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Determinants of Interorganizational Relationships: Integration and Future Directions

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This article integrates the literature on interorganizational relationships into six generalizable determinants of relationship formation, applies these determinants to the prediction of six types of interorganizational relations, and proposes hypotheses for future research that specify the conditions under which each determinant will be more likely to predict different types of relations. These determinants provide the basis for a general theory of interorganizational relationships and suggest that alternative theoretical perspectives on relationship formation provide important but only partial insights into why organizations enter into relationships with one another.

The study of interorganizational relationships (IORs) has begun to suffer the consequences of its own growth in importance. The increasing acknowledgment that organizations typically operate in a relational context of environmental interconnectedness and that an organization's survival and performance often depend critically upon its linkages to other organizations has generated a vast but highly fragmented literature on IORs. We no longer know what we know about the formation of interorganizational relationships.

IORs are the relatively enduring transactions, flows, and linkages that occur among or between an organization and one or more organizations in its environment. Although several reviews have made substantial contributions to the understanding of IORs (Aldrich & Whetten, 1981; Laumann, Galaskiewicz, & Marsden, 1978; Galaskiewicz, 1985; Schermerhorn, 1975; Van de Ven, 1976; Whetten, 1981), the current literature on the determinants of IORs is broad rang-

ing and heterogeneous. Many types of IORs have been studied in a variety of settings, and little attempt has been made either to integrate this literature into generalizable predictors of relationship formation or to distinguish between what causes such relationships or the conditions under which such relationships occur.

The prediction of IORs addresses the following questions: For what reasons and under what conditions do organizations establish linkages or exchanges with one another? The reasons for relationship formation refer to the underlying causes or contingencies that induce the formation of IORs. The conditions under which relationships form refer to the environmental and interorganizational factors that increase the likelihood that different contingencies will cause IORs to occur. The purposes of this article are to integrate the existing IOR literature into a set of critical contingencies of relationship formation and to suggest directions for future research that specify the conditions under which each critical

contingency will be likely to predict the formation of six types of IORs—trade associations, agency federations, joint ventures, social service joint programs, corporate-financial interlocks, and agency-sponsor linkages.

In the absence of prior efforts to integrate the IOR literature into underlying determinants of IORs, this article offers a set of predictive critical contingencies that are potentially generalizable across a broad range of IORs. This generalizability moves the field of IOR research toward a general theory of relationship formation that is applicable across a variety of IOR types and settings. In addition, by identifying these contingencies this article attempts to rectify the most serious weakness in the IOR literature: nonadditivity across past and current research and across a range of conceptual approaches. These contingencies recapture past insights into the causes of IORs, build on the complementarity among current theoretical paradigms, and provide a theoretical basis for cumulative additions to the understanding of IORs.

Also, there have been no attempts to link the causes and predictive conditions of relationship formation across a range of IORs. An examination of both the reasons for relationships and conditions under which these relationships are established allows us to distinguish between the determinants that actually motivate organizations to establish relations and the external factors that facilitate or impede the formation of IORs. This, in turn, permits us to be more specific in predicting a variety of different types of IORs and in identifying the research gaps that require further attention. Additionally, this article provides a common basis of comparison across different relationship-specific theories (e.g., joint venture theories and interlock theories). This article's application of critical contingencies to six types of IORs not only specifies the conditions under which each determinant predicts IORs, it also illustrates the contingencies' generalizability and provides a framework for comparing the predictions that pertain to different linkages.

Given the growth of literatures on joint ventures, board interlocks, and interagency relations, identifying generalizable predictors across types of IORs may help us to determine whether research on one type of IOR is relevant to predicting other types of IORs. In this way, important insights may be transferred across historically divergent lines of inquiry.

Critical Contingencies of Relationship Formation

Based on an integration of the IOR literature from 1960 to the present, six critical contingencies of relationship formation are proposed as generalizable determinants of IORs across organizations, settings, and linkages: necessity, asymmetry, reciprocity, efficiency, stability, and legitimacy. These contingencies are the causes that prompt or motivate organizations to establish IORs, that is, they explain the reasons why organizations choose to enter into relationships with one another. Although each determinant is a separate and sufficient cause of relationship formation, these contingencies may interact or occur concurrently when the organization decides to establish an IOR.

Two delimiting assumptions underlie the proposed contingencies. First, organizations are assumed to make conscious, intentional decisions to establish an IOR for explicitly formulated purposes. Although according to ecological and random choice models, organizational motives may be largely irrelevant, misdirected, or accidental, this article adopts the same underlying assumptions as the theory and research that have specifically addressed the prediction of IORs: Organizations consciously enter into relations for specific reasons within the constraints of a variety of conditions that limit or influence their choices. Second, the contingencies explain why organizations enter into relations from an organizational (top-management) perspective, even though IORs may occur between the subunits of two organizations or between individu-

als at lower hierarchical levels. Although the proposed contingencies may indeed explain lower level and subunit reasons for IOR formation, an organizational perspective on IORs is assumed throughout.

Necessity

An organization often establishes linkages or exchanges with other organizations in order to meet necessary legal or regulatory requirements. Mandates from higher authorities (e.g., government agencies, legislation, industry, or professional regulatory bodies) may provide the impetus for IORs that otherwise might not have occurred voluntarily. Whetten (1981), for example, distinguished between IOR structures of mutual adjustment (voluntary), alliance structures (intermediate), and corporate structures of coordination (mandated). Similarly, Warren (1967) distinguished between single IOR contexts, in which interaction is dictated by a higher authority, and contexts that permit the organization to make a decision to interact, including, for example, federations and voluntary trade associations (Evan & Klemm, 1980; Fottler, Schermerhorn, Wong, & Money, 1982; Provan, 1983, 1984a; Provan, Beyer, & Kruytbosch, 1982; Schermerhorn & Shirland, 1981; Stern, 1979, 1981). In situations in which IORs are prompted by the need to conform to the dictates of a higher authority, the anticipated repercussions of non-compliance (loss of resources, expulsion from the field) will determine the likelihood that mandated relations occur (Leblebici & Salancik, 1982).

Resource dependence and exchange approaches to IORs emphasize voluntary interactions and contingent cooperation among organizations, and these approaches have received the most theoretical and empirical attention (Benson, 1975; Cook, 1977; Dill, 1962; Gupta & Lad, 1983; Levine & White, 1961; Litwak & Hylton, 1962; Pfeffer & Salancik, 1978; Reid, 1964; Van de Ven, 1976; Van de Ven & Walker, 1984; Warren, Rose, & Bergunder, 1974; Zeitz, 1980).

Studies that examine mandated relations or that explicitly compare mandated with voluntary relationships are less common (Aldrich, 1976; Hall, Clark, Giordano, Johnson, & Van Roekel, 1977; Leblebici & Salancik, 1982; Levinthal & Fichman, 1988; Molnar, 1978; Raelin, 1982; Tolbert & Zucker, 1983). From evidence that the basis of an IOR (mandated versus voluntary) can be used to explain patterns of coordination and interaction among organizations, Hall and his colleagues (1977) concluded that the exclusive use of an exchange framework to explain IORs may be inappropriate because this type of framework is most relevant to relationship formation under conditions of organizational choice. Furthermore, mandating a relationship not only increases the frequency of interactions between respective organizations (Aldrich, 1976), but it also may reduce an organization's perception of power over its environment (Whetten & Leung, 1979). Therefore, the mandated versus voluntary distinction is important because the explanations and consequences of relationship formation associated with each are fundamentally different. All of the remaining determinants discussed in the following sections are voluntary interactions.

