

Institutional Collective Action and Local Governance

How are collective provision and production arrangements for local government services created and maintained? How do they evolve? An extensive literature on municipal provision and production has focuses on bilateral relationships such as outsourcing production through service contracts (Stein 1990). A second literature explores the structures of local political economies and multilateral governance arrangements (Ostrom, Ostrom and Bish 1988; Oakerson 1989; 2004). This work has given great attention to the evaluation of efficiency of alternative arrangements institutions, but less attention to understanding how and why such arrangements are created and maintained.

I have argued argues that competition and cooperation are complimentary forms of strategic interactions among local actors (Feiock 2004). Voluntary agreements emerge from a dynamic political contracting process among local government units facing a collective action problem. While informative, this work provides only an incomplete account of how decentralized systems of governance arrangements evolve and effectively cooperate to address multi-jurisdictional or regional problems. It also neglects the influence of relational networks on the emergence and success of cooperative agreements among local government units.

This paper takes initial steps to fill this lacuna by advancing a more complete institutional collective action framework for explaining interlocal cooperation among local governments. I outline several transaction problems that present obstacles to cooperative interlocal service arrangements. Agreements occur where benefits to local government actors exceed the transaction costs of bargaining. These can include

information/coordination, negotiation, enforcement, and agency costs. The extent of these costs and the ability of local actors to overcome them and to forge bilateral and multilateral interlocal agreements is posited to depend on characteristics of services, communities, political institutions, and policy networks. Specific propositions regarding evolution and effectiveness of interlocal cooperation are advanced and an agenda to investigate institutional collective action among local governments is outlined.

Transaction Costs in Interlocal Relations

The polycentric, decentralized character of governments in urban areas provides opportunities to address scale economies and intergovernmental spillovers (see Ostrom, Tiebout and Warren 1961). Cooperation among local governments can be viewed as collective action generalized to governmental institutions (Feiock 2004). The scope of cooperation can be small, as when neighboring jurisdictions enter into an agreement to coordinate timing of traffic signals, or large, as in regional efforts to plan infrastructure or promote regional development. In each case cooperative actions are expected to arise when potential benefits are high and the transaction costs of negotiating, monitoring, and enforcing agreement are low.

According to the Coase Theorem (1960), when transaction costs are zero, rational parties will achieve a Pareto-efficient allocation through voluntary bargaining.

Application of the Coase Theorem to intergovernmental relations suggests that when bargaining costs among local governments are low, they can correct misallocations in the provision of public goods. The implication is that it is not necessary for governments to merge to deal with spillover effects among neighboring jurisdictions. When the

regionally beneficial actions of one jurisdiction harm or impose costs on others, compensation could be negotiated for the affected jurisdictions.

The benefit of the institutional collective action perspective is that it considers the opportunity participants have to assess by themselves the costs and benefits of participation in the solution of mutual problems without intervention of a higher level government or the creation of a consolidated government. Existence of joint gains and mutual agreement on the rules for the division of joint benefits guide the behavior of participants in cooperative actions. As inter-local cooperation is achieved through mutual bargaining between/among affected parties, such mutually agreed arrangements will likely to be Pareto-enhancing. Coase (1960) argued that, given a precise allocation of property rights and the absence of information and negotiation costs, two parties would arrive at an arrangement to internalize any externalities between them. Coase extended his analysis beyond two-party externalities to larger groups and to collective goods (Coase, 1988). Thus, Coase's theorem has implications for collective action situations not just local externalities. (Dixit and Olson 2000).

The possibility of voluntary agreements among governments is generally dismissed in the urban policy literatures. The rejection of voluntary agreements as a feasible option can usually be traced to transaction cost problems that make such solutions costly or impossible.

1. Information/Coordination - payoffs from cooperation and preferences over outcomes are not common knowledge, and not necessarily known even by those who might benefit from agreements;
2. Negotiation - the parties may not agree to a division of the bargaining surplus;
3. Enforcement/Monitoring - agreements are often costly to enforce; and
4. Agency - bargaining agents may not perfectly represent the interests of their constituents.

Prescriptions for regional general purpose government and consolidation of local government units, at least implicitly, are based on an assumption that the information, negotiation, enforcement, and agency costs of bargaining collective agreements exceed the gains from cooperation or at least are greater than the costs of centralized policy in a consolidated system (Carr and Feiock 2004).

