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The Role Of Institutional and Market Forces In Divergent Organizational Change

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The Role of Institutional and Market Forces in Divergent Organizational Change

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This paper focuses on a radical change, in which organizations abandon an institutionalized template for arranging their core activities, that is likely to occur in organizational fields that have strong, local market forces and strong but heterogeneous institutional forces. We examine the role of market forces and heterogeneous institutional elements in promoting divergent change in core activities among all U.S. rural hospitals from 1984 to 1991. Results support the view that divergent change depends on both market forces (proximity to competitors, disadvantages in service mix) and institutional forces (state regulation, ownership and governance norms, and mimicry of models of divergent change).●

Organizations often arrange their core activities according to accepted models, or templates, in their field. These templates are patterns for arranging organizational behavior that specify organizational structure and goals and reflect a distinct set of beliefs and values. Accounting and law firms, for example, have traditionally used templates that emphasized individual autonomy and equality among peers, what Greenwood and Hinings (1993, 1996) termed a professional partnership model. Some templates are so repetitive and enduring across an entire organizational field that actors take it for granted that this pattern is the right way to organize (Oliver, 1992). Yet organizations do abandon such templates, diverging from accepted models in their field. What causes them to abandon an institutionalized template for arranging their core activities and replace this template with a substantially different one?

Understanding the causes of such divergent organizational change is important both for understanding the change itself and for advancing neo-institutional theory. Until relatively recently, theory and research have focused on examining the successful reproduction and diffusion of organizational forms and practices (DiMaggio and Powell, 1991; Oliver, 1992; Scott, 1995). It is not yet clear how the theory can be extended to account for divergent organizational change (Greenwood and Hinings, 1996; Kraatz and Zajac, 1996; Kraatz and Moore, 1998). Further, examining such change would help to link the "old" and "new" institutional theories (Greenwood and Hinings, 1996; Selznick, 1996; Hirsch and Lounsbury, 1997). This is so because divergent change involves both a transformation in organizational goals, a focus of the original institutional school, and a transformation in widely held beliefs and norms, a focus of neo-institutional research (e.g., Zald and Denton, 1963; DiMaggio and Powell, 1991).

Though theorists have proposed several explanations for divergent organizational change (e.g., DiMaggio, 1988; Oliver, 1992; Thornton, 1995), recent conceptual papers (Greenwood and Hinings, 1996), case studies (Leblebici et al., 1991), and a few large-scale empirical studies (Davis, Diekmann, and Tinsley, 1994; Kraatz and Zajac, 1996) have emphasized the importance of both market competition and institutional factors in causing such change. Kraatz and Zajac (1996) found that local market forces (e.g., consumer demand) prompted divergent changes in curricula among U.S. liberal arts colleges (e.g., offering business degrees). In contrast, results

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from Davis, Diekmann, and Tinsley (1994) suggested that institutional factors caused decreased use of the conglomerate form of organization in the 1980s—the very idea of this form was no longer legitimate. One explanation for these inconsistent results is that there are varying market and institutional conditions under which divergent organizational change occurs. Earlier conceptual and later empirical work in neo-institutional theory (e.g., Scott and Meyer, 1983; Dacin, 1997) has emphasized that organizational fields vary in both the relative strength and heterogeneity of institutional and market pressures they hold for organizations. Thus, prior studies may yield different explanations for divergent organizational change because they examined organizational fields that differ in the kinds of market and institutional forces that affect them. In this paper, we formulate and test hypotheses on the effects of both market and institutional forces on divergent organizational changes, using data on the organizational field of rural hospitals between 1984 and 1991.

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The Role of Market Forces

Divergent organizational change is more likely to occur within organizational fields that have strong, local market forces and strong, but heterogeneous, institutional forces. Organizations face strong, local market forces to the extent that there is low local demand for their products and services and intense local competition from similar organizations. Prior research suggests that competition among similar organizations is more intense at local levels than at population levels (Zucker, 1989; Hannan and Carroll, 1992: 146; Baum, 1996). Low local demand for organizations' products and services and intense competition among similar organizations at the local level lead to divergent change as less-fit competitors move out of a market in search of alternatives to their current templates (Hawley, 1950: 201–203; Delacroix, Swaminathan, and Solt, 1989; Amburgey, Kelly, and Barnett, 1993; Haveman, 1993; Greve, 1998). Organizations that hold favorable positions relative to their competitors in such markets can perform well enough to maintain their status quo (Greve, 1996). In contrast, organizations that have comparative disadvantages in key areas, such as size or product mix, need to make substantial changes in templates as they seek domains in which they can hold a competitive advantage (Hannan and Freeman, 1977, 1989; Baum and Haveman, 1997).

Demand. Insufficient consumer demand for organizations' products and services is an important cause of divergent organizational change. Local markets with high consumer demand may promote convergent change, because organizations might have adequate resources to adopt forms and practices from successful competitors (Hawley, 1968). In contrast, markets with low levels of local consumer demand are likely to promote divergent change because these markets cannot support all of the organizations that are operating with the same or similar resource needs. Kraatz and Zajac (1996) found, for example, that less consumer demand for traditional liberal arts degrees was significantly related to

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divergent changes in the curricula of liberal arts colleges. Thus, we hypothesize:

H1: The lower the level of demand in an organization's local market, the more likely it is to make a divergent change.

Geographic distance between competitors. Results from several empirical studies show that the addition of an organization to a population has stronger competitive effects on neighboring organizations than on those that are more distant (Baum and Singh, 1994a, 1994b; Hannan et al., 1995; Lomi, 1995; Baum and Haveman, 1997). This means that organizations that have similar products and services and are located in close proximity in local markets will face relatively strong competition, because they are trying to attract the same limited pool of consumers. As a result, competition in a local market increases the likelihood that one or more of the proximate organizations will perform poorly and will thus need to make a divergent change to differentiate itself from competitors and escape more losses. Thus, we hypothesize:

H2: The closer the geographic distance between an organization and its closest market competitors, the more likely that the organization will make a divergent change.

Size relative to competitors. The size of organizations relative to competitors in their local market is likely to influence which of them will be unsuccessful and thus be forced to search for an alternative template. Specifically, there is likely to be a competitive disadvantage for organizations that are relatively smaller than their local counterparts (Baum, 1996). This disadvantage appears to result, at least in part, from the superior ability of larger organizations to acquire resources that are needed to produce goods and services efficiently and effectively (Aldrich and Auster, 1986). For example, compared with larger organizations in their market area, small organizations will have more difficulty both in raising capital to purchase technology and in hiring specialized personnel. Thus, we hypothesize:

H3: Organizations that are smaller than their market competitors are more likely to make divergent changes.

