Organization Studies

http://oss.sagepub.com

# Politics and the Evolution of Inter-firm Networks: A Post-Communist Lesson

Gerald A. McDermott

*Organization Studies* 2007; 28; 885
DOI: 10.1177/0170840607075263

# Politics and the Evolution of Inter-firm Networks: A Post-Communist Lesson

Gerald A. McDermott

**Abstract**

This article attempts to account for both continuity and change in network structures and relationships by analyzing how a country's political approach to institution building shapes the reproduction of industrial networks. While firm-level actors may develop tenacious socio-economic relationships, the authority structure of a network emerges from the ways certain constituent firms align themselves with public institutions. I empirically examine this approach by analyzing the evolution of Czech industrial networks during and after communism. The fragility, eventual stability, and subsequent changes in networks come not from purely 'intra-network' factors, but rather from the political approaches of the government toward institution building. In short, this article aims to renew our focus on the origin and evolution of social capital and networks by enjoining network analysis with recent work in political economy.

*Gerald A. McDermott*
The Wharton School, University of Pennsylvania, USA

**Keywords:** networks, evolution, institutions, politics, transition economies

For more than a decade, scholars of economic sociology, organizational theory, and business strategy have found great purchase in the related concepts of social capital and socio-economic networks. Much of the debates have centered on the ways in which social structure and norms constrain and enable the action of firms and individuals (Podolny and Page 1998; Portes 2000; Burt 2000; Kogut 2000). This line of research is not without its limitations, however. Accounts of social capital and networks can often be over-socialized, static, and binary (Granovetter 1985; Sabel 1993; Salancik 1995; Nooteboom 2000).

These strengths and weaknesses are reflected in current debates about the economic and political transformations in developing and post-communist countries. On the one hand, network analysis, and economic sociology in general, have helped scholars explain how longstanding social ties can shape the distribution of new resources (Rona-Tas 1997; Ostrom 1995) and be sources of decentralized knowledge and problem solving (Stark 1996; Spenner et al. 1998; Spicer et al. 2000). On the other hand, these 'bottom up' approaches can overemphasize the stability of network reproduction and self-governance and, in turn, can limit their ability to explain the profound instability and changes in industry structure and economic governance witnessed in these countries (Woodruff 1999; Johnson 2001; McDermott 2002; Jacoby 2000).

The Czech Republic, for instance, was often used as evidence that norms of reciprocity and structural positions attendant to communist era socio-economic

Organization Studies
28(06): 885–908
ISSN 0170–8406



DOI: 10.1177/0170840607075263

networks could be stably reproduced and determine the strategies and governance rules of firms in the post-communist era (Chavance and Magnin 1997; Stark and Bruszt 1998; Allio et al. 1997). By the end of the 1990s, however, the economic and organizational outcomes undercut the expectations of these approaches. The Czech capital markets had collapsed under the weight of investment fund mismanagement and self-dealing, and economic growth and output lagged significantly behind countries like Poland and Hungary. Moreover, a close examination of Czech manufacturing reveals that while firms attempted to reproduce past industrial networks, the process was highly unstable and led to significant structural changes in networks.

This article attempts to account for both continuity and change in network structures and relationships by analyzing how a country's political approach to policymaking and institution building alters network reproduction. The extant approaches may lead to static and over-socialized views of networks since they largely take socio-economic relationships as prior to and independent of the political–institutional setting. In contrast, the *embedded politics* approach offered here understands inter-firm networks as *socially and politically* constructed. Firm-level actors may develop tenacious socio-economic relationships, but the authority structure of a network governs dispute resolutions and the distribution of resources. This authority structure emerges in part from the ways certain constituent firms are empowered or weakened by public institutions and the general regulatory setting of a society. The political approach a government uses to change policy and institutions can alter the authority structure, inducing both instability and change in network structure and relationships.