Asymmetry

The contingency of asymmetry refers to IORs prompted by the potential to exercise power or control over another organization or its resources. It has been argued that interorganizational power is a function of organization size, control over the rules governing exchange, the ability to choose a "do without" strategy, the effectiveness of coercive strategies, and the concentration of inputs (Benson, 1975; Blau, 1964; Boje & Whetten, 1981; Evan, 1966; Pfeffer & Salancik, 1978; Whetten, 1981). In contrast to the proposition that resource scarcity motivates organizations to cooperate with one another (Aiken & Hage, 1968; Molnar, 1978; Paulson, 1976), a power approach to explaining IORs suggests that resource scarcity prompts organi-

zations to attempt to exert power, influence, or control over organizations that possess the required scarce resources. For example, one corporation may be motivated to form a director interlock with a financial institution in order to gain influence and control over sources of capital and to increase its power, relative to other firms that are competing for financial resources in the same industry.

The contention that organizational efforts to control interdependencies predict relationship formation also is fortified by the assumption that relationship formation necessitates the loss of decision-making latitude and discretion, a consequence to which organizations are purported to have a particular aversion. Organizational concerns about loss of autonomy and control in IORs are acknowledged repeatedly in the literature (Aiken & Hage, 1968; Aldrich, 1979; Cook, 1977; Evan, 1966; Fennell, Ross, & Warnecke, 1987; Provan, 1982, 1983; Rogers, 1974; Scherm-erhorn, 1981; Thompson, 1967; Thompson & McEwen, 1958; Whetten, 1977; Whetten & Leung, 1979). Both the desire for control and the reluctance to relinquish control reflect asymmetrical motives in the organization's decision to interact.

Theories of political economy (Benson, 1975; Zeitz, 1980), resource dependence (Pfeffer & Salancik, 1978), class hegemony and elitism (Koch & Labovitz, 1976; Palmer, 1983; Perrucci & Pilisuk, 1970; Useem, 1979), and financial control (Fitch & Oppenheimer, 1970; Kotz, 1978) attribute motives of power and control to the establishment of IORs. The interconnected environments within which organizations operate are assumed to represent political or negotiated arenas that are characterized by injustice, information distortion, manipulation, exploitation, coercion, inequality, or conflict (Assael, 1969; Benson, 1975; Cook, 1977; DiStefano, 1984; Guetzkow, 1966; O'Toole & O'Toole, 1981; Pfeffer & Salancik, 1978; Sebring, 1977; Whetten, 1978; Zeitz, 1980). Several empirical studies have adopted a power, influence, or conflict perspec-

tive on IORs, although most of these studies have not explicitly tested power as a motive in IOR formation (Boje & Whetten, 1981; Galaskiewicz, 1979; Galaskiewicz & Krohn, 1984; Koch & Labovitz, 1976; Kochan, 1975; Laumann & Pappi, 1976; Molnar & Rogers, 1979; Palmer, 1983; Perrucci & Pilisuk, 1970; Pfeffer, 1972, 1973; Pfeffer & Leblebici, 1973; Pfeffer & Leung, 1977; Provan, 1982; Provan et al., 1980; Schmidt & Kochan, 1977; Skinner, Donnelly, & Ivancevich, 1987; Useem, 1979; Whetten & Leung, 1979).

Reciprocity

In contrast to the contingency of asymmetry in IORs, a considerable proportion of the literature on IORs implicitly or explicitly assumes that relationship formation is based on reciprocity. Motives of reciprocity emphasize cooperation, collaboration, and coordination among organizations, rather than domination, power, and control. According to this perspective, IORs occur for the purpose of pursuing common or mutually beneficial goals or interests. The contingency of reciprocity also provides a rationale for the development of certain IORs that cannot be explained by asymmetrical motives. For example, as Pfeffer and Nowak (1976, p. 403) pointed out, a linkage between two joint venture partners that is prompted by the desire to pursue new markets or activities represents a direct alternative to the resource interdependence perspective on IORs.

A reciprocity model of IORs is theoretically rooted in exchange theory (Emerson, 1962; Levine & White, 1961), and it is also consistent with the finance capital theory of intercorporate relations (Harvey, 1982; Levine & Roy, 1979; Menshikov, 1969; Scott, 1985), the reciprocity model of director interlocks (Allen, 1974; Dooley, 1969; Koenig, Gogel, & Sonquist, 1979), and the collective strategy framework (Astley, 1984; Astley & Fombrun, 1983; Oliver, 1988). The antecedents to effective coordination and equal exchange have been cogently delineated in the

literature on IORs (Whetten, 1981; Zeitz, 1980). Reciprocity-based IORs have been investigated primarily but not exclusively in health and social service agencies through empirical studies that examined cooperation or coordination among organizations (Aiken & Hage, 1968; Aldrich, 1976; Hall et al., 1977; Molnar, 1978; Paulson, 1976; Schermerhorn & Shirland, 1981; Van de Ven & Walker, 1984). Few empirical studies have contrasted asymmetrical and reciprocal approaches (Barnett & Carroll, 1987; Schmidt & Kochan, 1977).

Several assumptions underlie approaches to IORs based on reciprocity contingencies. First, resource scarcity may induce cooperation, rather than competition (Aiken & Hage, 1968; Molnar, 1978; Paulson, 1976; Schermerhorn, 1981). Second, the process of linkage formation typically will be characterized by balance, harmony, equity, and mutual support, rather than by coercion, conflict, and domination. Finally, potential partners to an exchange will anticipate that the benefits of forming a linkage far exceed the disadvantages, particularly the loss of decision-making latitude and the cost of managing the linkage (Provan, 1984a).

Efficiency

Efficiency contingencies are internally, rather than externally, oriented. In this situation, the formation of an IOR is prompted by an organization's attempt to improve its internal input/output ratio, not by the need to conform to the dictates of a higher jurisdiction, the desire to exert power and control over external resources, or the wish to pursue reciprocal interorganizational benefits. Some incentives for establishing IORs for the purposes of improving efficiency may be the organization's anticipation of increases in return on assets or reductions in unit costs, waste, downtime, or cost per patient or client. Williamson's (1975, 1985) transaction cost perspective is consistent with the argument that efficiency is an underlying determinant of IORs. This framework predicts that transaction cost

economization determines whether transactions will be carried out within organizations, in intermediate structures (IORs), or in the market. As asset specificity (the existence of significant and durable nonredeployable investments), uncertainty, and the number of recurring transactions between partners increase, transaction costs rise. When intermediate structures are able to mediate transactions more efficiently than the marketplace, as transaction costs rise, the likelihood of movement from the market to intermediate structures (and eventually to hierarchies) also increases. In other words, the movement from market-mediated transactions to formal interorganizational arrangements will occur as a result of an organization's attempt to economize on the cost of transactions.