Coordination is often a critical problem in that joint provision of local services. In order for actors to cooperate, they need to be able to identify opportunities for mutual gain and have good information on who may be a good potential partner. When information is not perfect and resources are limited, finding other actors in a trial-and-error fashion will be highly unproductive and inefficient. Thus, information costs prevent governments from recognizing the potential gains from joint action. This is especially a problem when service outcomes are difficult or costly to measure.

Information on the positions and likely future positions of other local actors is needed to coordinate actions for joint benefit (Libecap 1989; Riker and Sened 1991). If costs and benefits are not common knowledge, the parties may seek strategic advantage by trying to influence one another's perceptions of the relative attractiveness of their available outside options or their own valuation of the outcomes from cooperation (Scharpf 1997). Because fixed geographical boundaries reduce local governments' flexibility in choosing service partners, they may be at greater risk from these strategic behaviors than private organizations seeking to coordinate activities.

Even where local officials have complete information, achieving agreement on formulas or procedures to allocate costs or benefits can be difficult. The negotiation of equitable distributions of benefits will be affected by asymmetries in economic and

political strengths between actors (Heckathorn and Maser 1987; Steinacker 2004).

Negotiated solutions will reproduce existing advantages and disadvantages. Political and social norms regarding the fairness of divisions may preclude some technically feasible outcomes from being reached. Substantial experimental evidence has found that participants respond to the perceived fairness of a deal and sometimes reject offers where the stronger partner seems to benefit disproportionately (Roth 1995).

Bargaining positions of cities differ not only because of different service needs and production capacities, but also because local government leaders differ in their institutional powers and political security. The need for a collective service, the importance of its timing, and willingness to trade-off a certain outcomes for chance at something better shape bargaining positions in negotiating the distribution of gains from cooperation. Each local government wants joint gains from collective provision but also a large share of the benefits. Thus the likelihood of cooperation is dependent on the context of the situation, both whether the type of good produces joint gains and whether the city features lead to compatible bargaining positions.

Defection occurs if one or more of the parties do not comply with the agreement. While enforcement problems occur at implementation, the anticipation of enforcement problems adds to the costs to the process of bargaining an agreement in the first place. Preferences of the participants may diverge over time. As conditions change, the value of the cooperative agreement can change, possibly increasing the incentive of some parties renege (Keohane and Martin 1995). Cities that are on different trajectories -- a slowly declining central city or inner suburb versus rapid growth suburbs, for example -- may anticipate that their preferences regarding services will diverge over time. The higher the

probability that their interests will drift apart, the less likely a contract can be struck, especially if significant differences in asset investments would be required. When jurisdictions are tempted to renege, there will be less incentive to reach agreement in the first place.

Enforcement will be costly unless there are credible commitments by the contracting parties to not defect. In addition third party enforcement of interlocal agreements is uncertain because the courts have been inconsistent in their treatment of intergovernmental agreements among local government units (Ellickson 1979). State legal doctrines of nondelegation limit the capacity of localities to overcome contacting costs and the threat of strategic behavior. Dillon's Rule precludes local governments from engaging in activities for which they have not received explicit authority from the state legislature. Nevertheless, the courts have generally upheld interlocal agreements that have been challenged as violations of home rule provisions (Gillette 2001).

Agency problems not only influence the costs of reaching an agreement but also the social benefit or efficiency of interlocal agreements. The government officials that negotiate cooperative agreements are agents, thus, principal agent problems complicate the calculus of cooperation. Agency costs arise because the preferences of public officials negotiating interlocal agreements may depart from the preferences of citizens they represent (Feiock 2002). Alternatively, specialized government agents may be at a disadvantage in their inability to commit in the name of elected overseers without public disclosure of bargaining strategies (Steinacker 2004). The extent to which agency problems are manifest can be linked to the structure, powers, and political security of

public offices because these arrangements influence the value local officials place on cooperative ventures, their timing, and uncertainty in their outcomes.

Agency problems also have implications for the efficacy and performance of interlocal governance arrangements. Local officials participating in regional institutions are attentive to the local benefits and costs of regional policy. Gerber and Clark (2005) find that these considerations shape the extent to which regional versus local benefits are emphasized in regional governance arrangements.