Gerald Salancik (1995: 348) argued that '[a] network theory should … propose how adding or subtracting a particular interaction in an organizational network will change coordination among actors in a network'. Several authors have recently responded to this challenge by expanding network ties into the political and institutional fields. For instance, by including political affiliations of board members in Hungarian firms, Stark and Vedres (2005) show how inter-firm network structures evolve with changes in ruling political parties in national and local governments. Powell et al. (2005) demonstrate how policy changes in the National Institutes of Health in the USA influenced the structure of biotechnology networks in the 1990s. By arguing that firms are embedded in concrete socio-political networks, my approach extends this work by attempting to clarify how the politics of institutional change can cause changes in socio-economic landscapes. In doing so, I build on the growing literature examining the interaction between public institutions and economic organizations (Djelic et al. 2005; Whitley 2000) that has attempted to reconcile Polanyi's (1944) dual emphasis of economic activity being both embedded in social relationships and shaped by the politics of state crafting (see, for instance, Evans 1995; Fligstein 2001; Hall and Soskice 2001; Hamilton and Biggart 1988; Piore and Sabel 1984).

Like the above-mentioned authors, I too expand the definition of industrial networks to include the formal and informal socio-economic ties between firms, plants, and banks (via supply relationships, credit, ownership) as well as political ties between certain firms and government institutions. Political ties of a firm come in the form of the ability of the government to appoint top management as well as in the form of ongoing relationships between the firm and certain central or regional government institutions (e.g. ministries, regional councils) to develop and implement specific policies. Socio-economic and political ties can constrain the discretion of the firm, provide the firm with different channels of information and resources, and afford the firm different sources of power and legitimacy (Pfeffer 1992; Padgett and Ansell 1993). But the political process of policymaking and institution building during the period of transformation can reshape the given constellation of the network ties, since this process can bestow legitimacy, asset control, and resources on firms in discriminating ways that reshape networks. This process is amplified in post-communist countries, where governments attempt wholesale institutional renovations in relatively short time periods. In doing so, governments are first and foremost concerned with the structure of policymaking power — whom to include and exclude in creating and implementing new rules of economic governance. To capture the impact of these macro-political decisions on the micro-level attempts at inter-firm network reproduction, my embedded politics approach enjoins the recently expanded versions of network analysis with work on the political economy transitions (Haggard and Kaufman 1995; Haggard and Maxfield 1996; McDermott 2002; Woodruff 1999).

First, the authority structure of the network is in many ways derived from government attempts to regulate an industry or the economy at large. The power a firm or plant may have over assets and over the governance norms is derived from one's position in the value chain, such as a critical supplier or purchaser, as well as the strength of one's ties to local public actors, such as bank and party council officials during communism. For instance, under communism, certain firms in a network amassed power from their ongoing relationships with central planners in managing a part of an industry as well as from their relationships with relevant regional party councils in administering regional social policies. (A network may be more hierarchical or more egalitarian, depending on the mix of these two factors.) During transformation, as firms and plants clash over restructuring strategies and asset control, the dissolution of certain political institutions (e.g. the central planning ministry and the regional party councils) can undermine the relative authority of network members and, thus, much of the prior social norms for conflict resolution.

Second, network stability and reconstitution emerges from the way the government balances two contrasting approaches to institutional reform that are prior to a particular policy: 'depoliticization' and 'participatory restructuring'. 'Depoliticization' aims to rapidly impose on society a new set of rules based on self-enforcing economic incentives by an insulated, powerful, centralized policymaking apparatus (McDermott 2002). In contrast, 'participatory restructuring' empowers a variety of public and private actors to experiment with new roles of conflict mediation and risk sharing (Fligstein 2001: 40–43). Notice here that the key issue is not simply the policy that the government pursues, but especially the political process it uses to design and implement it. A government is always considering whom to include and exclude from policymaking and the distributional benefits (Haggard and Kaufman 1995; Schneider 2004). Indeed, much of the literature on development has shown that when confronting a crisis, governments often attempt first to pursue depoliticization approaches, regardless of whether they are promoting privatization, industrial, or redistribution policies (Haggard and Maxfield 1996; Johnson 2001; Rodrik 2004; McDermott 2004). As a country begins with the depoliticization approach, network reproduction grows unstable as old authority structures wither and no new institutional mechanisms for risk sharing and conflict mediation are in place. When and how the government reverses course and begins institutional experiments via backing negotiated restructurings will determine the structural and substantive changes of networks. That is, in seeking to stabilize a crisis in a sector, the government has to ease insulation and empower different public and firm-level actors to generate a negotiated restructuring solution. In doing so, the government will legitimize the decision-making rights over resources in favor of a particular subgroup of firms in the network, solidifying a change in the network authority structure and the rules of governance (Provan and Milward 1995; Human and Provan 2000).