Because the origins of IOR research are in nonmarket settings, the literature on IORs reveals limited theoretical and empirical attention to efficiency motives in relationship formation (Commons, 1950; Khandwalla, 1981; Kogut, 1988; McConnell & Nantell, 1985; Olson, 1965, 1982; Phillips, 1960, 1962; Staber, 1987; Stigler, 1964; Stuckey, 1983; Thorelli, 1986). Economic theories, from which efficiency-based predictions of IORs might be expected to emerge, have tended to examine IOR consequences, rather than determinants, and they have placed a particular emphasis on the IORs' negative impact on the market: for example, the effects of interorganizational coordination on restriction of competition (Gupta & Lad, 1983) and economic stagnation (Olson, 1965, 1982). From this perspective, social structures that are embedded in interorganizational fields also have been treated primarily as a frictional drag that impedes market competitiveness (Granovetter, 1985). There have been no attempts by researchers to consolidate efficiency considerations with necessity, power, or reciprocity contingencies.

Stability

Another critical contingency of relationship formation is stability (predictability). In the liter-

ature on IORs, the formation of relations often has been characterized as an adaptive response to environmental uncertainty (Aldrich, 1979; Cook, 1977; Ford & Slocum, 1977; Pennings, 1981; Pfeffer & Salancik, 1978; Schoorman, Bazerman, & Atkin, 1981; Starbuck, 1976; Thompson, 1967; Williamson, 1985). Environmental uncertainty is generated by resource scarcity and by a lack of perfect knowledge about environmental fluctuations, availability of exchange partners, and available rates of exchange in an interorganizational field (Cook, 1977). Uncertainty prompts organizations to establish and manage relationships in order to achieve stability, predictability, and dependability in their relations with others. From this perspective, IORs serve as coping strategies to forestall, forecast, or absorb uncertainty in order to achieve an orderly, reliable pattern of resource flows and exchanges (Benson, 1975; Pennings, 1981). Several empirical studies have investigated uncertainty reduction in IORs (Aldrich, 1982; Burt, 1980, 1983; Burt, Chistman, & Kilburn, 1980; Galaskiewicz, 1982; Galaskiewicz & Shatin, 1981; Leblebici & Salancik, 1982; Ornstein, 1984; Palmer, 1983; Pennings, 1980; Provan, 1984b; Stearns, Hoffman, & Heide, 1987).

Legitimacy

The enhancement of organizational legitimacy also has been cited as a significant motive in the decision for organizations to interconnect. Institutional theory (DiMaggio, 1988; DiMaggio & Powell, 1983; Fennell & Alexander, 1987; Hirsch, 1975; Meyer & Rowan, 1977; Meyer & Scott, 1983; Rowan, 1982; Scott, 1987; Scott & Meyer, 1983; Tolbert & Zucker, 1983; Zucker, 1977) suggests that institutional environments impose pressures on organizations to justify their activities or outputs. These pressures motivate organizations to increase their legitimacy in order to appear in agreement with the prevailing norms, rules, beliefs, or expectations of external constituents.

The establishment of IORs for purposes of increasing legitimacy can originate from an orga-

nization's motives to demonstrate or improve its reputation, image, prestige, or congruence with prevailing norms in its institutional environment. For example, the ability to obtain members of prestigious organizations to sit on a board of directors or the development of a relationship that publicizes social responsibility or charitable activities enhances an organization's image and reputation (Crawford & Gram, 1978; Schoorman et al., 1981; Singh, Tucker, & House, 1986). The target of legitimacy efforts may be other members of the organization's set, licensing boards, resource-granting agencies, the general public, or external stakeholders (Galaskiewicz, 1985). Attempts to enhance legitimacy through relationship formation will be directed especially toward organizations whose level of legitimacy is perceived by the focal organization to be considerably higher than its own. Empirical studies that relate legitimacy specifically to IORs are few. Schermerhorn and Shirland (1981) found that concern for image was linked to the level of interorganizational coordination among hospitals. Wiewel and Hunter's (1985) case study showed that new organizations were able to increase their legitimacy as a function of their ability to invoke affiliations with known organizations.

Interaction Among Contingencies

Although each of the foregoing determinants may be a separate and sufficient cause of relationship formation, the decision to initiate relations with another organization is commonly based on multiple contingencies. The necessity for compliance with legal or regulatory requirements is sufficient reason for an organization to establish an IOR. However, to the extent that mandated relations also are expected to lead to the fulfillment of other organizational requirements and expectations (e.g., more power, greater mutual advantage, higher levels of efficiency, greater stability or legitimacy), compliance with a mandate will be more likely. For

example, the mandate imposed by a commodity exchange on buyer-seller relations may reduce uncertainty by prescribing the fundamental nature and rules of interaction (Leblebici & Salancik, 1982). The enforcement of a joint program by a higher authority may induce mutuality and reciprocity between two agencies (Molnar, 1978; Raelin, 1982), may increase the agencies' respective efficiency by reducing duplication of effort (Van de Ven, 1976), or, alternatively, may engender conflict and asymmetry (DiStefano, 1984). Compliance with the laws and standards of a governing body may improve an organization's legitimacy in the public eye or it may increase the organization's centrality in a network (Boje & Whetten, 1981). In contrast, organizations that are constrained by several mandated relations may possess less attributed influence or reduced feelings of power (Boje & Whetten, 1981; Whetten & Leung, 1979). Therefore, the need to comply with constraints from above (Glassman, 1973) may interact with other contingencies in determining relationship formation.

The contingencies of asymmetry and reciprocity will interact when cooperative relations are formed for the purpose of exerting power over either a third organization or other members of the organization's task environment (Pfeffer & Salancik, 1978). Conditions of reciprocity also may disguise the acquiescence of a dominated exchange partner to the terms and conditions prescribed by a more powerful partner (e.g., a small supplier held captive by the actions and decisions of a large manufacturer). Additionally, an organization's orientation toward a particular IOR may change over time as the IOR becomes established (Schmidt & Kochan, 1977). The motive to interact may be reciprocal initially, but it may shift toward asymmetry if conflict develops; alternatively, IORs may be characterized initially by bargaining and negotiation processes as each organization attempts to secure power and control, and then they may develop a reciprocal relationship when a mutually acceptable compromise is achieved.

The nature of interaction between asymmetry and efficiency is more ambiguous because the relative predictive capabilities of each are a source of unresolved controversy in the IOR literature. The resource dependence framework, for example, attributes motives of power and control to the establishment of IORs (Pfeffer & Salancik, 1978). Williamson and Ouchi (1981, p. 363) argued that power considerations usually give way to efficiency, at least in profit-making enterprises, over the long run. Neither framework acknowledges the potential for concurrent contingencies in the decision to establish IORs.

The relationship between asymmetry and stability is similarly characterized by a lack of clarity in the literature on IORs. Resource dependence (Pfeffer & Salancik, 1978), co-optation (Burt, 1980), and financial control (Kotz, 1978) models assume that power and uncertainty reduction are not mutually exclusive, and, indeed, the desire for stability and the desire for dominance may interact to make the likelihood of either more probable. However, the desire to develop stable, predictable linkages may be sufficient in isolation to stimulate relationship formation, irrespective of power considerations, and the frequently cited trade-off between predictability and loss of autonomy in relationship formation bears witness to the need to treat stability and control as distinct contingencies. Moreover, an organization's effort to develop stable, reliable relations may lead to attempts to control that relationship or, alternatively, it may lead to the suppression of power plays in the hopes that equity, reciprocity, and harmony will facilitate stability. Similarly, empirical evidence indicates that legitimacy contingencies may induce asymmetry by driving organizations to jostle for position in a status hierarchy (Boje & Whetten, 1981). For example, a social service agency may be motivated to establish legitimating links with a reputable organization, such as the United Way, based on the expectation that greater community visibility also will increase the agency's power and influence, relative to

other agencies operating in the same domain. In addition, legitimacy and reciprocity may occur concurrently. For example, Wiewel and Hunter (1985) found that when new neighborhood development organizations established relations and affiliations with similar preexisting organizations in a domain, this reciprocity among competing organizations increased both the visibility and legitimacy of the new organizations and the collective credibility of the domain as a whole. For many organizations, their legitimacy is enhanced if they appear more efficient or stable. A United Way organization will be more positively evaluated by external constituents when it appears to utilize and allocate its contributions efficiently. A company may appear more reliable, well established, and legitimate when it exhibits stable and enduring relations with its suppliers or clients.