Service and product mix relative to competitors. Services and products differ along several dimensions, including quality, selection, and price, that make them more or less attractive to customers. In general, organizations that produce goods and services that are more attractive than those produced by their otherwise similar competitors are likely to be winners in head-to-head competition for customers in local markets (Greve, 1996). As a result, organizations with a relative edge in product and service offerings will be able to maintain their status quo, while losers must differentiate themselves and seek alternatives. We hypothesize:

H4: Organizations that have disadvantages in services and products relative to local market competitors are more likely to make divergent changes.

The Role of Institutional Forces

Organizations face strong, heterogeneous, institutional forces to the extent that their external environments consist of influential but diverse regulations, norms, and cognitive models (Scott, 1995). Divergent organizational change occurs, by definition, when an organization abandons an institutionalized template. Such change is possible when an organizational field has heterogeneous institutional elements that are inconsistent with the dominant model; these conditions give organizations some discretion—they are less locked in to their current templates (Oliver, 1991, 1992). Thus, heterogeneity in institutional elements can play a role in promoting divergent change that is primarily complementary to the role of local markets: while local market forces motivate organizations to find alternative templates, heterogeneity in institutional elements makes these searches acceptable and successful.

Heterogeneity in institutional elements is more likely to occur to the extent that an organizational field has a fragmented structure of decision making, in which there are multiple and uncoordinated sources of authority and influence (Scott and Meyer, 1983: 141–143; Meyer, Scott, and Strang, 1987). Such fields can produce diverse and even competing regulations, norms, and cognitive models for organizations because actors pursue their interests relatively independently, and there is no central authority to coordinate their activities or settle disputes. For example, two federal agencies may work independently in the same organizational field and, as a result, produce rules for state-level organizations that conflict with each other (e.g., Hoffman, 1999). When influential actors throughout a field promote a variety of regulations, norms, and cognitive models, an important result is a relatively wide range of accepted organizational practices and templates (Scott and Meyer, 1983: 150–151; Friedland and Alford, 1991; Powell, 1991: 195; Greenwood and Hinings, 1996; Hoffman, 1999). In such fields, organizations that are motivated to make divergent changes due to market pressures have the opportunity to do so, even if it means that they are abandoning a template that had been institutionalized across the field (Oliver, 1991, 1992; Ocasio, 1995). Due to lack of central control or coordination in heterogeneous institutional environments, however, regulative, normative, and cognitive elements each play an independent and distinctive role in influencing divergent organizational change (Scott, 1995).

Regulative Elements

Because regulations often codify widely held beliefs and stem from government initiatives, they can be viewed as institutional forces (Carroll, Delacroix, and Goodstein, 1988; Edelman and Suchman, 1997). Regulatory elements, especially government policies, either promote or inhibit divergent change by influencing resource flows in markets and organizations (Wade, Swaminathan, and Saxon, 1998) and by requiring organizational accountability in exchange for resources (Edelman and Suchman, 1997). Regulatory policies promote divergent change, for example, by increasing market competition (e.g., Dobbin and Dowd, 1997) and by reducing

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government financial support for organizational templates (e.g., Singh, Tucker, and Meinhard, 1991). In contrast, regulatory policies inhibit divergent change by demanding accountability and reliability from organizations, thus creating routines that promote inertia (Hannan and Freeman, 1984). Government policies can thus produce contradictory effects on divergent change.

Regulation that creates inertia. Meyer and Rowan (1977) emphasized that organizations whose technologies are relatively weak and whose output cannot be easily evaluated in market exchanges are subject to strong rules that focus on controlling their production processes. Such organizational fields have regulations that create and reinforce routines and structures that are intended to make organizations reliable and accountable for their performance. Organizations that fail to conform to such regulations risk losing their legitimacy and external support (D'Aunno, Sutton, and Price, 1991; Ruef and Scott, 1998). Conforming to such regulations, however, may be costly. A central argument in structural inertia theory (Hannan and Freeman, 1984) is that, over time, routines reduce an organization's ability to change. Similarly, neo-institutional theorists argue that routines can become taken for granted, thus contributing to inertia (Zucker, 1977). We expect:

H5: Organizations that meet regulatory requirements in their fields are less likely to make divergent changes.

Legislation that promotes and limits competition. Government regulation and policy also affect divergent change by increasing or decreasing the level of competition that organizations face in local markets (Fligstein, 1996). Strong competition motivates organizations to consider divergent change, while weak competition makes such change unnecessary. Government policy promotes competition through antitrust laws that aim to prevent or break up monopolies among existing firms (Dobbin and Dowd, 1997). For example, laws may reduce barriers to entry so that firms that are new to a market can challenge established ones (Fligstein, 1990; Kelly and Amburgey, 1991; Dobbin and Dowd, 1997). In contrast, policies can weaken competition by regulating several aspects of markets, including the production of goods and services, prices, and labor wages. The effect of such anti-competition policies is to reduce organizations' uncertainty about resources and provide them with a stable market environment, thus reinforcing the viability of current templates and decreasing the need to make divergent changes (Fligstein, 1996). We hypothesize:

H6a: Pro-competition regulation will promote divergent organizational change.

H6b: Anti-competitive regulation will inhibit divergent organizational change.

Legislation that affects resources in local markets. Government regulation and policies also play a contradictory role in divergent change by either limiting or increasing resources (especially capital) for organizations, thus either increasing or decreasing both their need and ability to search for, and

implement, alternative templates (Fligstein, 1996; Dobbin and Dowd, 1997; Wade, Swaminathan, and Saxon, 1998). Policies inhibit divergent change to the extent that they increase resources that flow directly to organizations to support their current templates. Dobbin and Dowd (1997) argued, for example, that the state of Massachusetts provided so much capital support for railroads in the 1800s that owners' concerns about competition were mitigated; state and local governments were ready to contribute funds to railroads that could not meet their expenses. Policies to increase organizations' resources work in a variety of ways, ranging from direct grants and loans (as for the Chrysler corporation in the 1980s) to legislation that reduces regulatory demands that are costly for organizations to meet. In contrast, government policies can promote divergent change by providing resources and financial incentives intended to stimulate and support organizations' searches for and implementation of alternative templates. In the post-cold-war era, for example, legislative initiatives provided resources to firms in the U.S. defense industry that would enable them to make divergent changes, thus saving jobs that might be lost due to lack of demand for military products. Thus, we expect:

H7a: Legislation that provides resources to support current organizational templates will inhibit divergent organizational change.

H7b: Legislation that provides resources to support organizations' use of alternative templates will promote divergent change.

Norms and values. From among the many norms and values that characterize institutional environments, the most important to divergent organizational change are those that make such change acceptable to actors who own and govern organizations. These actors have the authority and power to make divergent change occur. Norms about property rights are critical because they not only specify who owns organizational assets (public vs. private ownership) but also shape the extent to which these owners can, and will, use these assets to make divergent changes (Campbell and Lindberg, 1990). Similarly, norms about governance are critical because they specify which actors, other than owners, will influence strategic decisions, such as those to engage in divergent change (Fligstein, 1996). Divergent change is more likely to occur if it is supported by an organization's owners and board members, who have the authority and power to make substantial changes in an organizational template (Selznick, 1949).