This article illustrates my embedded politics approach by examining in detail the evolution of two leading Czech industrial networks during and after communism. These two networks were flagships of Czech industry during the 20th century and were viewed even by the *Wall Street Journal* (1996) as the future corporate leaders of post-communist east Europe. The analysis follows the comparative case method that uses both extensive interview and archival data, controls alternative explanatory variables, and highlights the degree to which differences and similarities in network evolution depend on the social and political ties of firms (Ragin 1987; Eisenhardt 1989). The field work was mainly between 1993 and 1996, including over 150 interviews (mostly in Czech) and examination of relevant contemporary and historical data and documentation on firm finances, privatization, and production. As all the firms involved were in mechanical engineering and subject to the same laws and unions, I am able to control for technological, unit labor cost, and legal variables, and thus discount the explanatory power of ex ante changes in factor markets in determining network changes (Baum et al. 2003; Uzzi et al. 2002). The matched pairs analysis of two ideal-type networks in the former Czechoslovakia shows how preexisting social ties may lead to divergent privatization and restructuring strategies. It also helps show how the government's oscillation between depoliticization and participatory restructuring changed the authority structure of the two networks over time.

The first section analyzes the emergence of Czech industrial networks during communism. In the second section, I examine the immediate attempts by the respective firms to reproduce their network ties and embrace privatization. The next two sections then focus on the points of instability and change. Both networks faced powerful internal conflicts over asset control and restructuring strategies that could not be mediated by either reference to old ties or contractual and ownership means. Intra-network conflict resolution required political intervention — assistance by public institutional actors to facilitate workouts and the reorganization of the network itself. In conclusion, by offering a way to frame the impact of different political approaches to reform on network dynamics, the article hopes to bring the literatures on the political economy of transformations closer to the study of network evolution.

## Networks and Social Capital under Communism

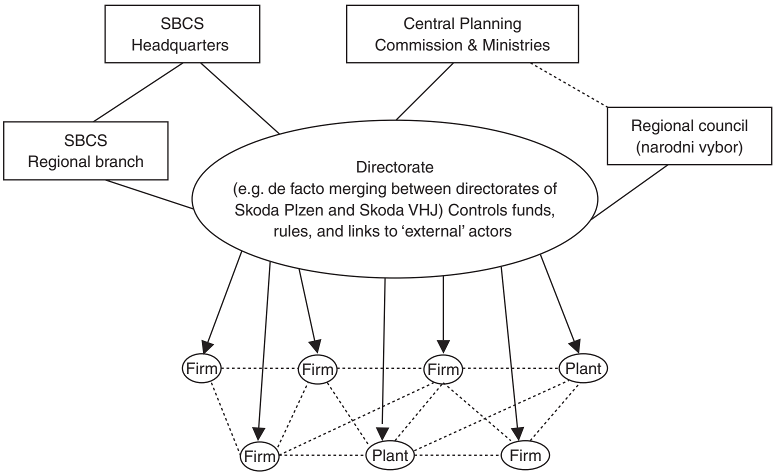
The economic organization of communism had two important currents. Economic sociologists revealed how the failures of central planning and the shortage environment led managers and workers to develop greater flexibility via informal horizontal ties and norms of reciprocity (Burawoy 1985; Stark 1986; Voskamp and Wittke 1991). Further research also showed that political–institutional factors were directly shaping production methods and bargaining power (Szelenyi 1988; Prokop 1996; Stark and Bruszt 1998: Ch. 4; Woodruff 1999). In communist Czechoslovakia, both sociological and political forces shaped the formation of networks, namely within industrial associations (VHJs) — meso-level planning structures that managed particular industrial branches (McDermott 2002).

On the one hand, VHJs integrated firms with related production to increase technological synergies and decrease the number of unfilled inter-firm orders. As VHJ directorates gained greater responsibility to guide production, member firms and plants gained greater independence from the central organs of the state. Constituent customers and suppliers, managers, and work teams forged direct informal ties and rules to adapt production to the exigencies of plan failure and shortage. Firms and plants developed broad production profiles of final and intermediate products and forged tight inter-unit technical and economic links as subcontractors and collaborators in R & D.