Finally, efficiency may interact with stability or reciprocity. For purposes of improving efficiency, an organization may attempt to secure stable relations with another organization (e.g., a supplier), expecting that stability will facilitate the acquisition of additional resources. In the same vein, the impetus to pursue mutually beneficial relations may be greater if an organization anticipates that greater internal efficiency will result from the relationship.

The preceding critical contingencies provide a theoretical basis for explaining the causes of relationship formation that are generalizable across all types of IORs. Although these determinants explain why IORs occur, they tell us little about when different types of IORs will be prompted by these contingencies. The remainder of this discussion examines the conditions under which different contingencies will lead to the formation of six types of relations.

Critical Contingencies and Types of Relationships

In order to both illustrate the potential generalizability of the contingencies and specify di-

rections for future research, six types of IORs are examined: trade associations, voluntary agency federations, joint ventures, joint programs, corporate-financial interlocks, and agency-sponsor linkages. Trade associations, joint ventures, and corporate-financial interlocks are voluntary, private sector IORs that fall between the extremes of merger and arm's-length markets. Voluntary interagency federations, joint programs, and linkages between an agency and a critical resource supplier or sponsor are social service sector IORs that fall between the extremes of mandated interagency integration and agency autonomy. Trade associations and agency federations are examples of horizontal relations, linkages between corporations and financial institutions and linkages between agencies and sponsors are examples of vertical relationships, and joint ventures and joint programs may be examples of either vertical or horizontal relationships. Because such relations are voluntary, the contingency of necessity will not be considered.

Table 1 provides examples of the reasons that have been given in the literature for the formation of each type of relationship. These examples, then, are illustrations of the critical contingencies for specific types of IORs. As this table reveals, a variety of causes has been offered to explain the development of each IOR, and these determinants can be classified in terms of the proposed contingencies. For example, it has been argued that trade associations are formed for a variety of reasons: to exert influence on state regulators (asymmetry); to promote the collective good of the members through information sharing and trade shows (reciprocity); to obtain economic advantages, including, for example, access to cheaper sources of supplies (efficiency); to reduce legislative or competitive uncertainty through efforts to standardize the products or services of members (stability); and to enhance the image of the industry and its members (legitimacy).

It is interesting to note that no single source in the literature has acknowledged the potential

Table 1
Critical Contingencies: Examples for Six Types of Relationships

Type of Relationship	Critical Contingency				
	Asymmetry	Reciprocity	Efficiency	Stability	Legitimacy
Trade associations	Lobby state regulators	Promote collective good (e.g., trade shows)	Obtain economic advantages	Reduce legislative uncertainty (e.g., product standardization)	Enhance members' image
Voluntary agency federations	Increase collective power in fund-raising	Coordinate network affiliates	Achieve economies in collection and distribution of donations	Stabilize flow of donation to members	Increase members' community visibility
Joint ventures	Increase market power and entry barriers	Obtain synergies in technology, information sharing	Increase economies of scale	Share risks in entering new markets	Enhance profile in industry
Joint programs	Exert control over access to resources	Facilitate exchange of clients or personnel	Reduce costs of social service delivery	Share risks in mounting new programs	Demonstrate norms of cooperation
Corporate-financial interlocks	Influence sources of capital	Share knowledge and information	Reduce search costs for capital	Co-opt financial constituents	Project appearance of financial viability
Agency-sponsor linkages	Augment power relative to other agencies	Facilitate information exchange	Rationalize acquisition of funding	Reduce uncertainty in flow of funds	Increase agency's acceptance and prestige

importance of all the critical contingencies. Consider, for example, joint ventures. Some theorists have argued that joint ventures are formed primarily to increase entry barriers and market power (asymmetry); others suggest that joint venture formation occurs for purposes of obtaining synergies in technology or information sharing (reciprocity). Still others argue that joint ventures are established to increase economies of scale (efficiency). Although any one contingency may be sufficient inducement for the development of a relationship, these competing explanations overlook the potential for concurrent or multiple causes of IORs. More important, however, these controversies are only conclusively solvable by determining when different

types of IORs will be formed for these different reasons. Therefore, the key question for future research is, when (i.e., under what conditions) will each critical contingency be more likely to lead to the development of each type of relationship?

Conditions of Relationship Formation

The conditions that increase the probability of relationship formation can be categorized as either generalizable or relationship-specific. Generalizable conditions predict a wide range of IOR types. Only a few of these broadly predictive conditions have been supported in the literature. Resource scarcity has been repeatedly cited as an important condition that facilitates

the development of many different types of relations (Aiken & Hage, 1968; Evan, 1966; Levine & White, 1961; Litwak & Hylton, 1962; Molnar, 1978; Pfeffer & Salancik, 1978; Thompson, 1967; Van de Ven, 1976; Van de Ven & Walker, 1984). When resources are scarce and organizations are unable to generate needed resources, they will be more likely to establish ties with other organizations. An intermediate level of industry concentration among firms also has been generally predictive of several different types of private sector IORs (Pfeffer & Salancik, 1978; Phillips, 1960). Similarly, domain consensus (the degree to which organizations accept each other's claims to specific goals and functions) has facilitated the formation of many different types of social service sector IORs. Research has shown that the greater the degree of domain consensus among or between public sector or social service sector organizations, the higher the probability that these organizations will establish relations (Aldrich, 1971; Benson, 1975; Gillespie & Perry, 1975; Levine & White, 1961; Litwak & Hylton, 1962; Marrett, 1971; Molnar & Rogers, 1979; Paulson, 1976; Schermerhorn, 1975; Thompson, 1967; Van de Ven, 1976; Warren, 1967).

Relationship-specific conditions predict when a particular type of relationship (e.g., a trade association, a joint venture) will be established. To date, the specific conditions that cause different relations to occur for different reasons have not been clarified. Table 2 proposes the conditions under which each critical contingency will be more likely to lead to the formation of each of the six types of relationships.

For example, according to the top left part of the table, trade associations will be more likely to form for reasons of asymmetry when the threat of government intervention is strong. The horizontal rows of Table 2 provide the basis for a theory of specific types of relations that is grounded in the critical contingencies of relationship formation. The vertical columns form the basis for explaining different types of IORs from a particular contingent perspective. These hypothesized conditions, elaborated in the fol-

lowing section, provide suggested directions for future research.

Trade Associations. An asymmetry-motivated reason for trade association formation is the exertion of political influence on behalf of its members. This contingency will be more likely to cause organizations to join together in a trade association when the threat of government intervention is strong (Gupta & Lad, 1983; Staber & Aldrich, 1983). Trade associations promote the interests of their members, make members' viewpoints known to government, and lobby public-policy makers to achieve favorable legislation. The attempt to exercise influence over government legislators is magnified by the threat of government intervention, particularly when regulatory pressures are perceived as excessive or unfavorable to members and when the exercise of the association's influence on legislators may preempt further regulatory attempts.