Norms about property rights define who owns or has claims on firms' assets and profits (Jensen and Meckling, 1976; Fama, 1980). The more that property rights in an organizational field consist of public rather than private ownership of firm assets, the less likely it is that divergent organizational change will occur. Public ownership means that all citizens of a given community, state, or nation have legal claims on an organization's assets and profits; these citizens also hold responsibility for financial losses. Thus, public ownership diffuses both the costs and benefits of organizational performance and, as a result, creates inertia rather than support for change (Meyer and Zucker, 1990). Further, publicly owned organizations typically are founded to meet certain communi-

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ty needs that profit-seeking organizations have failed to address. These organizations thus find it difficult to use public assets for purposes other than those stated in their original charter. Private non-profit organizations have a similar role in our society.

In contrast, for-profit owners have the right to use profits and assets as they see fit. In fact, for-profit owners have a legal responsibility to protect assets, regardless of prior commitments of these resources. For-profit owners are less concerned about meeting an organization's mission than they are in generating profits. Faced with market pressures, these owners will be likely to abandon traditional goals and commitments and exercise their right to use assets for other business opportunities. Thus, we expect:

H8: Public and private non-profit organizations are less likely to make divergent changes than for-profit organizations.

Governance norms play an important part in promoting divergent organizational change because they specify how firms should be organized, including what roles superordinate authorities, such as boards, should play in decision making (Fligstein, 1996). Governance norms that specify central control of complex organizations will promote divergent change among the various units or divisions that belong to such organizations. This is because central control weakens the importance, meaning, and identity of subunits, making it possible for superordinate authorities to view them as sets of capacities that need to be managed for the good of the firm as a whole (Davis, Diekmann, and Tinsley, 1994; Douglas, 1986). This view increases the chances that divergent change will occur in organizational units that face adversity. We hypothesize:

H9: Organizations that are members of multidivisional firms are more likely to make divergent changes.

Cognitive models of divergent change. Cognitive elements promote divergent change by providing models of such change for organizational decision makers to imitate. Organizations that adopt alternative templates provide cognitive models of divergent change that spread in an organizational field through mimicry. Neo-institutional theorists argue that organizations often mimic other organizations' behavior, especially under conditions of uncertainty (DiMaggio and Powell, 1983; Goodrick and Salancik, 1996). Results from several empirical studies support the view that mimetic behavior promotes organizational changes that are similar to the divergent change we examine here. Greve (1995, 1996) found evidence of mimicry in analyses of radio stations that abandoned their strategies and stations that adopted new market positions. Similarly, Haveman (1993) showed that savings and loan associations imitated the strategies of large and profitable associations by entering new markets. Divergent change occurs in part because organizations with similar resource needs cannot easily co-exist in the same markets. Thus, an organization is not likely to imitate other organizations that make divergent changes in its local market area because the need for such change is greatly reduced when

neighbors have already made it (Greve, 1995). Rather, organizations will imitate other organizations that face a similar or equivalent pattern of market and institutional forces (Burt, 1987, 1992). For example, an organization that faced state policies that were similar to those of a focal organization, and responded with a divergent change, would provide a relevant model for such change. In this case, imitation could be highly pragmatic (Kraatz and Moore, 1998). Thus, we hypothesize:

H10: Organizations are more likely to make divergent changes to the extent that they have nonlocal models of such change in organizations that faced similar market and institutional forces.

Divergent Change among Rural Hospitals

Institutional pressures. The health care field in the U.S. has long been characterized by institutional pressures that are both strong and heterogeneous (Stevens, 1989). All branches of the federal government make decisions that affect the entire health care field. Local and state governments also exercise authority to regulate health care providers (Carroll, Delacroix, and Goodstein, 1988). This fragmented structure of authority makes it possible for various actors to pass laws to meet particular needs and, importantly, means that regulations are, at best, uncoordinated and, at worst, inconsistent or conflicting (Alexander and Scott, 1984). This study focuses on rural hospitals because rural communities place particularly strong institutional pressures on their hospitals. If a rural hospital closes or changes its mix of services, community members may lose access to vital health care services. Rural hospitals also are often their communities' major employers; their failure may mean the loss of jobs and income for the community. Finally, hospitals have important symbolic meaning in rural communities; they are a source of pride that erodes with hospital closure or identity changes.

Effect of Medicare cuts. The 1980s marked the beginning of a new era that shifted focus from increasing access to health care, as marked by the passage of Medicare and Medicaid legislation in the 1960s, to controlling costs (Scott et al., 2000). Several years of double-digit increases in prices threatened the economic interests of actors who pay for health care; in response, they initiated policies and practices to control costs.¹ In 1984, Medicare became the first major payer to try to control hospital costs by moving from paying all "usual and reasonable" fees that hospitals charged for a particular service to paying a fixed fee for each service. This key change in Medicare payment policy had significant financial and market effects for rural hospitals (Bazzoli, 1995). Hospitals received reduced cash payments for services, which cut their budgets and contributed to cash-flow problems. Hospitals tried to compensate by increasing their patient and service volume, which, in turn, created more competition for patients. Though market pressures might have been relatively low in rural health care prior to 1984, these pressures increased with Medicare reform.

Rural hospital conversion as divergent organizational change. Rural hospital conversion occurs when a rural community hospital leaves the defining business of hospitals—

¹ Managed care is now the most predominant approach to controlling health care costs in the U.S. (Scott et al., 2000), but in the time period studied here, especially in rural areas, managed care was not yet an important market influence. In 1991, for example, only 3.5 percent of the population residing in rural counties was covered by managed care.

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acute inpatient care—and converts all of its capacity to become a provider of other kinds of health care, either outpatient care (e.g., ambulatory care clinic) or specialty inpatient care (e.g., nursing homes) (Alexander, D'Aunno, and Succi, 1996). Rural hospital conversion is a divergent organizational change for several reasons. First, conversion means that the “hospital” template is discontinued. The hospital template consists of two distinctive capacities: (1) to perform certain technical, medical procedures and (2) to allow patients to recover from acute episodes of health problems or procedures for a short stay (up to several days). Conversion changes one or both of these core features. The capacity to perform technical medical procedures (all surgical procedures) is lost when a hospital converts entirely to either a long-term care facility (a nursing home) or to a provider of non-acute care, such as mental health or drug abuse treatment. The capacity to allow short stays of residential care is lost when a hospital converts entirely to an outpatient care provider. To eliminate the physicians, technology, and services that define a hospital is a radical change, not just an incremental one, as is involved when a hospital specializes, for example, by using some beds to provide long-term care for the elderly.