The Institutional Collective Action Framework

The formation and effectiveness of bilateral and multilateral agreements among local governments is a problem of institutional collective action. Voluntary agreements emerge from a dynamic political contracting process among local governments. Local government actors are positioned to join in interlocal agreements when anticipated benefits exceed the transaction costs. Four factors are key to understanding costs and benefits of institutional cooperation to these local actors: 1) the transaction characteristics of goods; 2) the geographic, social, and demographic position of communities; 3) the configuration of existing political processes and institutions; and 4) the structure of interlocal policy networks.

Transaction Characteristics of Goods

The literatures on industrial organization and organizational economics suggest that characteristics of goods such as economies of scale in production, the meterability of service outcomes and performance, and asset specificity are salient.

Scale economies provide potential efficiency gains from coordination and joint production. Cost savings derived from economies of scale is often described as the impetus for service contracts and interlocal agreements (Fisher 1990; Post 2004). A survey by the International City and County Management Association (ICMA) reports that economies of scale are cited as a reason for cooperation by over half of the local governments participating in interlocal contracts and joint agreements (ICMA 1988). The unit cost of service production is minimized when services are produced to capacity and costs spread over a large population.

Interlocal service agreements can expand jurisdictional markets for public services allowing participant governments opportunities to take advantage of scale economies in production. This benefits both jurisdictions that are too small to achieve scale economies and larger jurisdictions that have excess capacity or can increase capacity through cooperation.

Transaction costs can be great when a relationship involves transaction specific assets or the qualities of a service are difficult to define and measure. For Williamson (1985) asset specificity – transaction specific durable investments that can not easily be redeployed to other uses- is central to choosing among governance structures. When parties make mutual investments of specific assets it creates mutual dependence. If an agreement requires governments to make investments in specific assets or other long-term commitments, it can alter the outcomes that would be available to them if the agreement broke down in the future (Frieden 1994). For example, a compact to not to engage in incentive competition for prospective firms in return for current tax-base shares may reduce the growth opportunities available to a city in the future. For physical assets

that are subject to congestion, such as shared use of a central library or landfill, both the party that provides it and the parties that contract for it are exposed to risk. The party providing the asset must make an investment greater than that necessary to cover its own needs, leaving it vulnerable to excessive costs if other participants later renege on the contract. At the same time if demand for the service increases, the party providing the good may prefer to terminate the interlocal compact in order to better serve its own constituency. The contracting participants are then forced to make an unplanned investment to develop their own asset.

Measurement difficulties increase search costs and make coordination of joint action more difficult. In addition measurement problems hinder monitoring and enforcement. Effective monitoring requires quantitative measures of what counts as an appropriate level of activity by a service provider or the extent to which the services achieve their desired impacts (Deakin, 1996). Service metering is the degree of difficulty in metering or monitoring the quantity and/or quality of output or benefits of a service (Brown and Potoski, 2003). Outcomes of some services are more difficult to measure than others, thus cooperative outcomes should be easier to achieve for services such as sewer, water, or refuse collection that have divisible outcomes that are easily measured. For these services exclusion is complete, costs are allocated based on the benefits received, and beneficiaries' preference is invariant (Steinacker, 2004). On the other hand, for service outcomes that are less divisible and not easily measured such as fire and police services, cooperation is more difficult because exclusion is not complete. It is also difficult to write a contract for services whose outputs are not tangible or whose production is complex (Ferris and Graddy, 1986).

Characteristics of Communities

Political, economic, and demographic characteristics of cities are salient to local governments' interest in, and ability to, negotiate interlocal agreements. We generally expect that more serious the underlying service problem, the larger the aggregate gains from resolving it, and the greater the likelihood of a cooperative arrangement to do so (Libecap 1989; Lubell, et. al. 2002; Ostrom 1990; Ostrom, Gardner, and Walker 1994). For example, we expect that communities experiencing economic hardship and/or with demands for large scale economic development will be most likely to cooperate in joint economic development projects with neighbors.

State level rules, internal demands and exogenous contexts such as the geographic configuration of government units and their physical, demographic, and social characteristics shape the payoffs of cooperation for citizens, and their governmental agents. Local authority to enter into interlocal agreements is derived from state constitutions and enabling legislation. The provisions of intergovernmental cooperation laws vary tremendously across states but most are permissive and let jurisdictions undertake jointly any activity they can undertake individually (ICMA 1997). Nevertheless, state legislation defines the purposes and forms agreements can take, what types or classes of local governments can participate and requirements for its passage and ratification.