Associations also develop to pursue common, mutually beneficial goals or interests. Reciprocity among members is especially apparent in the role of trade associations as facilitators of intermember communication and information sharing; through the publication of journals, magazines, or newsletters; and in the organization of conventions and trade shows. The balance and reciprocity of member relations will depend on the equity of member contributions. It has been argued that free-rider problems inhere to any group that shares a common good (Olson, 1965; Smith, 1980; Stigler, 1964) because any member can contribute as little as possible while enjoying the same benefits as other members (Kim & Walker, 1984). Therefore, if members of an association are induced to make relatively equal contributions in dues or time commitments, reciprocity will be enhanced.

From an economic perspective, anticipated improvements in organizational efficiency also may induce relationship formation. Efficiency-related motives are internally directed toward improving organizational input/output ratios, rather than externally directed toward either the

Table 2
Conditions of Relationship Formation for Each Contingency

Type of Relationship	Facilitating Conditions of Critical Contingencies				
	Asymmetry	Reciprocity	Efficiency	Stability	Legitimacy
Trade associations	Strong threat of government intervention	Equitable contributions by members	Low cost in the maintenance of relationship	Intermediate domain size	Explicit public criticisms of industry
Voluntary agency federations	Lack of fixed money market for funding	Equitable allocation of funding to affiliates	Moderate degree of standardization among affiliates	Stringent resource environment	Explicit public criticisms of agencies' activities
Joint ventures	Low potential for erosion of competitive position	Balanced bargaining position between participants	Low cost for interorganizational relationships relative to market or hierarchy alternatives	High risk in entering new markets or activities	Requirement for local legitimacy in host country or new market
Joint programs	High potential for control over funding or authority	Intermediate domain similarity	Low cost in monitoring relationship	Complex and risky delivery of social service	Strong public pressure to integrate social service delivery
Corporate-financial interlocks	Severe market constraints	Equal or symbiotic contributions by participants	Potential for high quality advice or expertise	High unpredictability in availability or acquisition of capital	External pressure to demonstrate financial viability
Agency-sponsor linkages	Sponsor centrality in social service network	Low probability of sacrifices to decision-making autonomy	Efficiency-based criteria for sponsorship decisions	High uncertainty in resource environment	Low community awareness of agency or its programs

exertion of influence on government regulators or the development of cooperative interactions with other members of the association. Stated differently, members may join an association not because they are primarily interested in the political issues that have an impact on their industry or because they wish to cultivate links with other members. Rather, they may hope to obtain selective (Olson, 1965) or economic advantages, such as information about less expensive sources of supplies, legal assistance, or statistical reports (Staber, 1987). Such advantages are commonly expected to increase internal organizational efficiency and to reduce costs. Efficiency-based reasons for association develop-

ment will be more likely when the cost of establishing and maintaining membership is low. As transaction cost theory suggests (Williamson, 1985), most enduring interorganizational relations are not established or maintained free of cost. If such costs are anticipated to be less than the selective economic advantages, the formation of an association for reasons of efficiency will be enhanced.

According to resource dependence theory (Pfeffer & Salancik, 1978), one of the motives of trade association formation is the reduction of legislative or competitive uncertainty. From the point of view of achieving stability and predictability, a trade association may reduce some of

the uncertainties of legislative compliance by disseminating information about political trends and requirements to its members. Trade associations also reduce competitive uncertainty by providing standard definitions of products and product-quality guidelines to members or by disclosing the results of association-sponsored research (Pfeffer & Salancik, 1978). Preliminary empirical evidence suggests that an intermediate domain size facilitates the formation of associations for purposes of achieving stability. If the number of competitors in an industry is small (e.g., oligopolies), tacit informal collusion is sufficient to achieve interfirm coordination (Phillips, 1960). Very large numbers, by contrast, may render an association unstable because the diversity of interests is broader and more difficult to coordinate (Staber & Aldrich, 1983). In a study by Staber (1987), an intermediate domain size was conducive to the development of a large, stable association.

Finally, trade associations will be most likely to form for purposes of enhancing legitimacy when institutional pressures are explicit. Most associations attempt to increase members' legitimacy, and public relations campaigns to enhance the image of the trade are commonly a central responsibility of associations. However, associations are more likely to form for legitimacy reasons in response to explicit institutional and public criticism. For example, the International Council of Infant Food Industries was created in response to strong criticism about the infant formula industry's marketing practices in underdeveloped countries; moreover, the association's first action was to develop a marketing code of ethics (Gupta & Lad, 1983). An association's adoption of codes of conduct, product guidelines, or codes of ethics will help to promote a positive and legitimate industry image.

Voluntary Agency Federations. An agency federation is an interagency network in which members or affiliates delegate certain administrative tasks, such as fund raising and coordinating interagency linkages, to a central man-

agement organization. Similar to members of a trade association, affiliates of a federation retain their autonomy for most activities, and membership in the federation is voluntary. Examples include agency councils, hospital consortiums, and the United Way and Community Chest organizations (Litwak & Hylton, 1962; Pfeffer & Leung, 1977; Provan, 1982, 1983, 1984a; Provan et al., 1980). Asymmetry contingencies are fundamental determinants of the formation of federations. Federations develop to increase the collective power of agencies (e.g., the United Way) by improving the affiliates' bargaining position relative to the environment (Provan, 1983), particularly in terms of the federations' capacities to exercise more influence over members of the community from whom funds are solicited than would be achievable by the fund-raising exertions of independent agencies. Federations are more likely to be established for reasons of asymmetry when agencies lack a fixed money market based on religion, government sponsorship, tradition, or current interest (Litwak & Hylton, 1962). *Fixed money markets* refer to relatively assured external sources for obtaining funds or a strong continuous following among donors as a result of either high visibility in the community or the provision of services that are deemed to be important by society or the public sector. The exercise of collective power is less important for individual agencies that have strong ties to religious organizations or government sponsors, for example, or for organizations that have a fixed following of donors based on either tradition (e.g., the Red Cross) or strong public interest (e.g., the American Cancer Society).

Federations also provide the means of establishing reciprocity among member agencies. An important reason for the formation of a federation is to establish a vehicle for facilitating coordination among a growing number of linkages in a social service field (Provan, 1983). An important element of reciprocity among members surrounds the distribution of funds to member

agencies. Organizations such as the United Way are charged with the primary responsibilities of not only soliciting funds from the community but also determining how those funds will be allocated to member agencies. The establishment of a federation for purposes of reciprocity will be enhanced when it is anticipated that the federation's distribution of funds among affiliates will be equitable. Because the exact determination of what constitutes a fair share of funding is susceptible to members' interpretations, a federation's motives of reciprocity, cooperation, and harmony will be undermined when the likelihood of inequities in allocating funds is high. This condition is more probable when the federation's management is inexperienced, when the criteria for the allocation of funds change without explanation, or when a particular agency has been aggressive in promoting its own interests to the perceived detriment of the network as a whole.

