

REGULATORY DISCRETION AND FIRM SUCCESS: AN EXAMINATION OF U.S. HYDROELECTRIC FACILITY LICENSING, 1900-2012.

ABSTRACT

While prior studies have examined the role of policy formation by legislators on firm performance, survival and entry and exit, few studies have examined the effect of policy implementation by regulatory agencies on firms. This study addresses that gap by looking directly at state-level regulatory agencies and their impact on firm entry and survival. Empirically, I examine the licensing of hydroelectric facilities in the U.S. from 1900 to 2012. I suggest that the discretion given to regulatory officials to interpret and implement policy creates political opportunity structures which firms and external stakeholders exploit to their advantage in a differential and non-linear fashion.

RESEARCH QUESTIONS

How does the implementation of public policy by regulatory agencies affect firm survival and success? The relationship between business and government is an essential element of virtually all industries. It is especially so in highly regulated industries such as energy, pharmaceuticals and biotechnology where public policy and regulatory approval have significant impacts on firm performance, survival, and entry and exit (Garcia-Canal & Guillen, 2008; Sine, Haveman, & Tolbert, 2005). In such industries, government regulation influences firms on a number of dimensions, including specific safety and testing requirements (Mathieu, 1997), environmental health (King & Lennox, 2000), the technologies and processes are used (Sharma & Henriquez, 2005) and pricing and licensing (Russo, 2001). Research in this area has led to a number of important insights into how firms attempt to influence policymakers to elicit favorably public policy decisions (Bonardi, Hillman & Keim, 2005; Lyon and Maxwell 2003) and how regulatory changes affect industries and firms (Dobbin & Dowd, 1997; Wade et al. 1998; Ingram & Silverman, 2002).

However, this literature has largely focused on firms' interactions with elected officials and how they affect policy outcomes at the legislative level. How firms affect and are affected by the implementation of public policy by regulatory agencies has received less attention (Holburn & Vanden Bergh, 2002, Hiatt & Park 2013). This is an important area of investigation because public policies are often determined by regulatory agencies rather than elected bodies, and regulators are often the primary and more frequent point of contact for businesses (Sabatier & Mazmanian, 1980).

I add to this literature by exploring how the variation across states in policy implementation affects firm survival and success. While the strategic management literature generally assumes that regulators have the freedom to shift policy in response to the firms' attempts at influence (Holburn & Vanden Bergh, 2008), the political science literature acknowledges that regulators don't always have the ability to shift policy due to firms' influence, but instead can be constrained by their political principals who monitor and may even overturn regulatory decisions (McCubbins, Noll & Weingast, 1987). By exploring how the degree of regulatory discretion granted to regulatory agencies by legislators affects the ability of firms to exert influence, I attempt to reconcile these two positions. I propose that as regulatory agencies have more discretion to interpret and implement policy, they become more vulnerable to influence by firms because their political principals are increasingly dissociated from their operations. However, when regulatory agencies are granted less discretion, legislators can better monitor regulatory decision-making, hindering firm influence.

How does stakeholder opposition interact with the implementation of regulation to enable or constrain the ability of firms to survive and succeed? The strategic management and political science literatures also focus almost exclusively on powerful firms (Dal Bo, 2006) and have not examined how external stakeholders are affected by variation in regulatory discretion. Recent research among institutional scholars, however, suggests that external stakeholders in a firm's institutional environment can significantly affect policy outcomes and firm performance (Davis et

al, 2005; King & Pearce, 2010). In particular, scholars have examined how social movements reconfigure existing institutional arrangements by promoting new practices, structures, and policies that can enable or constrain economic activities (Haveman, Rao & Paruchuri, 2007; Russo, 2001).

I address this gap by suggesting that social movement activists also take advantage of regulatory discretion to influence regulatory outcomes. Social movements leverage their organizing and mobilizing capabilities to challenge the legitimacy of regulations and regulators (Gilad & Yogev, 2012; Trumbull, 2012). At low and moderate levels of discretion, regulators are under constant scrutiny by their political principals who oversee them and who are in control of important resources (such as agency budgets) (Olson, 1997; Carpenter, 2004; 2010). Given that regulatory agencies seek to maximize their resources and autonomy, the ability of these stakeholders to either enhance or threaten reputation and legitimacy in the eyes of key resources holders is an important concern (Skocpol, 1985; North, 1990). Therefore, I propose that at moderate levels of discretion social movements will be most effective at influencing regulators. As regulatory discretion increases, challenging the legitimacy of regulations and regulators is less effective as political principals are more distanced from regulatory agency operations.

EMPIRICAL CONTEXT

I explore these research questions in the context of the U.S. hydroelectric power industry in the U.S. The Federal Energy Regulatory Commission (FERC) regulates all non-federally-owned or -operated hydropower facilities in the U.S. Although all facilities ultimately require FERC approval, individual states have the power to place additional restrictions (FERC, 2014). Some states take advantage of this, while others specifically prevent regulators from creating restrictions greater than applicable federal requirements. This has resulted in significant variation across states in discretion that regulatory agencies have to interpret and implement legislation.

Though hydropower is considered a relatively ‘clean’ energy technology because it is renewable with no harmful emissions, the founding of hydroelectric facilities is not without controversy. Facilities create concerns about their impacts on local communities, river ecosystems, and water rights. As a part of the FERC licensing/relicensing process, a number of different stakeholders (including environmental groups) may comment on the application and environmental review. Some of these stakeholders use various tactics to oppose licensing/relicensing, including informational lobbying, engaging in protests and utilizing the courts (Kosnik, 2010). Hydroelectric firms also use a repertoire of tactics to gain favorable regulatory decisions including informational lobbying, financial contributions and collective action via industry associations.

METHODOLOGY

My dataset contains all hydroelectric facility licenses applications and licensees (1694 license applications and 642 licensees), project size, and start-up/shut-down dates for all hydropower plants from 1900 to 2012 – as far back as these data are available. The data includes a measure of state-level regulatory discretion derived from the political science literature and information on the tactics used by environmental groups and firms to influence favorable regulatory decisions. To analyze the factors that influence likelihood of founding and relicensing of hydroelectric facilities, I will use survival analysis. The dependent variable for my survival models is the hazard of a firm achieving licensing and the risk set includes all hydroelectric utility firms that registered with FERC.

PRELIMINARY RESULTS

Preliminary results support my expectations that at high levels of regulatory discretion firms are most effective at influencing regulators, and at low to moderate levels of discretion social movements are most effective. However, I am in the process of gathering additional data on the tactics used by firms and social movements. Data collection and coding will be completed by September, 2015 and a full empirical paper will be completed by mid-October, 2015.