City size influences the anticipated benefits of cooperation for certain types of services because the unit cost of service production is minimized when services are produced to capacity and costs spread over a large population. Larger governments

generally possess greater tax base and access to capital markets as well as a larger population of service recipients. They also may have greater ex-post monitoring capacity (Kreuger 2005). This allows them take fuller advantage of scale economies. Smaller governments, with less resources and a smaller population of service recipients are less likely to be able to realize scale economies in service production (Hirsch, 1964; Levin and Tadelius 2004). This is particularly true for capital-intensive services. Both small and large units may benefit in agreements where one unit produces service for others and scale economies are realized.

Economic, social and political characteristics of community populations shape preferences for public goods and help determine the potential gains and transaction costs of cooperation. Homogeneity of preferences both within units and across units is salient. Similar to individual collective action situations, we expect intergovernmental homogeneity across jurisdictions to signal potential common interests and service preferences. For the public officials that are the bargaining agents for their governments, knowledge that counterparts in other jurisdictions represent similar constituencies provides a better understanding of their preferences and indicates similar political as well as economic interests.

Demographic homogeneity suggests that there will not be political and economic power asymmetries that advantage one of the parties and create problems for negotiating fair divisions of benefits. Neighboring jurisdictions that are similarly situated begin from a position mutual dependence. Scarpf (1997: 140) argues that mutual dependence can be represented as a battle of the sexes game in which both players have an interest in concluding the deal but have differences in preference for one or the other coordinated

outcome. In this situation both players could achieve their second-best outcome. Since non agreement would lead to the worst outcomes for each, threats to break off negotiation would not be credible. If instead power is asymmetrically distributed, the player in an advantaged position can capture all of the benefits or no deal will be struck.

Demographic homogeneity within, not just between, units is important because it reduces agency costs for officials negotiating interlocal agreements on behalf of citizens. We expect intra-jurisdictional homogeneity will increase the likelihood of cooperation. Also, certain community characteristics may impede the capacity to engage in cooperative service provision arrangements. For example strong unions that resist contracting or administrative concern about potential loss of local autonomy and control may raise the political costs of to public officials or pursuing cooperative strategies. Homogeneity of preferences within local government units is also likely to improve the efficiency of interlocal agreements by reducing agency costs as discussed in the next section.

One of the most important contextual factors is geographic location. Neighbors have incentives to cooperate based in the technical costs of sharing services. For high transaction cost services, we might expect agreement will be sought with the same neighbor across services. Fixed geographic borders also requires repeat play among neighboring jurisdictions, and thus reduce transactions costs by creating interdependencies. Governments with common borders are not stuck in a one-shot prisoner's dilemma; the impossibility of exit means defection from cooperation exposes the defector to retaliation. The prospect of future play with the same party constrains opportunism so it is then in the interest of each government to cooperate with neighbors

who cooperate. This provides opportunities for mutual assurances that each government will contribute to the provision of the collective good.

Cooperative actions with actors beyond direct neighbors can be more costly. Much recent work demonstrates that the welfare of suburbs is linked to the welfare of central cities. In theory, suburbs should be willing to join collective action that assists the central city out of a desire to protect their own financial well-being (Savitch and Vogel 2000; Stein and Post 2000). Nevertheless, each has a self-interested incentive to withhold contributions and free ride on those of others, with the result that no one engages in the conduct from which all would benefit. If joint action is advantageous because of the geographic range of spillover effects, affected governments may only participate in the agreement if all affected governments are included.

Characteristics of Political Institutions

Political institutions are linked to successful interlocal cooperation because they shape the information available and the structure of incentives faced by local government officials. Administrators and elected officials each play a role in forging cooperative alliances with other local governments but they differ in their bargaining resources and institutional positions. The political and career incentives of local leaders have implications for their willingness to enter into cooperative arrangements and their attentiveness to the level and timing of collective benefits.

Contracts offer incentives for efficiency, but may also motivate the parties to act opportunistically. Certain local political system institutions have been shown to constrain risks of opportunistic behavior by both elected and appointed leaders (Feiock 2004).