The formation of federations also may be efficiency-driven. For example, the observation that most community fund-raising was inefficient, time consuming, and economically wasteful prior to the development of the Community Chest and United Way federations (Litwak & Hylton, 1962; Pfeffer & Leung, 1977) lends support to the argument that federations evolve, at least in part, to achieve economies of fund-raising and efficiencies in the allocation of resources to agencies. The development of a federation to increase efficiency is exemplified by the common requirement for members of a federation to follow detailed budgeting procedures once the federation is formed. These requirements put pressure on agencies to be internally efficient and encourage federation management to consider the aggregate utility of the membership in efficiently allocating funds among members. The formation of federations for purposes of improving efficiency will be facilitated when a moderate degree of standardization (e.g., budget requests) can be imposed on federation members. Affiliates of the same

federation typically serve different constituencies, possess different goals, and undertake different activities. The efficient allocation of resources among different agencies requires a common basis of comparison regarding the worthiness of the recipients. Standardized budget requests impose a moderate degree of standardization on federation members (Litwak & Hylton, 1962), reduce perceived inequities, and assist in the comparison of the effectiveness of programs across agencies.

Several theorists have noted that federations serve an important purpose in reducing environmental uncertainty and securing a stable flow of resources to member agencies (Pfeffer & Salancik, 1978; Provan, 1983; Provan et al., 1980). Agency motives to achieve stability in the receipt of community donations would be expected to play an important role in explaining the formation of agency federations because such resources are unpredictable. Donations are subject to changing community and client demands, and they are based on value-laden assessments of the social importance of alternative services. Federations are especially likely to develop to achieve stability when the network of potential members is constituted by relatively small organizations confronting an increasingly stringent environment. Under these conditions, any individual agency is less able to survive the vagaries of unpredictable resources and is also more willing to relinquish a part of its decision-making autonomy in exchange for a stable inflow of charitable contributions (Pfeffer & Salancik, 1978).

Federations elevate members' profile, visibility, and status in the community; increase members' legitimacy in the eyes of the public; and enhance members' appearance as well-run agencies. As Provan (1983, p. 84) pointed out, "benevolent regulation [by federation management] helps to confer legitimacy on affiliates by allowing them to claim that their own activities are being monitored to conform with some larger set of societal . . . norms." Similar to trade

associations, federations are even more likely to develop for legitimacy reasons in response to explicit public criticism. For example, several theorists (Litwak & Hylton, 1962; Pfeffer & Leung, 1977; Provan, 1983) have noted that the development of Community Chest-type federations was prompted in part by criticisms of donors. Community and institutional pressure to consolidate fund-raising activities emerged directly from donors' complaints about subjection to separate appeals for funds from too many agencies. The legitimacy of the agencies, therefore, depended upon the development of a federation that would integrate and manage the solicitation of funds from the community.

Joint Ventures. Alternative theoretical perspectives on joint ventures have emphasized different motives of joint venture formation. As this article suggests, IORs are likely to develop for several concurrent reasons, but different conditions make any one contingency more probable. A strategic perspective on joint ventures attributes asymmetrical motives to joint venture formation. It is argued that organizations establish joint ventures to enhance their market power and to improve their competitive position against rivals. Several empirical studies support the contention that joint ventures are motivated by the strategic objective of augmenting market power (Kogut, 1988). The formation of joint ventures is more likely to occur for purposes of increasing market power when the potential for erosion of either partner's competitive position is low. Porter and Fuller (1986, p. 326) noted that joint ventures can dissipate sources of competitive advantage by lowering entry barriers, creating a new competitor, or making an existing competitor more formidable through the transfer of expertise and market access. Therefore, joint ventures will not be undertaken to increase market power if the potential partners anticipate long-term threats to their competitive advantage.

Reciprocity motives in joint venture formation include efforts to pool knowledge and informa-

tion, to obtain synergies in technology, and to facilitate joint corporate planning. The argument that joint ventures may be developed primarily to exchange organizational knowledge also has been substantiated empirically (Berg & Friedman, 1981). Reciprocity motives will be stronger when the bargaining position of the two partners is balanced. This is less likely to occur when one partner makes irreversible, specialized, or asset-specific investments or when the contribution of one partner would be difficult to replace (Pfeffer & Salancik, 1978; Porter & Fuller, 1986).

Efficiency-driven joint ventures are prompted by attempts to obtain economies of scale and to overcome capital constraints. From a transaction cost perspective, joint ventures are more likely to be formed for efficiency reasons when these ventures represent the efficient mid-range solution between the diseconomies of acquisition or arm's-length markets and the high costs of internal development. A study by McConnell and Nantell (1985) supports the argument that joint ventures may be established for efficiency reasons. In accordance with transaction cost theory, joint ventures are predicted to be optimally cost minimizing when the cost of coordinating, monitoring, and controlling the relationship, relative to returns, is lower than the alternatives of market arrangements (e.g., outsourcing), hierarchy (e.g., internal product development), or merger.

Pfeffer and Salancik (1978, p. 154) suggested that "joint ventures are undertaken to reduce uncertainty and promote stability." Like the preceding motives of joint venture formation, there is empirical support for the stability contingency as well (Pfeffer & Nowak, 1976). According to these researchers, general predictors of competitive uncertainty and industry concentration can explain joint venture activity. More specifically, it is hypothesized here that stability considerations will be central to joint venture formation when the risks of entering new markets or undertaking new activities are high (e.g., joint

ventures in oil and gas exploration). Under these conditions, risk sharing in joint ventures reduces the uncertainties associated with exploring new markets, technologies, or activities when the eventual outcome is difficult to predict and capital investment is relatively intense.

Preliminary empirical support for each joint venture contingency substantiates both the divergent validity of the contingencies and the contention that IORs may be inadequately explained by any single theoretical perspective. The formation of joint ventures for legitimacy reasons, however, has not been investigated. Legitimacy motives are likely to surround proposed ventures in which a small, less experienced company seeks a joint venture with a large company in order to tap the reputation, status, and legitimacy of the established firm. The development of a joint venture for purposes of enhancing legitimacy may be especially likely when a less experienced firm wishes to establish itself in a new or foreign market for the first time and needs to secure relations with a host partner to demonstrate local legitimacy. The legitimacy aspects of market access, especially in international joint ventures, may precede alternative contingencies. Firms may need to establish their credibility in a new market before they can respond to alternative contingencies such as growth in market power (asymmetry), technological transfer (reciprocity), or economies of scale (efficiency).

Joint Programs. Joint programs occur when two agencies work jointly in planning and implementing specific programs or activities. Unlike joint ventures, agency joint programs do not necessarily require the creation of a separate organization. From an asymmetry perspective, Boje and Whetten (1981) found support for the proposition that joint programs are linkage strategies that can be used to increase organizations' network centrality and the influence attributed to these organizations by other agencies in a network. Joint programs are more likely to be developed for purposes of increasing the influence of the partners when program establish-

ment increases the organizations' access to funds or authority (Benson, 1975). For example, the creation of an interagency education or research program may improve the agencies' abilities to convince government sources to provide funding, particularly if the program is a new initiative in the social service domain. This exclusivity also may increase the agencies' autonomy and dominance, relative to other agencies, by permitting them sole authority to conduct a specific activity. Regardless of exclusivity, however, asymmetry motives indicate that joint programs develop in order for organizations to gain more influence and control over resources (e.g., funding, authority, or personnel) or resource suppliers.