On the other hand, alliances between certain firms, central bank branches, and especially regional party councils, shaped the authority structures of VHJ networks (McDermott 2002: Ch. 2). Communist regimes had created three parallel planning structures — one for the economy via VHJs, a second for the management finances, through which state bank regional branches provided working capital and investment credits, and a third for territorial administration, through which subnational party councils managed political and social welfare matters. These structures overlapped in different ways, but with VHJs as the nexus points. For instance, council officials could block the appointment of top managers. Councils and VHJ firms together administered housing, health, cultural, and training assets, which were on the books of the firms but under the jurisdiction of the councils. Over time, certain VHJ managers forged alliances with their relevant regional or district councils, and bank branches began to gain resources and to develop informal rules of economic governance for the respective region.

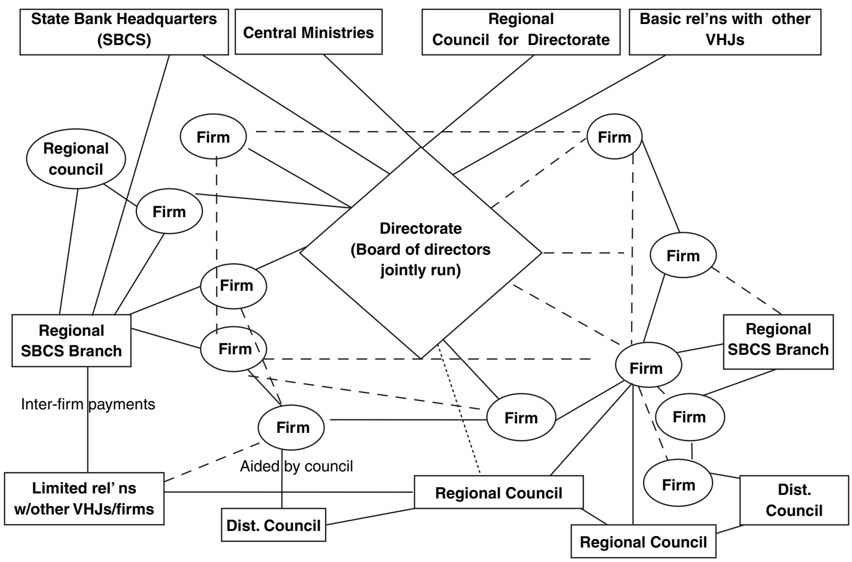
The importance of the alliances becomes immediately apparent when we try to distinguish different types of networks and how they evolved during communism. Figures 1 and 2 show two types of industrial networks, hierarchical and polycentric, represented respectively by the VHJs Skoda and TST. Each VHJ averaged, in the 1980s, about 30,000 employees and 20–25 member firms. Within their respective VHJs, the networks differed in their production traditions, nodes of power, and distribution of decision-making rights, even though both VHJs had the same legal–organizational form (a *koncern*) and were both in mechanical engineering. Within Skoda, there were several heavy engineering production programs, such as locomotives, power plant equipment, heavy machinery, forged steel parts, and gearboxes. Firms and plants were incorporated as both final producers and mutual

Figure 1.
Hierarchical Network
(e.g. Skoda VHJ)




*Note:* Solid lines represent stronger links than broken lines.
*Source:* McDermott (2002: Ch. 2)

Figure 2.
Polycentric Network
(e.g. TST VHJ)




*Note:* Solid lines represent stronger links than broken lines.
*Source:* McDermott (2002: Ch. 2)

subcontractors. Decision making for production and finances was centralized at the level of the directorate, which set the framework for lower-level bargaining among members and overtly favored certain members' production needs over those of other members. Within TST, member machine tool producers had fewer subcontracting links between themselves, collaborating only on certain parts and the R & D conducted by two member firms. Decision making was decentralized, with member firms keeping their own financial accounts and running the directorate largely through consensus.

A key reason for these structural differences was the variation in the ways that certain member firms forged alliances directly with the administrative councils and indirectly with corresponding bank branches. For instance, the firm Skoda–Plzen dominated the directorate of Skoda VHJ. This grew out of the alliance Skoda–Plzen forged with the powerful regional council of Western Bohemia. The alliance allowed Skoda–Plzen top management to control all channels, outside of their VHJ, to other VHJs, government actors, and the banking system. Such control afforded Skoda–Plzen management the authority to dominate even other large firms within the VHJ, like having the firm for nuclear power equipment take orders from a turbine plant of Skoda–Plzen. In TST, most member firms developed direct links to regional bank branches and administrative-communist party councils of their respective regions and districts. These linkages aided firms in managing inter-firm debts, mediating delivery disputes with non-TST firms in a region, and acting as sources of countervailing bargaining power vis-à-vis one another, the TST directorate, and the central state ministries.