Second, the hospital template has been highly institutionalized across the entire health care field for decades (Stevens, 1989). In all states, for an organization that provides health care to be termed a hospital it must meet certain legislatively defined standards, such as having the capacity to provide care by licensed professionals for 24 hours per day, having state-licensed physicians and equipment to perform surgery, or operating an emergency unit for 24 hours per day with at least one physician staff member. Eliminating the services and medical staff that define a “hospital” means that a health care provider is legally no longer a hospital. Finally, when the required services and medical staff that define a hospital are eliminated, other groups recognize that the identity of the hospital has changed.

METHOD

Sample

This study's unit of analysis is the individual hospital. The study sample consisted of all non-specialty, community hospitals that were at risk for divergent change (conversion) during the study period. These included hospitals operating in rural areas from 1984 through 1991 and those hospitals that were founded during the study period or that may have exited the population of rural hospitals through mergers and consolidations. We used the broadest possible definition of rural: any locale outside a metropolitan statistical area (MSA). The sample excluded hospitals that operated in rural areas at the outset of the study period but were subsequently incorporated into an MSA. The sample also excluded rural hospitals that had no competitors within 35 miles; we could not test hypotheses about local market competition with these isolated hospitals.² The final study sample consisted of 2,064 rural hospitals.

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Nonetheless, we could test all of the other hypotheses with this sample (i.e., H1 and H5–H10), and we did so to determine if excluding hospitals with no competitors within 35 miles affected the results. Including these rural hospitals (an average of 362 per year) increased the sample size for the hospital-year data from 14,446 to 17,280. The results (available from the authors) do not differ significantly from those obtained when the sample excludes rural hospitals with no competitors within 35 miles.

Data Sources

We used several data sources. The American Hospital Association (AHA) annual survey data files (1984–1991) provided an initial listing of conversions as well as data on hospital services and organizational characteristics. We collected primary data from state hospital associations and individual hospitals and medical facilities to validate our initial inventory of conversions. We used the Area Resource File (ARF) (Bureau of Health Professions, 1991) as a source of data on county-level market variables. We used latitude and longitude listing of all community hospital addresses from Geographic Inc. to compute straight-line distances between each hospital in the sample and the nearest hospital provider (rural or urban). The Health Care Financing Administration (HCFA) Medicare Cost reports (1984–1991) provided data for computing financial ratios for all federally funded hospitals in the sample. Data on state legislation concerning rural hospitals came from the Intergovernmental Health Policy Project (1988) and Gibbens and Ludtke (1990).

We merged data from these sources to construct a pooled, cross-sectional analysis file. The data set contained annual observations on hospitals from 1984 through 1991 in a hospital-year format. Hospitals in the sample were assigned observations for all variables for each year of the study period. Those hospitals that entered the sample after 1984 or exited prior to 1991 were assigned observations only for the years they were operational during the study period. Because predictors of hospital conversion were unlikely to exercise instantaneous effects, and to enhance causal explanation, all predictors were lagged by one year in the analysis. Thus, the data set consisted of seven years of observations, equivalent to 14,446 hospital-years. Table 1 shows the measures for all study variables.

Dependent Variable

Conversion means that a rural hospital changed to provide other types of health care services, and these included outpatient facilities and specialized inpatient facilities (long-term care, substance abuse). We classified community hospitals that closed but reopened as health care providers within one year of closure as conversions. This decision assumes that conversions are often not instantaneous events but require changing the hospital to fulfill its new role. If the time span from closure to reopening as a health care facility was greater than one year, however, the event was classified as a closure. We used a two-step process to produce a complete, validated inventory of conversion in the population of rural hospitals over the study period. First, we compiled an initial inventory of conversion events by comparing annual changes in hospital status using the AHA annual surveys (1984–1991). Second, representatives in all 50 state hospital associations reviewed and modified this preliminary inventory of events. We found 147 rural hospital conversions. Seven percent of the hospitals converted to become providers of long-term care (nursing homes); 17 percent became specialty providers of inpatient care (substance abuse); and the majority of hospitals, 76 percent, converted to become outpatient clinics that

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Table 1

Variables and Their Measures*	
Variable	Measure
Conversion	Rural community hospital ceases operation and, within one year, begins operation as another type of health care provider (1 = yes; 0 = no)
Market position	
Geographic proximity	Straight-line distance (in miles) from focal rural hospital to nearest hospital in its market area
Relative position by:	Euclidean distance between a focal hospital and other hospitals in its market, based on:
Size	Total number of beds authorized and staffed
Diagnostic service	8-item scale: CT scanner; cardiac catheterization lab; diagnostic radioisotope; X-ray radiation; megavoltage radiation; trauma center; hospice; psychological hospitalization
Inpatient treatment	8-item scale: respiratory therapy; pediatric acute care; obstetric care; physical therapy; cardiac intensive care; general medical/surgical care; medical/surgical intensive care; ultrasound
Outpatient services	5-item scale: ambulatory surgery; psychiatric emergency; psychiatric treatment; substance abuse; rehabilitation
Demand	
Total population	Average population of focal hospital and contiguous counties, in 1,000s
Population age	Percent of population age 65 or older in focal and contiguous counties
Population income	Per capita income in focal and contiguous counties
Regulatory elements (state or federal legislation)	
Capital funds for rural hospitals	Hospital is located in a state with laws that provide capital funds to maintain rural hospitals (1 = yes; 0 = no)
Reduction in regulation to reduce operating expenses	Hospital is located in a state with law to reduce regulations that place financial burdens on rural hospitals (1 = yes; 0 = no)
Capital for rural hospital conversion	Hospital is located in a state with law that provides capital for rural hospital conversion (1 = yes; 0 = no)
Certificate-of-Need law (CON)	5-item index: CON covers capital expenditures; CON covers medical equipment purchases; CON covers new services; percentage of hospital requests approved by CON review board; budget size for CON review board; each item ranked from 0 (no CON) to 3 (most stringent requirements) and summed; index ranges from 0 (no CON) to 15 (most extensive regulation)
JCAHO accreditation	Hospital has JCAHO accreditation (2 = yes); (1 = no)
Diversification law	Hospital is located in state with law that reduces barriers to entry in new services or geographic service areas (1 = yes; 0 = no)
Normative elements	
Multihospital system member	Hospital is member of multihospital system, defined as two or more hospitals that are owned, leased, or sponsored by a single administrative entity (1 = yes; 0 = no)
Ownership	Hospital ownership is public (1 = yes; 0 = no), private-for-profit (1 = yes; 0 = no); private non-profit is an omitted category
Cognitive element	
Conversion available as a model	Rate of rural hospital conversion in focal hospital's state
Cash flow	Ratio of net income plus depreciation divided by total assets
Size	Number of beds set up and staffed for use
Age	Number of years since hospital's founding
Time	The years 1985–1991 are measured as a series of dummy variables, with 1991 as the omitted reference year

*All variables are measured for each year of the study period.

provide primary health care. The number of new conversions per year was 10 in 1984; 10 in 1985; 18 in 1986; 20 in 1987; 24 in 1988; 24 in 1989; 21 in 1990; and 20 in 1991.