Gary Miller argues that the progressive reform “myth” of separation of politics and administration institutionalized in reformed council manager forms of government helps elected leaders resist opportunism (Miller 2000). Kreuger and McGuire (2005) assert that “the city manager function can be viewed as a mechanism for reducing information costs associated with policymaking in a complex environment” (2005: 11). The professional standing and employment opportunities of city managers are improved by service innovations and a record of promoting efficiency at both the city and regional levels (Feiock et. al 2004). LeRoux and Carr (2004) and Kreuger (2005) report that council- manager form of government predicts interlocal contracting. The role of professional administrators is also highlighted in Thurmaier and Woods (2002) account of interlocal agreements among governments in the Kansas City metro area. Department directors identified opportunities for cooperation in specific service areas and the city manager, CFO and/or assistant managers put the deals together.

Although elected officials are expected to be primarily responsive to internal electoral constituencies, local leaders may also be interested in election or appointment to regional or statewide office in the future (Bickers and Stein 2004). Or, they may desire advancement within their political party or seek employment within the private sector after their term of office is complete. Such motives can lead officials promote regional interests. Gillette (2000) asserts that electoral ambitions can lead local officials to address interlocal needs even in the face of weak internal demand (2000).

Local officials’ time horizons have implications for interlocal cooperation because short-term gains from defection will outweighed by the long-term gains from continued cooperation. Turnover and short election cycles result in a short term focus by

local officials that makes cooperation difficult (Clingermayer and Feiock 2001). Interaction with other governments, and past cooperation between/ among city governments affects present and future cooperation because actors consider their reputation with other governments in the metropolitan area and value their networks. These network investments a kind of cooperative norm or institutional level social capital that reduces transaction costs (Park and Feiock 2003). Cooperation is more likely the longer the horizon of their relationship. In a repeated relationship, such as with geographically fixed government units, each actors stands to benefit by acquiring and preserving a positive reputation. In uncertain real world situations, the signal of reputation does more than compensate for incomplete information; reputation is a valuable social capital asset: building it up and maintaining it entail a short-run cost, and running it down or failing to maintain it yields short-run benefit (Dixit 1996). If the forces of repetition and reputation are strong enough local governments' own incentives ensure that they will not tempted to defect from commitment. As a cooperative norm in metropolitan areas, reputation and commitment provide considerable power to explanations of cooperation among governments in polycentric systems. Repeated relations are performed by informal and formal networks among local governments that reduce the transaction cost of investments in reputation making interlocal cooperation easier.

Institutional homogeneity, similarity of political institutions across government units in a region can also facilitate exchange. The homophily thesis argues that actors tend to cluster with others of similar values, norms and beliefs characteristics (Carley 1991 Sabatier et al 1999). Much of the local public administration literature suggests that

professional city managers share a common set training, experience and orientation that leads to common values and an emphasis on efficiency and professionalization that are reinforced by the professional organizations in the field (Frederickson 200?). We expect local leaders will tend to align with others with whom they share similar professional values towards the protection of the resources in the area or not.

The Structure of Policy Networks

A contractual arrangement between two local government units constitutes a dyadic relationship. If each unit also participates in other agreements with other local governments, together, the dyadic relations form a macro-level regional governance structure that comprises a set of actors in a social network (see Thurmaier and Wood 2002). Over time embedded relationships with other local governments accumulate into a regional network that invests the reputation and reciprocity of information in the reliability and competencies of prospective partners (Gulati and Gargiulo 1999). Cities change strategy as a result of learning from prior experiences and encounters and their expectations of future dealings with each other. The presence of a contractual link is voluntary in that non participation, even if costly, is always an option. Local governments maintain their relationships when their benefits exceed the expected value of one-time interactions.

Local governments bargain the terms of interlocal contracts in light of the information they have available (Maser 1988). The resulting governance structure is the product of a series of negotiated agreements over governance arrangements and substantive benefits. Rather than relying on centralized authority, local governments

themselves negotiate the technologies and strategies to produce desired outcomes, the obligations of the parties, and the timing and duration of the agreements. Information impactedness because of uncertainty and opportunistic behavior can be minimized in this process by repeated interactions among multiple neighboring governments.

As described above, the formation of effective regional governance is constrained by the transaction costs of developing and maintaining contractual arrangements. The existing structure of formal and informal agreements among local governments reduces these transaction costs problems by increasing available information about each other's conduct specified in the agreements and enhancing the credible commitments to fulfill those agreements. By spanning the metropolitan area, interlocal agreements provide information about local governments' policies and programs in relation to others within the region and potential implementation problems. Regional governance, consisting of interlocal contractual arrangements, also increases credibility of commitments by transforming short term interlocal relations into repeated games in which a reputation for reciprocity and trustworthiness can mitigate problems of opportunism involved in a single interaction, especially with localities or organizations that are not located immediately across the jurisdictional boundary.