Joint programs are prompted by reciprocity when two agencies' objectives can be achieved only through cooperation (e.g., a personnel exchange program between two agencies to promote interagency learning). Additionally, the reciprocity contingency is reflected in agencies' joint efforts to exchange information or to facilitate interagency client referrals (Provan, 1984b). The establishment of joint programs for purposes of reciprocity is likely to be facilitated when domain similarity is intermediate (Van de Ven, 1976). *Domain similarity*, as distinct from domain consensus, refers to the similarity of agencies' services, clients, and outputs. As Van de Ven and Walker (1984, p. 601) suggested, at the low extreme of domain similarity, organizations have too little in common to be prompted to interact. At the high extreme, the potential for competition and territorial disputes impedes interaction. These authors argued that when organizations have moderately similar domains, they are likely to have complementary resources. In a study of nonprofit health service organizations, Paulson (1976) found support for the proposition that complementary resources predict joint program cooperation.

Joint programs also are established for efficiency reasons to reduce the cost of social service delivery, to overcome funding constraints, and to eliminate redundancy of effort between

agencies (e.g., rationalizing facilities, staff, or equipment). Joint programs are more likely to be formed for these reasons when the anticipated cost of developing and maintaining cooperation between the two agencies is low, relative to the anticipated gains from program establishment. For example, a program to exchange employees may cost each organization little in terms of setting up and maintaining the link, while at the same time it can expose the employees to new methods of administration that will increase the efficiency of their own organizations. Similarly, a program by two health service agencies to establish shared facilities for ongoing emergency services may be resource intensive, but it may reduce the overall costs to each agency by eliminating redundancy and reducing their respective investments.

Because joint programs are formalized, rather than ad hoc, interorganizational arrangements, they tend to institutionalize reciprocal obligations and stabilize the interorganizational exchange of resources. The formality of joint programs creates a mutual hostage position (Kogut, 1988) that is inherently stabilizing, particularly when the partners' shared investments are equal and extensive. The stability that joint program partners anticipate from program establishment also may reinforce an already considerable normative commitment to the service of a recognized social need. The stabilizing effects of commitment to a social problem are especially relevant in nonmarket settings in which the moral imperative of social responsibility is fundamental to organizational goals. Joint program partners are more likely to be motivated by considerations of stability when the delivery of a social service is complicated and risky (e.g., a new program for the early release of repeat offenders of the law). Under such circumstances, joint commitment mitigates uncertainty because risk and accountability are shared and a greater sum of expertise can be brought to bear on the social problem.

An organization may attempt to establish a joint program with a more prestigious and visi-

ble organization in order to increase its legitimacy. In addition, linkage partners may be jointly motivated to develop an interagency program for purposes of enhancing legitimacy when government pressures to coordinate social services are strong. Even in the absence of a government mandate, government representatives may encourage organizations to work together in order to consolidate the implementation of public policies or to rationalize spheres of activity through more integrative and cooperative social service delivery. Organizations that project the appearance of rationalized activity and cooperation through joint program activity often are able to mobilize more funding and authority to provide services in a specific domain than are autonomous organizations.

Corporate-Financial Interlocks. Motives of asymmetry (i.e., efforts to exert dominance, power, and control) have been frequently attributed to corporate-financial interlocks, but the direction and magnitude of influence remain a source of continuing debate. According to the financial control model of interlocks (Fitch & Oppenheimer, 1970; Kotz, 1978), banks exert extensive control over corporations through interlocks. In contrast, the management control model (Berle & Means, 1967; Mariolis, 1975) emphasizes the dominance of corporations and the relative powerlessness of directors to influence organizational activities (Bazerman & Schoorman, 1983; Richardson, 1987). The interorganizational co-optation model (Allen, 1974; Burt, 1979, 1983; Pennings, 1980; Pfeffer & Salancik, 1978; Selznick, 1949) considers asymmetry and stability contingencies in combination. This model proposes that corporations strive to reduce uncertainty by co-opting external representatives to sit on their boards of directors. Organizations achieve stability of access to capital at the expense of organizational autonomy and control. From this perspective, external representatives are targets of influence attempts for purposes of neutralizing their opposition, but organizations also relinquish some of their influence to the co-opted member in exchange for

the reduction of uncertainty. Organizations will be more likely to establish financial interlocks for purposes of exerting power and control when market constraints are severe. Burt and his colleagues (1980), in the only study to examine this hypothesis, found strong support for the argument that co-optation of market constraints is an important determinant of interlock formation.

Additionally, corporate-financial interlocks are established for purposes of reciprocity. Bazerman and Schoorman (1983), for example, identified a reciprocity model of interlocks. From a reciprocity perspective, corporate-financial interlocks tend to facilitate mutual lending and borrowing as well as information sharing. The placement of bank directors on a board ensures careful attention to loan requests of financial backing (Aldrich, 1979). Banks, in turn, benefit from this situation because placement of bank directors on corporate boards may attract large deposits and secure a reliable customer for bank loans (Dooley, 1969, p. 318). When the linkage participants' contributions are symbiotic or equal, corporate-financial interlocks will be more likely to form for reciprocity reasons. Because corporations and banks are vertically related, the expected potential for reciprocity is high. However, finance capital theory further suggests that an elite reciprocity has developed between corporations and financial institutions, such that they collectively constitute a cohesive, hegemonic, mutually reinforcing, and highly integrated industrial group (Fennema, 1982; Levine & Roy, 1979; Menshikov, 1969; Scott & Griff, 1984).

Efficiency contingencies in the formation of corporate-financial interlocks include rationalizing the process of obtaining financial resources and reducing search costs in the acquisition of financial information and capital. Corporate-financial interlocks will be more likely to develop for efficiency reasons when the linkage provides high-quality advice or administrative expertise to the corporation. In addition to studies of interlocks that have focused mainly on the use of interlocks for providing linkages to the external

environment, traditional theories have emphasized that a board's function is to improve internal operating efficiency (Aldrich, 1979). The control of internal affairs for maximizing efficiency depends on the quality of the expertise and information that the financial representative possesses and imparts in serving as a board member of the corporation.

Several theorists and researchers made specific reference to interlocking directorates as a mechanism for reducing uncertainty (Burt, 1980, 1983; Pfeffer & Salancik, 1978; Schoorman et al., 1981). As noted previously, a co-optation model suggests that organizations may attempt to achieve stability in securing continued access to capital. Because capital is a resource that is required by all corporations, the attempt to achieve stability in links to financial institutions should be particularly strong. The urge to establish a financial interlock for reasons of stability will be more likely when the availability and acquisition of capital are highly unpredictable (e.g., volatile markets, economic recessions or downturns).

Representation from financial constituents on an organization's board of directors also can increase the organization's legitimacy and can promote the appearance of financial soundness and viability. The outside director serves as a signaling device to external constituents, including suppliers, customers, shareholders, and the public, in the promotion of a favorable organizational image that reflects financial worth, dependability, or prestige. Organizations are more likely to establish financial interlocks to enhance legitimacy when external constituents call into question the financial viability of the corporation. Under these circumstances, the formation of interlocks will be a response to external accountability that provokes the need to provide symbolic evidence of responsible fiscal management.