Predictor Variables

Market area. Following Succi, Lee, and Alexander (1997), we defined local market areas for rural hospitals using a variable-radius approach. The variable-radius approach takes into account that local market areas vary for each rural hospital on

the basis of population density (generally considered in the literature as a measure for service demand) in areas surrounding the focal hospital (Goody, 1993; Phibbs and Robinson, 1993). Population density was calculated by averaging the total number of residents per square mile for the focal county and all contiguous counties (Bronstein and Morrissey, 1990). Thus, hospitals located in areas with lower population density were assigned a larger radius and a larger market area than hospitals in areas with higher population density.

To calculate a radius for each hospital's market area, we limited radii to a range between 10 and 35 miles. We selected the 10-mile lower bound because it represents the average of two distances (15 and 5 miles) generally considered as the radii of urban hospital markets (Luft and Maerki, 1984). The 35-mile upper bound was selected because it represents the cut-off by which rural hospitals are designated as a sole community hospital (Office of Technology Assessment, 1990). Within these bounds, we assigned each rural hospital a radius value between 10 and 35 miles, using two steps. First, we determined the market area for each rural hospital by calculating a weight for population density in the focal hospital's county and surrounding counties; this weight is relative to the total population of rural hospitals. Next, we used this weight to assign a proportionate radius for each rural hospital, according to the following equation from Succi, Lee, and Alexander (1997):

$$\frac{R_f^2 - (10)^2}{(35)^2 - (10)^2} = \frac{P_f - P_{\max}}{P_{\min} - P_{\max}}$$

where R_f is the radius of the focal hospital's market area; P_f is the average population density in the focal hospital's home county and surrounding counties; P_{\max} is the highest value of average population density in the sample; and P_{\min} is the lowest value of average population density in the sample. The resulting market areas formed the basis for constructing measures of local market demand and market position.

Demand. Demand for hospital services was measured by three variables: population and percent of population age 65 or older are measures of general demand for hospital services (i.e., potential patients); aging increases the need for and use of such services. Per capita income reflects the general munificence of the market and the ability of the population to afford hospital services. We constructed these demand measures by averaging the values of the focal and contiguous counties to account for services provided for patients from neighboring counties.

Market position. We measured three aspects of each rural hospital's market position: geographic proximity to the nearest hospital, service mix relative to its market competitors, and size relative to market competitors. Because of sparse populations and the small number of competitors in most rural markets, we considered proximity a better measure of the potential for competition than more traditional measures such as market density or concentration. We focus on the

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relative number of different services that rural hospitals provide because, other things being equal, patients and their physicians prefer to do "one-stop shopping" at hospitals that provide a rich array of services (Succi, Lee, and Alexander, 1997). Rural hospitals with a larger, richer mix of services relative to competitors should have an advantage. We produced scales that measured the relative number of services that hospitals provide in three areas: diagnostic, inpatient, and outpatient services. We began with the list of services that appeared consistently in the AHA survey for each year of the study, asked several health care experts to group these services into common domains (if any), and conducted statistical checks on the resulting scales. We used multidimensional scaling (MDS) to group the service items because they are binary: a hospital had a particular service or not (Kruskal and Wish, 1978). We also used confirmatory factor analysis to check the results from MDS. Cronbach alpha tests show acceptable reliability scores (diagnostic services = .67; inpatient services = .63; outpatient services = .65), and there are low correlations among the scales.

We calculated relative competitive advantage due to service mix and size using a variant of the Euclidean distance to indicate how much an individual hospital differed from other hospitals in its market (Jackson et al., 1991):

$$\sum_{j=1}^n \frac{S_i - S_j}{n - 1},$$

where n is the number of hospitals in a market, S_i is the focal hospital's value on size or services, and S_j is the j th hospital's value on the corresponding attribute. This measure differs from the standard Euclidean distance score: it reflects the direction of the difference and whether the focal hospital was positioned above or below the market average. We could thus use these measures to test our hypotheses about the relative competitive advantages of size and service mix.

Regulation. Using data from the Intergovernmental Health Policy Project (1988), Gibbens and Ludtke (1990), and the AHA survey, we measured six types of federal and state regulation during each year of the study period (see table 1). To test H5 on the effects of conformity to regulations, we measured whether each rural hospital held an accreditation from the Joint Commission on Health Care Organizations (JCAHO). This accreditation is the field's primary regulatory approach to increase reliability in the production of hospital services (Westphal, Gulati, and Shortell, 1997; Ruef and Scott, 1998). To test H6a, we measured pro-competition legislation that focused on rural hospitals in the 1980s, intended to promote competition by reducing or eliminating regulatory barriers to entry into new markets. Several states encouraged hospitals to diversify into nontraditional services (e.g., nursing homes). This legislation assumed that diversification would enable rural hospitals to convert to provide more financially viable (less expensive) services. To test H6b, we assessed the strength of states' anti-competition regulation by the strength of Certificate of Need laws, which are a key anti-competition

regulation in this field. Certificate of Need laws restrict the purchase of new equipment and construction because they require hospitals to demonstrate medical need for each capital expense. Hospitals competing to attract patients often purchase new medical technology, build facilities, and begin new service programs. In response to such non-price competition, many states passed Certificate of Need laws in the 1970s. These laws limit competition for technology and serve as a barrier to entry to new products and services. We used a five-item index of Certificate of Need laws that measures variance in both their breadth and stringency. Three of the five dimensions measure the breadth of Certificate of Need laws (i.e., what services or capital expenditures are covered by the law). Stringency is measured in that each of the five dimensions is rated on a scale from 0 to 3, on which 0 indicates that the law did not cover a dimension (e.g., new services were not regulated), and 3 indicates that the law was most stringent (e.g., capital purchases of less than \$150,000 must be approved by a review board). Values for the five dimensions were summed to create an index that ranges from 0 to 15. This measure was available only for 1986, but these regulations changed very little in the study period.

We measured two types of state legislation to test H7a on the effects of state intervention to support current templates. Several states passed legislation to provide low-interest loans for rural hospitals to purchase capital equipment (e.g., advanced diagnostic technology) that might attract patients (Mueller, 1992). Such capital fund laws sought to inhibit divergent change among rural hospitals by providing them with funds needed to maintain their current work. Some states passed legislation to reduce the regulatory burden on rural hospitals and thus indirectly improve their financial status; for example, a requirement for continuous physician coverage could be met by having a physician on call rather than on site. Finally, we used one measure of state legislation to test H7b on the effects of state intervention in promoting divergent change. Several states passed legislation to provide rural hospitals with capital that would enable them to move from providing acute inpatient care to sub-acute care exclusively, i.e., only outpatient care or long-term care (e.g., nursing homes).