Scholz, Feiock, and Ahn (2005) advanced two general propositions regarding the role of network structures in mitigating the problems of institutional collective action. One emphasizes tightly-clustered or "strong tie" relationships capable of enhancing the credibility of commitments among network members, which they called "credibility-clustering." The other emphasizes the role of extensive "weak tie" relationships linking

diverse organizations in enhancing shared information required to coordinate collective decision, which they called “information-bridging.”

Four distinct network structures are identified here and their implications for the coordination, information, negotiation, and enforcement costs of institutional collective are examined. Scholz et al (2005) described coordination as a critical problem in organizing joint projects among local actors in estuaries. Availability of information on who may be a good partner is necessary for local government units to cooperate with each other. Where coordination is problematic we expect that centralized networks with a central actor serving as a hub or network broker will emerge. A hub is defined as exhibiting a value on both degree and betweenness centrality. Provan and Milwards’ (2001) investigation of networks of mental health service providers in four communities identified just this type of network structure.

At a micro level we want to know what network structures local actors seek, and why they choose those configurations rather than others. Bernardo and Scholz (2005) suggest one solution to coordination problems is to link with the more popular “well connected” organizations in the area. The logic is that local governments that have interlocal agreements with many other local government units will be better suited to provide coordination among those actors facing comparable uncertainty conditions.

The value of such a link might be particularly high if the link creates a “bridge” to a government with connections to other governments that are not part of the first governments network (Burt 2005). In many instances, coordination of policy actions across a large number of units has the potential to increase benefits and performance for each government. Information-bridging links a unit with others that do not share

contractual relationships with common partners. This allows local governments to investigate a broader set of possible gains from other local governments and to reap the advantage of innovation not available within a highly clustered network. This idea builds on Burt's theory "structural holes" which argues that information bridging provides advantages when negotiating collaborative agreements.

Ties that bridge structural holes are beneficial for the flow of information and can reduce coordination/information costs. Nevertheless, they may increase bargaining and enforcement costs if there is a risk that an actor can use this brokerage position to opportunistically control information. What Burt calls an opportunity structure can also be interpreted as a power structure. Burt points out that brokerage is about coordinating people between whom it would be valuable, but risky, to trust. (Burt 2005: 3-4).

Figure 1a

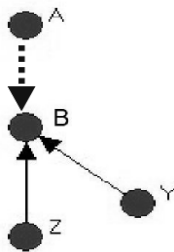


Figure 1b

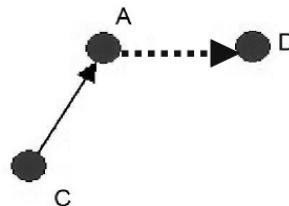
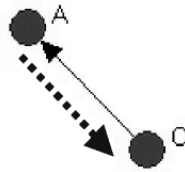


Figure 1a depicts a relationship in which faced with a coordination problems, unit A will seek a link directed toward the most popular unit in the network. Figure 1b depicts a relationship in which Unit A will seek ties that link other pairs of otherwise unconnected actors, hence increasing her betweenness centrality and reducing coordination costs.

Bargaining costs are reduced by reciprocal relationships in dyads. By entering into agreements with a government it has existing service agreements with, a local government unit can strengthen its relationship with this partner to create the more solid conditions for cooperation that develop from mutual exchange to facilitate agreement to a division of the bargaining surplus. Reciprocal relationships provide the opportunity for “side payments” if they link agreements across issue areas. This type of log rolling may facilitate interlocal agreements (Stein 1980).

In Figure 2, unit A could strengthen the existing relationship in which C already contracts with A by reciprocating C’s contracts. This is accomplished through the reduction of the transaction costs that may exist in a dyadic reciprocal relationship (Monge and Contractor 2003; Bernardo and Scolz 2005). In such a relationship, the costs of knowing how the counterpart may behave are reduced, since the establishment of a link running in both directions presupposes wider access to information on what type of behavior is expected and the political and social norms regarding the fairness of divisions. Previous alliances shape new alliances through information about current or potential partners capabilities and trustworthiness, timing and referrals (Burt 2005: 192). In Figure 2, where there are differences in bargaining positions that create division difficulties, unit A will seek reciprocal ties to others with whom it has existing interlocal agreements. Bundling agreements across issues can be especially helpful if the government which is in advantaged position regarding one service is in a disadvantaged position with others.