These different patterns of firm–council alliances had a clear impact on the reproduction of network reproduction when the communist state dissolved the VHJ system in the late 1980s. Similar to strategies of VHJs in steel, trucks, and aircraft manufacturing, Skoda became a consolidated, single firm. To fight off independence battles of member firms, Skoda–Plzen used its ties to the regional and city councils to convert the remaining member firms of the old VHJ into its own plants, which it alone vertically commanded. Plants would have no legal powers and no individual accounts, while the head office kept control of, among other things, foreign trade relations, R & D, and credit links to the state commercial banks. The contrasting form of network reproduction that TST pursued was also found in electronics, pump manufacturing, and chemical sectors. With the aid of their already decentralized financial accounts and their relevant regional and district councils, TST firms pushed to become separate, independent state-owned firms, with all attendant rights and privileges. Yet, because each firm lacked financial strength and direct foreign trade experience, the firms again called on the aid of their political allies and collectively bargained with the central state to have the former directorate of TST (with its personnel and facilities) become head office of their ‘own’ voluntary branch association, which they all would control.

## Revolution and Reproduction

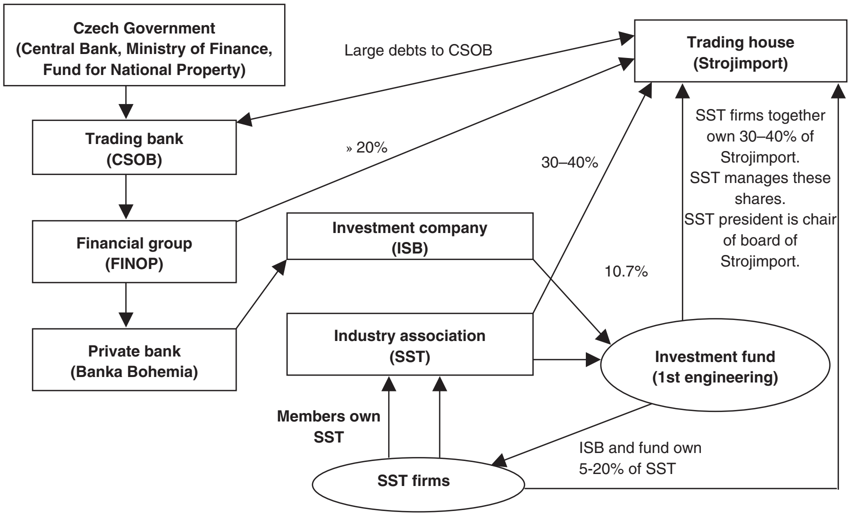
By the early 1990s, the Czech lands had two noticeable characteristics: a political approach to transformation based on a depoliticization strategy (Frydman and Rapaczynski 1994; Boycko et al.1995) and a concerted effort by firms to reproduce their old network ties. A coalition led by Vaclav Klaus, first as Finance Minister and then as Prime Minister, created a strong, insulated policy apparatus by minimizing the interventions of parliament and special-interest groups, limiting the powers of workers councils, dissolving regional administrative councils, and reducing the powers and resources of district and fragmented municipal governments (Eyal 2000; McDermott 2002). The new self-enforcing rules for economic restructuring came in the form of mass privatization via vouchers (privatizing over 1,800 firms and banks in less than four years), one-time recapitalization to strengthen banks, and a strict bankruptcy law based on liquidation of defaulting debtors. As a result, over 400 investment funds emerged almost overnight as the principal vehicles for corporate governance, and the Czechs led the region in private ownership of industrial and banking assets (EBRD 1995; World Bank 1996).

The Czech depoliticization approach also gave firms the opportunity to reproduce their existing industrial networks and protect themselves from outside interference. First, the combination of new financial constraints, a collapse of stable markets, and government avoidance of directly restructuring firms allowed for the continuation of a rigid and segmented industrial structure (Buchtikova and Flek 1993; McDermott 2002: Ch. 3). Surveys showed that the lack of new sources of sales, inputs, and financing led firms and plants to work with their few existing suppliers and customers to gain resources and reorganize production (see Mihola and Havlin 1992; Mihola et al. 1992). Second, the priority of rapid privatization with limited government intervention helped managers maintain control over the firm. Research shows that privatization projects from incumbent management won out by far over those of outsiders (Lizal et al. 1995). Managers thought the use of vouchers would allow them to retain decision-making powers (Eyal 2000) while their pursuit of joint ventures (JVs) would bring needed foreign capital (Mihola and Havlin 1992; Orenstein 2001).

