*** (0.077)	0.320*** (0.077)	0.320*** (0.076)	0.331*** (0.076)	0.318*** (0.076)	0.341*** (0.076)
Constant	-510.254*** (135.042)	-644.995*** (153.083)	-683.391*** (152.980)	-642.114*** (153.286)	-642.546*** (152.798)	-664.610*** (152.344)	-637.454*** (151.897)	-684.250*** (152.058)
N	1599	1599	1599	1599	1599	1599	1599	1599
Log lik.	-853.766	-609.210	-588.194	-608.878	-602.548	-604.590	-605.913	-577.022
Chi-squared	228.639	340.932	324.478	340.905	348.842	345.121	352.736	343.639

Standard errors in parentheses

\*\* p<.05, \*\*\* p<.01 (one-tailed tests for hypotheses; otherwise two-tailed tests)

**Table 3. Tobit Model on Wal-Mart Donation**

	Model (9)	
	Coef.	S.E.
Protest	1.886**	0.878
Race homogeneity	-0.804	2.598
Relocated store	-7.523***	0.769
Institution hazard	0.074	0.777
Profitability	-0.167	0.233
Wal-Mart's competitors	-0.621	0.506
Migration	2.708	5.497
Pro Democrat	1.598	1.748
Main Street Program	0.328	0.990
Debt per capita	-0.024	0.142
City manager	0.218	0.647
Population	0.755***	0.135
Unemployment %	14.725	15.536
Income per capita	0.038	0.114
Retail worker %	1.609	14.635
Urban %	0.971	2.278
College educated %	-5.201	14.279
Union	3.427	9.579
Church per capita	133.377	590.902
Editorial	-0.081***	0.016
Unfavorable editorial	56.439***	16.664
Northeast	2.464	1.397
South	-2.203	1.206
West	-3.540***	1.138
Year	8.116***	0.923
Constant	-16250.990***	1850.324
N	968	
Log lik.	-3592.251	
Chi-squared	357.70	

Standard errors in parentheses

\*\* p<.05, \*\*\* p<.01 (one-tailed tests for hypothesis; otherwise two-tailed tests)

## Appendix 1. Heckman Probit Model on the Emergence of Protests

	Model	
	Coef.	S.E.
Pro Democrat	0.512***	0.189
College educated %	4.427***	0.785
Race homogeneity	0.560**	0.283
Distance weighted success	0.105***	0.038
Main Street Program	0.216**	0.103
Institutional hazard	0.185**	0.085
Profitability	-0.055	0.154
Population	0.012	0.010
Unemployment %	1.516	1.391
Income per capita	-0.032***	0.010
Urban %	-0.118	0.206
Migration	0.873	0.573
Northeast	0.039	0.119
South	-0.039	0.107
West	0.326***	0.108
Retail worker %	-0.859	1.675
Wal-Mart's competitors	0.012	0.039
Union	-0.646	0.848
Church per capita	-0.106	0.758
Gov. debt per capita	-0.023	0.014
City manager	0.094	0.072
Editorial	0.326***	0.106
Unfavorable editorial %	0.101	0.635
Year	-0.041	0.047
Constant	79.565	93.551
N	1599	
Lo lik.	-7974.539	
Chi-square	169.570	

Standard errors in parentheses

\*\* p<.05, \*\*\* p<.01 (one-tailed tests for hypotheses; otherwise two-tailed tests)

Tabulation of Protest and Predicted Protest

Pred. Protest	Protest		
	0	1	Total
0	935	371	1,306
1	101	192	293
Total	1,036	563	1,599

(Predicted protest dummy is defined 1 if the predicted likelihood of protest given proposal from the Heckman model is greater than .5)

## Appendix 2. Variable, Measurement, and Source

Variable	Measurement	Level	Source
Church per capita	The number of churches in a county divided by county population	County	Religious Congregations and Membership Study, 2000
City manager	This variable is a dummy that is coded 1 if a local government adopts the council-manager format	Place	The Municipal Yearbook; Local governments' websites
College educated %	The percentage of population with bachelor's degree out of the total population 25 years or older	Place	2000 Census of Population
Editorial	The ln-transformed number of editorials discussing Wal-Mart as key words	Year	America's News
Government debt per capita	The total outstanding debt of a county government divided by the county's population	County	Census of Government 1997, 2002
Income per capita	Yearly income per capita (in \$1,000)	Place	2000 Census of Population
Institutional hazard	A dummy variable that indicates if a store size cap exists within the same state in the prior year	Place	Institute for Local Self-Reliance
Main Street Program	A dummy variable that equals 1 if there is a local branch of MSP	Place	Main Street Program Member Directory; Main Street Program offices at the state level
Migration %	The percentage of a county's population above 5 years old in 2000 that had a residence in a different county five years ago	County	2000 Census of Population
Northeast	The Northeast region	Region	Census Bureau's Definition
Opening	A dummy variable that is coded 1 if a proposed store is opened	Store	Wal-Mart Fact, Wal-Mart Openings List
Population	The total population (in 100,000)	Place	2000 Census of Population
Prior success weighted by distance	The total number of anti Wal-Mart protests, $\sum_j \sum_{t>\tau} \frac{S_{jt}}{D_{ij}}$ , where t is the time of the focal proposal at place i and $S_{jt}$ is a dummy variable that equals 1 if a successful protest happened in a place j at time $\tau$ , $D_{ij}$ is the distance between i and j in the unit of 5 miles	Place	Sprawl-Busters Database, 1998-2005; Lexis-Nexis Academic Database
Pro Democrat	The margin of votes supporting Democrat presidential candidate over that supporting Republican presidential candidate	County	Presidential election results in 1996, 2000, and 2004 from U.S. News and World Report

### Appendix 1(cont'd). Variable, Measurement, and Source

Variable	Measurement	Level	Source
Profitability	Distance to the closest Wal-Mart store/Distance to the closest distribution center	Place	
Protest	Report of protesting activities against Wal-Mart's entry (dummy=1 )	Place	Sprawl-Busters Database, 1998-2005; Lexis-Nexis Academic Database
Protest organization	A dummy variable that equals 1 if a local organization played a leadership role in organizing protest	Place	Sprawl-Busters Database, 1998-2005; Lexis-Nexis Academic Database
Race homogeneity	Herfindahl Index of Races (White, Black, Hispanics, Asian, Indian, and others)	Place	2000 Census of Population
Relocated store	This variable is a dummy that is coded 1 if a store opening is for a relocated store rather than a new store	Store	Wal-Mart Facts ( <a href="http://www.walmartfacts.com/">http://www.walmartfacts.com/</a> )
Retail worker %	The percentage of workers in retailing business out of all workers in the civilian labor force	Place	2000 Census of Population
South	The Southern region	Region	Census Bureau's Definition
The amount of donated Money	The amount of money donated at the opening of a store (in \$1000)	Store	Wal-Mart Facts ( <a href="http://www.walmartfacts.com/">http://www.walmartfacts.com/</a> )
Unemployment %	The ratio of unemployed civilian workers to the total number of workers in civilian labor force	Place	2000 Census of Population
Unfavorable editorial %	The percentage of editorials discussing Wal-Mart with negative events	Year	America's News
Union density	The percentage of workers who are union members in private employment sector	State	Current Population Survey 1997-2004
Urban population %	The percentage of people living in the urban areas out of the total population	Place	2000 Census of Population
Wal-Mart's competitor	The count of Target and Kmart stores within the a state in the previous year	State	Target's Annual Reports; Kmart's Annual Reports; Kmart's closing list
West	The West region	Region	Census Bureau's Definition
Year	Calendar year	Year	