Norms. To measure the effects of norms concerning property rights and governance (H8 and H9), we included two variables in the model: hospital ownership and hospital membership in a multihospital system. We measured hospital ownership by a series of dummy variables representing private for-profit, public (state or local government), and private not-for-profit ownership. Membership in a multihospital system is a measure of norms specifying system-level, centralized governance vs. local governance of a hospital. Multihospital system membership was measured with a dummy variable, where 1 = yes, and 0 = no.

Cognitive models. To measure the availability of nonlocal models of divergent change for a focal hospital to imitate (H10), we calculated the rate of rural hospital conversion in each state. Rural hospitals that have converted in a given state provide an especially likely role model for other hospi-

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tals in that state because so much health care regulation is state-specific.

Control variables. Prior work suggests that three important characteristics of hospitals could affect their responses to institutional and market forces: cash flow, size, and age. Cash flow was used to assess hospital financial performance, which, if poor, could provide either a stimulus for change (e.g., Tushman and Romanelli, 1985) or a stimulus that induces rigidity and inertia (e.g., Staw, Sandelands, and Dutton, 1981; Ocasio, 1995). The measure of cash flow we used is appropriate for rural hospitals because it captures both profits earned and cash-based activities (Kane, 1991). Other financial indicators are more sensitive to profits earned and tend to present difficulties for comparisons among hospitals of different ownership and for rural hospitals when equity balances are negative.

Following structural inertia theory (Baum, 1996), we examined the effects of organization age and size on divergent change; older and larger organizations might be less likely to engage in divergent change. Our measure of size, number of beds set up and staffed for use, has the advantage of capturing the actual number of beds that hospitals are using, as opposed to the number of beds they are licensed to use. We measured age as the number of years since the hospital's founding. Table 2 shows means, standard deviations, and correlations for all study variables.

Model Estimation

We used discrete-time event history analysis (McCullagh and Nelder, 1983), which can be used to estimate the rate of occurrence for a particular event, compared with all non-event observations (e.g., conversion versus non-conversions). Discrete-time event history analysis offers two other advantages. First, it adjusts for right-censored observations: observations that were truncated due to merger and those that continued to operate as community hospitals after the end of the study period (Yamaguchi, 1991). Second, this approach is appropriate for use with time-varying covariates and categorical dependent variables that might produce specification error if modeled with linear regression techniques.

To assess the effects of time on risk of rural hospital conversion, we included a series of dummy variables representing each year of the study in the model. Interactions between these dummy variables and all other covariates were added to the model to test the assumption that effects of covariates on conversion are time-invariant. Results (not shown) indicate that time interactions were not statistically significant. Because these findings suggest that covariate effects were not dependent on history, time-covariate interaction terms were subsequently excluded from the model.

Adjustments for repeated observations. Longitudinal data consisting of repeated observations of the covariates and outcomes for the same subjects can introduce bias due to correlation among the repeated observations (Zeger and Liang, 1986). We used generalized estimating equations (GEE) to estimate the model to correct for potential bias

Table 2

Descriptive Statistics and Zero-order Correlations*

Variable	Mean	S.D.	1	2
1. Conversion	.01	0.08		
2. Bed size	83.80	66.61	-.03	
3. Hospital age	42.80	23.30	-.01	.26
4. Cash flow	.07	0.24	-.08	.08
5. Distance to near hosp.	15.28	7.34	-.03	-.24
6. Relative size	-8.05	78.21	-.03	.71
7. Inpatient services	-.02E-2	1.65	-.02	.15
8. Diagnostic services	-.09	1.30	-.04	.49
9. Outpatient services	-.08	1.48	-.02	.37
10. Total pop. (1,000s)	418.15	527.44	.02	.09
11. % population > 65	14.10	8.80	.00	.34
12. Per capita income	12220	2360	.01	-.08
13. Capital funds for hosp.	.32	0.47	.00	-.01
14. Capital for conversion	.05	0.22	.03	.01
15. CON law	7.23	3.49	-.02	.18
16. JCAHO	1.38	0.48	-.03	.41
17. Diversification law	.08	0.28	.00	.02
18. Reduced regulation	.13	0.34	.02	-.15
19. MHS member	.37	0.48	.03	-.01
20. Public ownership	.42	0.49	-.02	-.20
21. Private for-profit	.09	0.29	.01	.00
22. Conversion rate	.05	0.07	.03	-.04
Variable	11	12	13	14
12. Per capita income	.02			
13. Capital funds for hosp.	-.04	-.11		
14. Capital for conversion	-.03	.20	-.10	
15. CON law	.03	-.16	-.15	.12
16. JCAHO	.18	-.05	-.03	.01
17. Diversification law	-.05	.09	-.09	.22
18. Reduced regulation	.02	.19	.32	.02
19. MHS member	.07	.01	-.05	.05
20. Public ownership	-.18	.00	.15	-.02
21. Private for-profit	.03	-.14	.07	-.03
22. Conversion rate	-.02	.11	.10	.14

*Correlations greater than .016 or less than -.016 are significant at $p < .05$; $N = 14,446$ hospital years.

caused by such correlation (Karim and Zeger, 1988). GEE adjusts for repeated observations by estimating within-subject correlation separately from the regression parameters, yielding consistent estimates of the regression coefficients without rigorous assumptions about the actual correlation among the subjects' observations (Zeger and Liang, 1986).

RESULTS

Table 3 shows results from event history analyses using GEE to test our hypotheses. It shows results from four equations that enter variables in different combinations to determine the extent to which coefficients are affected by other variables in the equation. In column one are results from an equation with only the control variables; column two shows results from an equation with control variables and market variables; in column three are results with control variables and institutional variables, and, finally, column four shows results from an equation with all variables. Because the results change so little from one equation to the next, we focus on results from the full model (column 4).