These general tendencies, however, were mediated by the change in the political and institutional environment. While network firms fought over conflicting strategies to increase consolidation or to break up into ever more independent firms, the past forms of conflict resolution dissolved with alterations in the network authority structures. Formerly powerful members no longer monopolized external channels. Regional councils were dissolved with no replacement, the planning system was disassembled, ministries were diluted of resources, and the transforming state banks faced new regulations. Plants and units also had the right to submit their own privatization projects to the government. Subsequently, two patterns of reproduction emerged.

Members within former hierarchical networks, such as Skoda, appeared to strike an initial compromise: to privatize the group as a whole, in the form of a holding company, combining the use of voucher and foreign partners (McDermott 2002: Ch. 4). The holding structure allowed a diffusion of authority and a sharing of common resources. Units became subsidiaries or divisions, with decision-making power over production changes and new independent financial accounts. The holding became an 'internal, regulated market', providing critical resources each lacked on its own: financing and mutual subsidization through internal credit, strategic management for common production programs, foreign trade and partnership contacts, and shared labor and production facilities. In the meantime, members, collectively or individually, would formulate restructuring strategies and find foreign partners to gain needed investment, market niches, and know-how.

Figure 3.
Network Ties in the Czech Machine Tool Industry, 1992–1993




*Note:* Direction of arrow denotes direction of ownership. Percentages denote ownership share.
*Source:* McDermott (2002: Ch. 5)

Members of a polycentric network, like the ex-TST VHJ, chose distinctly different privatization strategies, which built on their earlier efforts to further decentralization but supported group cohesion. First, the 40 firms entered the first wave of privatization as individual entities mainly via vouchers. Second, they grafted indirect equity and financial alliances onto their past social ties. They converted the directorate of their former VHJ into the headquarters of a new machine tool association, SST, in which each firm was a part-owner. As can be seen in Figure 3, SST used its past professional ties to create overlapping equity stakes with FINOP and CSOB, the Czech leaders of international trade finance, and their new private bank, Banka Bohemia, in key investment funds and foreign trade companies. SST and the new equity links would provide members with strategic sectoral information and a common coordinating structure in areas where individually they were weak, such as in foreign trade, shared trademarks, critical inputs, vocational training, and development loans.

At first glance, we can see that the old network patterns were durable. Despite having similar technologies, aggregate employment, and end markets, as well as being subject to the same laws, policies and trade unions (Kovo), the members of the ex-Skoda and the ex-TST VHJ networks chose different privatization strategies and initial organizational forms. Moreover, both groups were conscious about the importance of maintaining cohesion, by using holding structures and associations that would be supported by new private external partners, such as through FDI JVs and local financial organizations.

If one were to view the inter-firm and inter-plant networks as autonomous from their political–institutional contexts, then one might be tempted to conclude that past patterns of intra-network resource control and norms of reciprocity directly determine network reproduction and the new patterns of economic governance. The notion that inter-firm networks are self-governing and able to stably adapt to new outside shocks comes from the emphasis that network structure and norms emerge mainly from inter-firm social relations (Chavance and Magnin 1997; Allio et al. 1997; Stark and Bruszt 1998: Ch. 5; Putnam et al. 1993; Kogut and Walker 2001).

But if one fast-forwards the story a few years, one finds that both networks became unstable and experienced significant structural changes. For members of both Skoda and SST, the attempts to preserve their past social relationships and reinforce them with new governance mechanisms of equity and contracts, and also to replace past public external partners with new private ones, did little to promote cooperation and restructuring. By the mid- to late 1990s, the pre-existing network structures would be reversed for each. The previously hierarchical structure of Skoda would have a significantly weaker central office and fiercely independent member firms. The previously polycentric structure of TST/SST would end up with a single strong member firm that owned several others and controlled the rest via its hold over the association headquarters, subcontracting, and available credit.