Figure 2

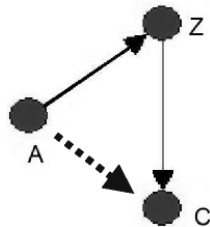


Cowell (2004) argues that formal contractual relationships are the organization level equivalent of social capital because these organizational relationships foster trust and obligations. The credibility-clustering relationship suggests that the credibility advantage of a clustered network becomes increasingly important when there is a potential problem of defection by local governments involved in the delivery of collective goods. Threats of defection impose costs on those who have already invested resources in collective efforts. A large network of connected actors adds greatly to the incentives to maintain trustworthiness because of the costly investments necessary to rebuild them. A clustered network structure reduces enforcement costs because information on the efforts, contributions and behaviors of a contacting government can be made available to and sanctioned by other potential partners. A highly clustered network has the ability to impose constraints on shirking and opportunism that increase the stability of a regional governance structure. A highly clustered dense network structure contributes to social capital by providing extensive monitoring mechanisms, and facilitating mutual reciprocity, trust, and conformance to the rules of the game (Coleman 1988).

The transitive triplet argument illustrates this relationship. Transitivity in a relationship may be a good indicator of social trust being built in a social context (see Carpenter et al 2004). In Figure 3, where unit A already has an interlocal agreement with Z and actor Z in turn has an agreement in place with C. If the costs

of monitoring and enforcement are otherwise high, it is the interest of unit A to initiate an interlocal agreement with C. When faced with high enforcement costs, local governments will seek to form transitive triplets.

Figure 3



One strategy for testing these hypotheses is to implement a maximum likelihood estimator to analyze the impact of selected network characteristics on observed changes in network structure. In particular, we want to know whether the existing patterns of agreements alter the basic utility calculations of local governments in entering into new agreements. This estimation model assumes that changes in observed networks are manifestations of an underlying continuous Markov process in which network actors make decisions about adding or breaking network connections at randomly-determined intervals. When a choice opportunity occurs, ego selects the change that optimizes utility based on the existing network structure at the time of choice (which is not the same as the structure at the moment of observation). This assumes that this change is not forward-looking or coordinated with others, but simply reflects the immediate utility-optimizing choice of the individual. Given a set of selected variables representing hypotheses about the utility function, we can estimate both a rate function (for choice opportunities) and

utility function that maximizes the likelihood of observing the transitions between observed networks (Snijders 2001).

Discussion

Institutional collective action provides a framework for studying interlocal cooperation in fragmented metropolitan area by focusing attention not only the economic scale and costs and benefits of interlocal cooperation, but also their transaction costs. Transaction costs can be reduced by institutional arrangements both formal and informal that increase the availability of information, reduce obstacles to bargaining and reinforce social capital that is a product of networks and political institutions. While recent work has examined the implications of network structures for service performance (Agranoff and McGuire, Provan and Milward Meier and O'Toole), the influence of relationships among local government units on the emergence of cooperation has not been systematically addressed.

Much of the urban politics and administration literatures depict the governance of metropolitan areas as a choice of between competition and consolidation yet both have limited promise for efficiently addressing externalty problems in local services. Cooperation can compliment competition in decentralized metropolitan areas where voluntary agreements emerge from a dynamic political contracting process among local government units. While the record is incomplete the evidence to date, the examples of interlocal cooperation described earlier and recent empirical work provide cause for skepticism of the conclusions that governmental fragmentation is destructive of regional cooperation. These studies also highlight the importance of the endogenous networks

relationships that result from institutional interactions. The conceptual handle of institutional collective action helps to grasp some of the dynamics of decentralized systems of governance and to identify the various ways governments cooperate and compete. Network structures can facilitate efforts to overcome information negotiation and enforcement problems and facilitate inter-organizational learning.

Nevertheless, much network research has focused on relationships between actors to the neglect of actor attributes. Work on networks derived from the sociological tradition in particular focuses on the structure of ties in which actors are embedded and directs attention away from the attributes of actors that shape their interest in cooperation. I argue that both the attributes of actors and relations among them need to be accounted for in explanations of how and why they decide to cooperate with each other.