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3	4	5	6	7	8	9	10
.00							
-.14	-.03						
.16	.06	-.09					
.08	.06	-.02	.20				
.17	.08	-.09	.67	.26			
.12	.06	-.07	.51	.20	.49		
.13	-.01	-.21	-.02	-.01	-.02	-.02	
.12	.06	-.16	.32	.13	.31	.25	-.24
.18	-.06	.09	-.01	-.01	.00	-.01	.13
-.07	-.03	-.03	.01	-.01	.00	.00	.00
.08	-.02	.07	.01	-.01	.01	.00	.10
.06	.05	-.07	.00	.01	.02	.00	.02
.23	.07	-.20	.21	.19	.26	.18	.20
.06	-.01	-.07	-.01	.00	-.02	.00	.20
-.07	-.07	.09	.00	-.01	-.01	.00	-.11
-.02	.00	-.02	-.01	.04	.01	.01	.02
-.20	-.03	.19	-.06	-.04	-.10	-.07	-.08
-.15	.04	-.16	-.05	-.05	-.02	-.02	.03
.00	-.04	.02	-.00	.00	-.01	.00	.05
15	16	17	18	19	20	21	
.13							
.02	-.08						
-.47	.17	-.12					
-.05	-.13	.02	.03				
-.15	.24	-.02	.10	-.23			
.01	-.04	.02	.02	.26	-.27		
-.15	-.01	.04	.22	.01	-.01	.00	

Market Forces

There is no support for H1, that organizations operating in local markets with lower demand levels would be more likely to engage in divergent change (see columns 2 and 4). None of the demand measures (population in the area, percent of population over age 65, per capita income in the market) were significantly related to divergent change. Results do support H2, that the closer the geographic distance between an organization and its closest competitor, the more likely it is that a focal organization would make a divergent change. There is a statistically significant relationship between geographic distance to a competitor and hospital conversion. Odds ratios show that there is an 8 percent decrease in the likelihood of conversion for each mile that hospitals are located from each other. Hospitals that are located 20 miles from each other are 80 percent less likely to convert than hospitals that are located 10 miles from each other. H3, that divergent change would be more likely for organizations that had size disadvantages (were smaller) relative to market competitors, was not supported. There was only partial support for H4, that organizations would be more likely to engage in diver-

Table 3

**Results from Discrete Time Event History Analyses Using GEE:
Market and Institutional Effects on Divergent Change among Rural Hospitals***

Predictor variable	1	2	3	4
Intercept	-4.33*** (.357)	-3.97*** (.876)	-5.00*** (.666)	-3.83*** (.613)
Bed size	-.009** (.003)	-.010** (.004)	-.006* (.003)	-.007* (.004)
Age	-.001 (.005)	-.001 (.005)	-.001 (.005)	-.001 (.005)
Cash flow	-1.28*** (.341)	-1.29*** (.367)	-1.21*** (.362)	-1.27*** (.377)
Distance to nearest hospital		-.080*** (.019)		-.085*** (.020)
Relative bed size		.002 (.004)		.000 (.002)
Diagnostic services		-.346** (.142)		-.318** (.138)
Inpatient services		-.049 (.069)		-.040 (.069)
Outpatient services		-.006 (.112)		-.008 (.109)
Total population		.000 (.0001)		.000 (.001)
Percent population >65		.001 (.015)		.004 (.015)
Per capita income		.000 (.0001)		.000 (.0001)
Capital funds for rural hospitals			-.088 (.248)	-.188 (.257)
Capital funds for conversion			.906** (.360)	1.04** (.612)
Reduction in regulation			-.203 (.320)	-.028 (.339)
CON law			-.083** (.037)	-.090** (.041)
JCAHO accreditation			-.579** (.258)	-.657** (.242)
Diversification law			.045 (.379)	-.241 (.414)
Multihospital member			.511*** (.231)	.591*** (.228)
Public ownership			-.692** (.248)	-.605** (.259)
Private for-profit			-.007 (.356)	-.412 (.386)
Conversion rate in state			3.30* (1.59)	3.37* (1.61)
1985	-1.27* (.659)	-1.11 (.675)	1.11 (.668)	-1.12 (.690)
1986	-.393 (.416)	-.273 (.463)	-.221 (.441)	-.316 (.490)
1987	.040 (.367)	.139 (.406)	.125 (.379)	.043 (.418)
1988	.098 (.355)	.155 (.357)	.206 (.364)	.120 (.367)
1989	.083 (.363)	.153 (.380)	.114 (.374)	.092 (.303)
1990	-.244 (.401)	-.213 (.404)	-.248 (.405)	-.269 (.409)
Log-likelihood	61.32***	100.16***	98.16***	139.26***
D.f.	9	17	19	27

* $p < .05$; ** $p < .01$; *** $p < .001$, two-tailed tests.

*The sample includes 14,446 hospital-years and 147 conversion events. Standard errors are in parentheses.

gent change to the extent that they had disadvantages in product and service mix relative to competitors. Rural hospitals were more likely to convert if they had a disadvantage

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relative to their market competitors in providing diagnostic services. The results thus provide mixed support for the hypothesized role of market forces in promoting divergent organizational change. The key market factors that appear to promote divergent change are geographic proximity to competitors and the extent to which an organization has a disadvantage in product or service mix relative to local competitors.

Institutional Forces

H5–H10 concern the role of institutional forces in promoting and inhibiting divergent organizational change (see columns 3 and 4). The results show strong support for H5, that organizations that meet major regulatory requirements are less likely to make divergent changes. Rural hospitals that meet the requirements of JCAHO accreditation are significantly less likely to convert (92 percent less likely). H6a, that pro-competition legislation (that reduces barriers to entry) would increase the likelihood of divergent organizational change, is not supported, but the results do support H6b, that anti-competitive regulation would inhibit divergent organizational change. Hospitals located in states with stronger Certificate of Need laws are significantly less likely to convert (8 percent less likely). H7a, that legislation that provides resources (e.g., capital funds) to support current organizational templates will inhibit divergent organizational change, was not supported; there was no relationship between rural hospital conversion and hospitals' location in states that provided capital funds to support current organizational templates. Similarly, legislation that attempted to reduce operating costs for rural hospitals by decreasing the burden of regulations was not related to conversion. In contrast, H7b was strongly supported: hospitals were significantly more likely to convert (2.8 times as likely) if they were located in states that passed legislation providing capital to do so. We also examined the extent to which rural hospitals faced combinations of inconsistent institutional elements and found that this occurred relatively rarely. For example, in the seven-year study period, only three states passed legislation that was both strongly anti-competitive and pro-competitive. But there was variation between states in the regulations that they passed to influence rural hospitals.

The results show moderate support for H8, that public and private non-profit organizations would be less likely to make divergent changes than for-profit organizations. Publicly owned rural hospitals were significantly less likely to convert (46 percent less likely) than private nonprofit rural hospitals. Private nonprofit rural hospitals did not differ, however, from for-profit hospitals in their likelihood for divergent change. The results support H9, showing that members of multihospital systems are significantly more likely to convert (81 percent) than free-standing hospitals. Results also provide strong support for H10, that organizations are more likely to make divergent changes to the extent that they have nonlocal, but equivalent models of such change: rural hospitals located in states that have higher rates of conversion are more likely to convert themselves. In general, the results provide consistent support for the hypotheses concerning the effects of

normative and cognitive institutional elements in divergent change, but the results are mixed on the effects of regulation on such change. Finally, the results show that two of the three control variables are related to divergent change. Hospitals that were smaller and that had worse financial positions were more likely to convert.