## The Limits of Continuity — The Conflict over Network Restructuring

In order to make sense of the continuing impact of past socio-economic relations and to account for the subsequent instability and changes in network reproduction, my embedded politics approach will emphasize two key factors. First, it emphasizes how the authority structure of the network is central to stability and adaptation and depends in part on the political–institutional context. Second, it emphasizes how different political approaches to transformation in the Czech Republic altered that context and, in turn, the network authority structure. This section will show how, for both Skoda and then the TST/SST networks, coordination would falter, since the depoliticization approach of the Czech government not only eliminated traditional political allies of certain firms but also provided no institutional substitutes to mediate disputes and share risk (Eyal 2000). The next section will illustrate how the government's different uses of participatory restructuring strategies to resolve ongoing sectoral crises bestowed different sets of control rights and legitimacy on certain firms and thus altered the structure and governance of the networks.

### Reinforced Linkages and Disharmony in the Skoda and SST Networks

Intra-network conflicts over asset control and restructuring strategies emerged from the contradiction between the reinforcement of inter-unit production and financial links and the multiple restructuring experiments pursued by members. If the inherited scope and flexibilities were sources for unit and firm autonomy, the overlapping supply links with relatively narrow technical specifications constrained individual discretion. Intra-network subcontracting links remained vital for the flow of production across different common programs as well as those of individual units. For instance, while production for customers outside of Skoda accounted for over 70% of total output before and after the revolution, inputs from outside the group (as a percentage of production value) dropped by almost 50% after 1990 (see McDermott 2002: Ch. 4). They also provided cross-subsidization in a liquidity-constrained economy. The importance of these internal links, however, varied according to one's place in the network. In turn, managers held different views over production interdependencies, which provoked clashes over such critical restructuring issues as asset control, spin-offs, product development, and plant closings.

By 1989, the production profile of Skoda–Plzen accounted for 91 different product groups across more than 20 plants. After 1989, these plants focused more resources on their own priorities to gain independence. In turn, joint production programs and inter-unit supplies suffered as hold-up problems increased. Moreover, the rapid insolvency and loss of key components by several self-liberated, previously profitable members of Skoda and other holdings further restrained the ambitions of holding units to spin-off (Lizal et al. 1995; McDermott 2002: Ch. 4). The scope of plant-level production and density of multiple production links impeded the clear definition of new divisions for the main programs. Since several units often produced key inputs for multiple programs using the same facilities and personnel, members fought over the control of these suppliers. Given the production interdependencies and the lack of clear outside sourcing, holding members also could not reach agreement over the closing of large loss-making intra-holding suppliers.

In SST, the uncertainties of new production experiments created restructuring conflicts between interdependent firms. Given the lack of knowledgeable suppliers and the high costs of total in-house production, SST firms turned to one another for the development or subcontracting of certain components and the cost-sharing of exporting and importing (especially for CNC electronics). Since the strategies of new product development entailed significant risks and often conflicted with one another, no firm could give the contractual guarantees to the others to forgo their own plans and invest in those of the soliciting firm. For instance, even when the soliciting firm demonstrated that the trial runs were for a credible international client, the small production volumes and poorly defined future revenue streams undermined the credibility of the project. In turn, the potential SST suppliers refused to alter their own component production for the benefit of the soliciting firm. Similar fates met efforts to clarify firm specializations, collaborate in exports and imports, and use the vocational training system (McDermott 2002: Ch. 5).

To mitigate these disputes, both sets of networks embraced the two new external sources of capital and authority that were now available — Czech banks and foreign direct investors. Holding companies, like Skoda, increasingly sought the financial aid of the main Czech banks. They also saw FDI via JVs as highly advantageous. Voucher privatization had taken sales of whole sets of assets out of state control. Foreign investors wanted to learn more about Czech management and were interested in a subgroup of holding units (Gulati and Gargiulo 1999). As noted above, SST firms used equity links and investment funds to tie themselves to a major Czech bank and a new bank.

But these schemes of using equity and credit contracts to secure new external allies failed. The main Czech banks were reluctant to lead and finance restructuring directly or indirectly, simply based on governance mechanisms of contracts, liquidations, or ownership (e.g. debt–equity swaps). Given the lack of bank restructuring experience and weak capital structures, providing large amounts of capital under high uncertainty was highly risky. At the same time, given their limited client base, liquidation was equally risky (Hoshi et al. 1998). In turn, the five main Czech banks refused to provide additional credit lines to firms or to the new banks like SST's ally, Banka Bohemia, which indeed was closed in 1994 by regulators.

