



**PUBLIC POLICY AND ENTREPRENEURSHIP: THE DEVELOPMENT OF THE  
COMPETITIVE LOCAL TELEPHONE SERVICE INDUSTRY**

by

Eric J. Neuman

**ABSTRACT**

In this dissertation, I examine how political environments influence industry structure and entrepreneurial opportunities following deregulation. Within the competitive local exchange carrier (CLEC) industry, which was created by the federal Telecommunications Act of 1996, I find that founding rates of CLECs were higher in states with more experience with incentive-based regulation and in those states with new governors or new commissioners. I also find that states were attractive expansion targets when their political and regulatory characteristics were similar to those of a CLEC's founding state and when they had new governors or new commissioners. Together, my findings support my argument that a state's current policy is built upon its previous policies and that changes in political leadership can serve as punctuating moments that stimulate competition and industry development.

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## **EXECUTIVE SUMMARY**

A look back on the U.S. since about 1980 shows an unmistakable trend toward a push for market forces, rather than government employees, to control aspects of the economy that have important societal benefits. The introduction of auctions for distributing spectrum rights, pollution credits for reducing emissions, and the deregulation of industries such as financial services, transportation, energy, and communication are some examples that signify an abrupt change in ideology. This symphony of market fundamentalism struck a resounding chord in 1996 with two presidential actions only weeks apart. In his state of the union address on January 23, President Clinton, in a statement that ran counter to the typical image of the Democratic party, announced that “[t]he era of big government is over.” Just 16 days later, President Clinton signed the Telecommunications Act, which introduced competition to the local telephone service industry for the first time in nearly 100 years. These events helped to signal the country’s faith in markets, a stance that has shown little sign of abating.

In my dissertation, I focus on one aspect of this transition: deregulation. In particular, I address the development of its ensuing competition including its potential for stimulating entrepreneurship. My dissertation is motivated by one particular question: How does deregulation lead to competition? The implicit theory is that like a magnetic force, entrepreneurs will be attracted to compete with incumbents with strength proportional to the unleashed economic opportunities. Such a conception is, of course, simplified from the arguments of

mainstream economic theory, but even these theories typically do not see states having much influence in bringing about competition. This is despite the fact that our society is flush with evidence that states are an ever-present lubricant that smoothes the frictions of the market through the use of property rights, corporation law, the court system, etc.

Yet what most of us call deregulation is still different from the typical free market activity where the state is merely a supporting structure. Despite the language of withdrawal implied by the prefix “de”, state actors often maintain control over crucial elements of the industry: licensing who can operate where, setting prices, resolving disputes between incumbents and new entrants, etc. Thus, what we term deregulation is more accurately re-regulation or liberalization<sup>1</sup>. Furthermore, the state actors themselves may try to rule and arbitrate neutrally but bring with them “ideological biases and institutional capabilities” (Vogel, 1996: 268). Understanding how entrepreneurs and ultimately competition arise following the deregulation of an industry therefore requires attention to who these state actors are, what they believe, and under what institutional and historical contexts they operate.

Though we have learned much of the role that governments play in fostering competition and new businesses, research tends to focus on the effects of current policy. Many questions remain about other aspects of the political process, such as the role of individual state actors and the lingering effects of the policy that is being replaced. These factors seem particularly relevant for an industry being transformed from monopoly to competition. For instance, if market fundamentalism is indeed a driving force behind federal deregulatory policy, do state-level variations in such ideology lead to state-level variations in deregulation outcomes? How do

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<sup>1</sup> Vogel (1996: 3) defines deregulation as the “reduction or elimination of government regulations” and liberalization as “introduction of more competition within a market.” Though the 1996 Telecommunications Act clearly did not reduce or eliminate the amount of regulation for the local telephone service industry (Crandall, 2005; Neuman, McKnight, & Solomon, 1997), I will use deregulation in this document to coincide with what most people mean by the term.

preexisting conditions within states influence the federal deregulation process? Can new government leaders break the bonds between political elites and incumbents that tend to hurt new entrants? To address these and related questions, I analyze the deregulation of the industry I alluded to previously, the local telephone service industry.