Agency-Sponsor Linkages. Knoke (1983, p. 1066) defined a *sponsor relation* as a regularized flow of essential resources to a voluntary organization, regardless of the degree to which ties

are formalized in written agreements, contracts, or other legal arrangements. Similar to corporate-financial interlocks, voluntary agency-sponsor linkages are vertical relations between an organization and a supplier of financial resources. In contrast to contingencies of federation formation, which predict the establishment of a formal network or association, agency-sponsor ties focus on the motives of dyadic relationship formation from a focal agency's perspective. Asymmetry contingencies are important determinants of agency-sponsor linkages. A central assumption of resource dependence theory is that the ability to obtain access to vital resources (e.g., funding) increases an organization's power and control (Pfeffer & Salancik, 1978). Agencies will, therefore, seek ties with a sponsor to secure access to critical resources and to increase their power, relative to other agencies. Motives of asymmetry will be especially compelling if the formation of a tie with a sponsor diversifies the agency's funding sources. Theory and research indicate that diversified links to sources of funding and community support augment an agency's power, influence, and decision-making autonomy (Benson, 1975; Galaskiewicz, 1979; Knoke, 1983; Pfeffer & Leung, 1977; Provan et al., 1980). An agency is more likely to be prompted by power considerations when the sponsor is centrally located in a social service network (Benson, 1975; Cook, 1977; Laumann & Pappi, 1976; Rogers, 1974). Central organizations are more powerful because they control valued resources as a consequence of their proximity to the core of a system of transactions (Boje & Whetten, 1981, p. 379). Therefore, central sponsors, by virtue of their power and influence, will be likely linkage targets for agencies that are motivated to enhance their own power, relative to other agencies (Galaskiewicz, 1979).

Agency-sponsor relations are reciprocally based on the receipt of funds in return for the provision of human services. A United Way agency, for example, depends on the United Way organization to provide funding; the orga-

nization, in turn, depends on the agency to provide social services that create goodwill in the community, which can be converted into more funds for the United Way organization in the future (Provan et al., 1980). Similarly, the funds provided by a public welfare department, for example, to a rehabilitation agency can provide the sponsoring department with community approval and the assurance that the socially important activities will be carried out. An agency will be especially responsive to reciprocity contingencies when it anticipates that the rewards of acquiring funding will equal or exceed the sacrifice of giving up some of its decision-making power. Although dependency on a critical resource supplier increases an agency's susceptibility to influence and domination, empirical evidence suggests that agencies often view such influence as helpful or benevolent (Provan, 1982). Agencies are likely to be more receptive to a sponsor's influence when that sponsor helps the agency to succeed or when formal boundaries have been established for the sponsor's control over agency decisions.

In terms of efficiency contingencies in sponsor linkages, the ready acquisition of resources that are necessary for effective social service delivery can make agencies more efficient in obtaining goals and objectives. Agencies are more likely to be motivated by efficiency considerations when future sponsorship is expected to be based on efficiency criteria. Although the locus of demand for agency efficiency is usually the sponsor, who may exert pressure on the agency to make effective use of the resources it provides (e.g., government agencies, United Way management), it also has been repeatedly observed that nonprofit agencies are often the targets of public scrutiny regarding their efficient use of resources. Pressures for greater accountability in the allocation and utilization of public resources and pressures for more professional management and administration of social service delivery systems have increased the likelihood that agencies will attend to efficiency considerations in establishing resource links. For

this reason, agencies are more likely to establish links to sponsors for efficiency reasons when the sponsor provides not only monetary but also informational support (e.g., technical or political information, advice on agency management, or information on cost-reduction strategies in processing or referring clients). Moreover, this informational support may reduce uncertainty, over and above reductions in resource uncertainty.

Agencies establish links with community and government sponsors in order to reduce the uncertainties of resource acquisition (Provan, 1983). An agency's desire for reducing uncertainty will be greater as the turbulence, instability, and stringency of the resource environment within which it resides increase. As uncertainty increases, agencies will be motivated to seek out influential or resource-rich organizations that are capable of stabilizing inflows of funding. Because giving funds to social service agencies increases the potential for a sponsor's control over agency activities, the anticipated stability and predictability of the sponsor's behavior toward an agency also will figure strongly in stability contingencies. For this reason, agencies may be motivated to formalize and standardize relations with sponsors (e.g., through written contracts) in order to reduce uncertainty and to render more predictable the sponsor's future actions.

In addition to the contingencies of asymmetry, reciprocity, efficiency, and stability, an agency's desire to establish or increase its legitimacy may be a fundamental determinant of links with sponsors. Agencies form links with sponsors to increase public acceptance of their claims to conduct specific activities or to carry out programs in a specified domain. Sponsors can extend moral support (Galaskiewicz & Krohn, 1984) to agencies, for example, by promoting the agency to other constituents. Links to visible sponsors also increase legitimacy through association; if sponsors are prestigious, well established, or socially valued, the association with the sponsor enhances the agency's status in the

community. Therefore, links to sponsors for legitimacy reasons are especially likely to occur when community awareness of the agency's activities is low.

Conclusion

Given the increasing proliferation of interorganizational linkages in contemporary environments (Astley & Fombrun, 1983; Cook, 1977; Pfeffer & Salancik, 1978; Scott, 1983; Turk, 1973), the importance of understanding the determinants of relationship formation cannot be understated. This article integrates the IOR literature into six fundamental contingencies of relationship formation, examines their interactions, illustrates their applicability to six types of IORs, and identifies the conditions under which different contingencies will be likely to predict six types of IORs.

An examination of the conditions under which the critical contingencies are likely to predict the formation of IORs reveals broad, general patterns in the factors that influence necessity, asymmetry, reciprocity, efficiency, stability, and legitimacy. These are, respectively, enforceable laws or mandates, external threats or constraints, interparticipant compatibility, relationship costs and benefits, environmental uncertainty and risk, and institutional disapproval or indifference.

Although these patterns are only preliminary categories for comparing the conditions of relationship formation across different types of linkages, they suggest (a) that the critical contingencies of necessity, asymmetry, stability, and legitimacy are shaped primarily by external factors; (b) that efficiency contingencies are influenced largely by internal factors and the cost of the relationship itself; and (c) that reciprocity contingencies are affected primarily by the relative or comparative properties of the participants and their degrees of congruence with one another. These conclusions suggest that differences among current theoretical paradigms are partly attributable to differences in their locus of atten-

tion for explaining IORs. This, in turn, implies that such paradigms may be more complementary than researchers previously had assumed and that rigorous adherence to the explanations of any single theoretical paradigm or contingency is likely to reveal only a part of the truth about why interorganizational linkages develop.

The literature, when integrated, reveals an encouraging accumulation of wisdom regarding the reasons for relationship formation. Future research should be focused on the conditions that support or facilitate relationship formation for these reasons. Table 2 proposes conditions for six types of IORs as a guide for future research. In addition, more research should be conducted on how the contingencies interact to explain why organizations choose to enter into relationships with one another.

There are also several sources of disunity and fragmentation in the IOR literature that this article has attempted to rectify. In particular, current theory and research have not been consol-

idated with earlier groundwork on IORs, and interorganizational research has not taken into consideration the distinction between generalizable and relationship-specific determinants of IORs. For example, some researchers have used joint ventures as the operationalization of the dependent variable "IORs," assuming that the results of the studies explain IORs in general. Other researchers have examined one type of tie exclusively, without considering its potential for informing other types of relationships. Therefore, the contingencies and conditions proposed in this article have attempted to consolidate past insights with current research, providing a common predictive basis for comparing determinants across different types of IORs. To move the study of IORs closer to a generalizable theory, researchers should (a) examine the convergence among multiple contingencies, (b) proceed cumulatively on the basis of the existing literature, and (c) assess the generalizability of their research results to a range of different IOR types and settings.

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