An Agenda for the Study of Institutional Collective Action

The papers presented at this meeting will go a long way in filling the gaps in our knowledge of the frequency, forms, and structure of horizontal federalism in the U.S. Taken together the empirical analyses, drawn from four very different states, provide the most complete picture of the interlocal relationships available. The next steps will be to empirically test explanations for the emergence and evolution of interlocal service networks and to investigate how the structure of interlocal networks influence policy outcomes and performance.

Understanding the dynamics of the evolution of interlocal service arrangements needs to be a priority for the study of horizontal federalism. Voluntary agreements emerge from a dynamic political contracting process among local government units. The

network of contractual arrangements constitutes a macro-level regional governance structure that comprises a set of actors in a social network. There is an extensive literature applying social network analysis to policy networks and their implications, including local government service networks (see Thurmaier and Wood 2002; Provan and Milward 2001). However, this work has focused on the consequences of networks for policy outcomes, to the neglect of how networks emerge or evolve.

Empirical investigations of institutional collective action being supported by the Devoe Moore Center at Florida State University will begin to fill this lacuna by testing network based explanations for the emergence and evolution of intelocal service agreements among local governments. This work focus on how the interests and incentives of local policy actors shape the emergence and evolution of local governance networks and investigates the motivations of local government actors for seeking specific networks structures where networks and actors preferences evolve together in a dynamic relationship. Local governments change strategy as a result of learning from prior experiences and expectations of future dealings with each other. The formation of effective regional governance is constrained by the transaction costs of developing and maintaining networks of contractual arrangements. The existing structure of networks of agreements among local governments influences these transaction costs problems by providing information about other actors and their strategies and the credibility of commitments to fulfill their contractual obligations.

One study building on Manoj Shersta's paper presented at this meeting investigates the scope and evolution of intelocal service networks in Pinellas County Florida. Its 25 general purpose governments have a long history of mutual agreements in

service delivery and thus it provides an excellent laboratory to investigate the dynamics of interlocal service networks more than 400 agreements covering a period of more than 25 years. This allows empirically investigate the dynamics of interlocal cooperation in local public service delivery and test specific propositions regarding network structure by estimating the implicit utility functions of local actors that accounts for observed changes in the structure of interlocal agreements. This procedure allows us to account for actor characteristics on the structure of networks as well as the influence of network structure on actor characteristics (Shrestha and Feiock 2006). Simon Andrew's work will be extended to investigate network based explanations for change in the scope and form of network ties over time. His work will test proposition about how the structure of relationships and the institutional forms that public safety agreements take influence whether cities pursue service new service linkages, their choice of partners, and the institutional forms of new agreements.

Park and Feiock have undertaken several empirical projects that investigate institutional collective action in the broad area of economic development. They have applied the ICA framework to examine the formations of regional partnerships (Park and Feiock 2004; Feiock, Johnson and Tao 2004) and joint development ventures undertaken by local governments (Feiock Park and Steinacker 2005). A survey of development officials for all local governments in the Orlando and Tampa metropolitan areas is in progress. The instrument identifies the competitive and cooperative dyadic relationships among governments and the types of joint development projects they engage in.

The final step will be to link the structure of interlocal service networks to governance and policy outcomes in terms of efficiency and equity in service provision

and the ability of decentralized governance to effectively deal with regional problems. While this has been the subject of a tremendous amount of scholarship in the last few years, this work on “network management” is unsatisfactory because it focuses on designed rather than emergent networks, it does not address the endogenous nature of relationships, it often does not allow comparisons across networks and network structures and it, does not systematically examine networks and performance across different types of policy.

Each of the empirical projects described above can be extended to examine endogenous relationships between networks and performance over time and across various types of policies. Building from this work will provide a stronger micro level foundation for linking the interests of actors with service networks and outcomes. An ongoing project by Lubell Feiock and Scholz will link the structure of interlocal service networks to land use outcomes. The structure of interlocal planning agreements contributes to changes to local land use institutions embodied in amendments to local comprehensive plans. Additional work will focus on developments of regional impact (DRI) in Florida. Surveys of participants in the DRI process will measure the structural characteristics of networks which will then be linked to the indicators of project success.

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