## **Dissertation Overview**

When local telephone service was deregulated as part of the federal Telecommunications Act of 1996, it gave rise to a new sector: competitive local telephone service. The purpose of this dissertation is to analyze how the competitive local telephone service industry developed differently across states as a function of state political environments. In particular, I focus on industry growth and study it in two different ways. Consistent with the ecological perspective of studying industry growth, I analyze state-level founding rates of competitive local telephone service providers to address the question, Why did certain states see more entrepreneurial opportunities for competitive local telephone service providers than did other states? And because many competitive providers expanded their service into territories outside their headquarters state, I also study industry growth at the firm-level. I analyze these expansion decisions in order to answer the question, Why did competitive providers choose to expand into certain states rather than into other states? Together, they provide a richer view into the relationship between state characteristics and industry growth than either could do alone.

I study five different aspects of a state's political environment. First, I examine *political ideology*—that is, the beliefs held by state government officials and by the state's electorate regarding the role that government should play within society. I argue that states with a more conservative ideology, which is typically associated with a preference for free markets, should see higher levels of industry growth.

Second, I explore what I am calling a state's *institutional endowment*. Relative to this context, this includes the policies that states had in place for regulating the local telephone industry before federal deregulation. I argue that these policies should influence how the new, competitive industry developed after deregulation. States with a history of incentive-based regulation, which was guiding the industry away from monopolies and toward competition, should see higher levels of industry growth.

Third, I consider another way in which previous policy continues to shape an industry despite being preempted. Before deregulation, local telephone providers were regional monopolies, in which they were the sole providers for a given geographic territory. The largest incumbent providers covered several states. Competitive entrants are unrestricted about where they can operate, but I argue that they have been influenced by the geographical boundaries of these large incumbents due to both transaction costs and to the cognitive conception of markets that this *legacy policy* of geographical restrictions created.

Fourth, I analyze whether the geographical location where a firm starts its operations influences what other states appear to be desirable expansion targets. I argue that a firm's *founding conditions* cause it to structure itself a certain way and to take on characteristics that make it a better fit for some states rather than others.

Fifth, I examine how *political regime change* helps states make the transition from regulating monopolies to regulating competition. I argue that events of new government leadership, both overall and specific to those who oversee the industry, serve as punctuating moments that (1) break those ties between incumbents and the political elite and (2) stimulate the economy and attract service providers such as competitive local telephone service providers. This should lead to higher levels of industry growth.

As a final consideration, I analyze how the effect that political environments had on industry growth at the state-level may have varied over time. I argue that as an industry gains legitimacy and as its surrounding context changes, the factors that influence its growth and its entrepreneurial opportunities may shift in their level of importance. I explore, then, the extent to which the preceding characteristics varied over time.

### **Summary of Results**

In my first study (Chapter V), I examine variation in state-level founding rates of competitive local exchange carriers (CLECs) between 1997 and 2006. My dependent variable (the number of CLECs founded in a state in a given year) is based on data I obtained from individual state public utility commissions. I contacted each public utility commission of the 48 continental United States to request its CLEC certification data since 1996. I received usable data from 35 states, covering a total of 9,180 issued certificates. My independent variables come from a variety of archival sources.

I find that states with more experience with incentive-based regulation had higher CLEC founding rates and that this effect was stronger in the early years of deregulation. Interestingly, though, the particular policy that states were using at the time of deregulation did not matter. CLEC founding rates were also higher for states with new governors throughout the study and for states with new commissioners early in the study period. Though not all hypotheses were supported, these findings do support my arguments that a state's regulatory history provides an institutional endowment upon which future policy is built and that a change in political leadership can serve as a punctuating moment that can spur deregulation and industry development.