DISCUSSION

We argued that strong, local market forces limit the critical resources that organizations need to support their current templates, while strong, heterogeneous institutional forces make searches for new templates acceptable and successful. In fragmented organizational fields, the regulatory, normative, and cognitive elements that typically promote stability in behavior can also promote divergent change. The results provide relatively strong support for our hypotheses.

Market factors seem to affect divergent change in two important ways. An organization is more likely to engage in divergent change to the extent that it (1) is geographically proximate to competitors and (2) has a relative competitive disadvantage in its product and service mix. These results are consistent with results from Baum and Haveman (1997) that suggest that founders of hotels try to differentiate their organization on at least one key dimension to avoid competition with other hotels in close geographic proximity. The issue of geographic proximity is particularly salient for service organizations such as hospitals. When service organizations are located in close proximity, potential consumers have choices, and this makes it difficult for all competitors to stay in the same market. Further, overlap in diagnostic services is important because hospitals that are able to provide these services are likely to have an edge in patients' decisions about where to receive follow-up treatment services. The importance of diagnostic services as a competitive advantage may explain why we observe no effects for other measures of organizations' advantages in size or product and service mix. Our failure to find results for market demand may validate a long-standing claim that health care providers are more important in creating demand for services than individual consumers (Feldstein, 1988). Physicians in particular can create demand for hospital services by their decisions about the need for such services and where they should be obtained. We tested this hypothesis with measures of the per capita number of physicians in market areas, but we found no significant results (results not shown). Perhaps more fine-grained measures are needed to adequately assess demand for hospital services and its relationship to divergent change.

At the same time, it is clear that institutional factors contribute both to promoting and inhibiting divergent organizational change. The results for normative and cognitive elements in promoting such change are relatively consistent and strong. In contrast, the results for regulatory elements are mixed. On the one hand, it appears that regulation that makes organizations reliable and accountable for their production processes (JCAHO accreditation) and regulation that directly limits competition (Certificate of Need legislation) inhibited organizational change, while, in contrast, regulation

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aimed at promoting change by increasing competition had no effects. These results indicate that regulation aimed at maintaining the status quo may be more effective than regulation that seeks to promote change in markets or organizations.

On the other hand, the results also show that state intervention was effective in promoting divergent change when it awarded funds directly to organizations to support their efforts to find and implement alternative templates. Hospitals located in states with legislation that provided capital funds to promote conversion were significantly more likely to convert. Taken together, these results suggest that only relatively focused state intervention is effective in promoting divergent organizational change. Both JCAHO accreditation and Certificate of Need legislation are relatively longstanding in the health care field; perhaps the newer legislation needed reworking to make it effective.

We also argued that norms concerning governance and property rights in an organizational field influence divergent change (Fligstein, 1996), and the results support this view. Hospitals that are members of multihospital systems lose local governance. This shift in governance means that the interests of individual hospitals become secondary to the interests of the system as a whole, which system boards have a legal obligation to support. Membership in multihospital systems thus makes it more likely that divergent change will occur in individual hospitals to meet the needs of their parent systems. The results also show that public hospitals are less likely to convert than privately owned nonprofit hospitals. Public hospitals limit owners' property rights—there are no profits recognized in publicly owned organizations, and taxpayers share both assets and financial losses. Thus, the combination of local control and diffuse, public ownership of assets and profits makes it very difficult for divergent change to occur. These results are consistent with our broader argument that institutional elements can either promote or inhibit divergent organizational change.

Finally, we argued that organizations would mimic models of divergent change that are provided by their nonlocal, but equivalent peers; the results support this view. In states that already have high rates of rural hospital conversion, more conversion is likely. Organizations are likely to mimic behavior that they can observe among peers that face similar institutional and resource environments (Greve, 1998; Martin, Swaminathan, and Mitchell, 1998).

Despite the relative strength of the results, we are cautious about making generalizations from this study. We argued above that inconsistent results from the few previous studies of divergent change could be due to the particular organizational fields that were examined. Following this logic, this study's results may hold only for a particular context. We examined a fragmented organizational field at a time when traditional organizational forms and practices were called into question due to the steeply rising costs of health care. It is under this combination of conditions that we find that both market and institutional forces can promote divergent organizational change. Further, we examined a relatively brief time

period (seven years) in a field with a long and complex history (Starr, 1982; Stevens, 1989). Perhaps our results would change over time, as both institutions and markets evolve in this field. Thus, we encourage empirical tests of our hypotheses in other industries that are experiencing profound change.

Nonetheless, despite its limitations, the study results raise important questions for research on divergent organizational change. One question concerns how divergent change affects organizational performance. Though Kraatz and Zajac (1996) found no decline in the performance of liberal arts colleges that added professional degree programs to their curricula, the change we examined is more extensive. Moreover, the change we examined involved organizations moving from what ecologists might consider generalists (hospitals) to specialists (e.g., nursing homes) (Baum, 1996). To what extent do generalists perform well in their new areas of specialization? Does this change merely stall organizational demise? Further, this study raises questions about the processes involved in divergent change. Because we used national survey data, we could not examine such processes, as scholars had done in the original institutional school (Selznick, 1996). Certain approaches to divergent change, such as gaining the support of a range of stakeholders, may affect post-change performance.

The results also indicate that institutional theory can provide at least a partial account for divergent organizational change. This account includes several elements. First, we must recognize that organizational fields vary in their structure of decision making and in the strength of their institutional and market forces (Dacin, 1997; Hoffman, 1999). Researchers need to examine these factors in studies of organizational change (Hinings and Greenwood, 1996). Second, we should hold open the possibility that institutional actors have multiple and often inconsistent interests (Meyer and Rowan, 1977). In this study, state legislatures produced several policies that aimed to promote or inhibit change among rural hospitals (Mueller, 1992). In some cases, legislatures also passed laws that circumvented markets and provided rural hospitals directly with funds either to support them in their current state or to support divergent change. Other actors, especially the boards of multihospital systems and publicly owned hospitals, worked either to change rural hospitals or keep them the same.

Third, institutional analyses of organizational change should recognize that actors are not necessarily bound by history or taken-for-granted practices (Fligstein, 1997). We found, for example, that state legislatures were quite active, passing laws that were more or less supportive of rural hospitals. To continue linking the old and new institutional approaches, perhaps studies should be event-focused (e.g., we focused on rural hospitals after the reform of Medicare payment). Studies that are not event-focused may fail to capture how actors pursue their interests and may thus incorrectly conclude that tradition limits actors to maintaining the status quo.

Finally, examining only institutional forces will not be sufficient to explain divergent organizational change. Both institu-

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tional and market forces are likely to affect divergent change to varying degrees in different organizational fields and, probably, in different historical periods. Moreover, institutional and market forces may interact in important ways to affect organizational change, and future research should aim to specify their roles more precisely.

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