In my second study (Chapter VI), I examine variation in firm-level expansion decisions made by CLECs between 1997 and 2005. The data for my dependent variable in this study come from market reports on the CLEC industry authored by New Paradigm Resources Group. These data represent the entire population of CLECs that constructed their own networks. Because I am interested in growth from one year to the next, my sample consists of the 186 CLECs operating for at least two years. I analyze each CLEC's decision to expand (or not) into each state not already in its territory for each year of the CLEC's existence, thus giving me  $N = 26,267$  firm-state-year observations, of which 936 correspond to market entries. As with my first study, my independent variables come from several different archival sources.

I find that over the first part of the study period, CLECs were more likely to enter states that were similar to their founding state on dimensions of the political ideology of its electorate and that employed the same type of local telephone regulation in 1996. This suggests that a firm's "founding conditions" may play a greater role when its industry is still developing and before regional experimentation has converged to a more stable equilibrium. New governors and newer commissioners (on average) also significantly contributed to the growth of the CLEC industry by making such states more attractive expansion targets. These results again support my argument that political regime change can serve as a punctuating moment by disrupting ties between regulators and incumbents or by stimulating a region's economy in general. Finally, CLECs exhibited a strong tendency to grow within the boundaries of the dominant incumbent carrier's territory. In many respects, this effect was as strong as the effect of adjacency. Even after one policy has been preempted by a second policy, the effects of the first policy can be seen.



Together the studies support my argument that political environments and institutional conditions matter in stimulating entrepreneurship following deregulation. Though a number of hypotheses were not supported, the findings provide a basis upon which future research on the relationship between political environments and entrepreneurship can build.

### **Contributions to Theory**

By focusing on contextual factors that create entrepreneurial opportunities, this dissertation contributes to the literatures of organization theory and entrepreneurship. One way of doing so was to expand upon the usual conception of political environments as simply the effects of current policy. I have attempted to provide a richer, more realistic view of what constitutes the political environment of an industry and its firms. As I have argued and as my results have shown, policy such as deregulation must be studied as a process. This process starts with the conditions that had been in place and can traverse across multiple levels of government (here, the state and federal levels). Furthermore, policy does not legislate or implement itself. State actors, who may have been part of the previous policy era, bring with them their own unique histories, capabilities, and ideologies. For this reason, change in the political regime may be the necessary punctuating moments to break the links to old conceptions and help institutionalize the new policy.

At a higher level of abstraction, many of these aspects of the political process can be generalized to contribute to our understanding of institutional change. Institutions may become endowed by elements from a previous era and, much like pre-deregulation policy did in this study, create lingering effects well after the change event has taken place. Transition moments such as new leadership can be helpful in dissolving ties to the past. A separate way that this study explicitly considered institutional change was to investigate whether forces driving the

change varied over time. In this way, I placed the attention on the dynamic process of institutionalization rather than on static institutions.

### **Contributions to Policy**

I opened this summary with a discussion about neoliberal policy since 1980 and its push toward market-based control of business activity. Yet my dissertation chronicles how deregulation of the local telephone service industry was not a removal of governmental control so much as it was a shift in what the government would be controlling. Deregulation therefore remained very much influenced by state actors in the present condition along with their previous decisions.

The need for regulator involvement in the deregulation process is typically portrayed as a necessity for leveling the playing field between incumbents and new entrants. What this dissertation suggests is that (1) rather than a single playing field, there are typically multiple playing fields; and (2) previous policy efforts and state regulators themselves may represent bumps on the field that need to be smoothed out. These issues are more difficult to address with additional policy. One alternative would be to remove all regulation and oversight entirely—that is, to create “true” deregulation. Given the start-up costs for constructing a local telephone network and network externalities, it is difficult to imagine new entrants standing a chance against enormous incumbents without some third-party intervention. Yet if our conception of telephone service is broadened to include cellular service, which has fewer infrastructure requirements and does not require a physical connection into each residence and business, this idea becomes more viable. A second option that builds on the findings from this study is to transition the oversight of deregulation from exclusively the domain of the state regulatory agency to a different entity served by multiple interests, such as the government, industry, and

consumers. Though this could create political gridlock, it should generate an influx of new perspectives that could steer deregulatory effects beyond the blind spots of the past.