JVs were equally stalled, as Czech managers and foreign investors were reluctant to cede control of key assets, or invest via contractual agreements. In turn, they sought third-party guarantees to help develop credible commitments. But such guarantees were not forthcoming from either the banks or the government. Skoda was especially dependent on a proposed JV with Siemens. At the time, the deal was a bellwether for FDI deals with holding companies. With Czech privatization rules already restricting government intervention into deals that did not contain outright sales by, and revenues to, the state, such participation was tantamount to revising Czech privatization policy and the clear roles of government organs. The Klausians saw this as antithetical to their designs and control over policy. As they gained increasing political power and control over policy from late 1991 through their victory in the June 1992 parliamentary elections, the Klausians blocked efforts by the Minister of Industry to allow the government to become a financial and negotiating partner. After the elections, the Minister of Industry was ousted and the talks with Siemens collapsed. By 1993, virtually all prominent JVs had collapsed, and foreign investors withdrew.

The growing restructuring stalemates were to a certain degree the result of high uncertainty — the uncertain returns on individual production and organizational experiments undermined the credible guarantees that network firms could give to one another, a bank, or to foreign investors to gain needed cooperation for components or financing (Cacciatori and Jacobides 2005). Yet why, despite the conscious attempts to graft new governance modes onto historical social ties, could network members not overcome these gaps in credibility and coordination (Woolthuis et al. 2005)? The answer, from an embedded politics view, was that the Klausians' depoliticization approach toward institutional change had radically altered the authority structure of old networks and not provided institutional mechanisms to resolve such disputes.

First, the government's efforts to centralize power effectively had eliminated a critical source of socio-political power and order. As experiments began to foster potentially conflicting strategies and change the position of units within the group, the authority structure of the network was thrown into question: how should new boundaries around assets be drawn and who had the rights to decide them? Under the former hierarchical network, a key firm supported by the regional council possessed the political and social resources to aid a resolution to conflicts — be it by force or compromise. Under the former polycentric network, relevant central bank branches and regional/district administrative party councils had provided many constituent firms with political and material resources for bargaining power vis-à-vis other machine tool firms and the central state ministries. The dissolution of regional councils and the weakening of district and municipal councils eliminated a source of power for some members and a source of external resources and mediation for the group as a whole. Indeed, the aggregate data on privatization show that firms solicited the aid of local municipalities by offering them free transfers of significant equity stakes (Lastovicka et al. 1994). Yet, the changes in the systems of territorial administration and taxes effectively left municipalities with little control over political and financial resources (McDermott 2002).

Second, to sustain its insularity, the Czech government impeded the development of new institutions for restructuring. Once mass privatization was implemented and banks were partially recapitalized, private contracts and a bankruptcy regime emphasizing liquidation were to induce restructuring. Yet, clearly, these modes of governance failed to do this or help network firms secure new external partners. Any alternative policies, such as leasing firms, selling assets with typical conditions of restructuring, providing third-party guarantees to JVs, or promoting workouts as part of bankruptcy, would have linked ownership change with restructuring and required government oversight. Moreover, to do so would have demanded empowering different public actors, be they ministries or subnational governments, with the necessary discretion and resources to share some of the risks and create rules for the relevant parties to negotiate over time the restructuring of both operations and financing (McDermott 2004). The Czech approach to transformation, however, strongly curtailed any such delegation of power and public–private deliberations.

## Politics and the Reconstitution of Networks

If depoliticization undermines network stability, then the next key issue is the identification of the conditions that would induce participatory restructuring and reconstitute a new authority structure of a network. As discussed earlier, participatory restructuring demands that the government relax some of the constraints of insulated, centralized policymaking power so that different public and private actors can experiment with and negotiate over restructuring solutions. This implies that, while the government may be forced to share some financial risks and mediate intra-network disputes, it will also bestow resources, decision-making rights, and legitimacy on certain firms. The research on the political economy of development (Woodruff 1999; Jacoby 2000; Schneider 2004), and on the emergence of new social service networks (Provan and Milward 1995), has shown that government empowerment and inclusion of private actors can stabilize crises but can also alter the relative power of market actors. Who those actors would be, and the constraints placed upon them, would depend on the state of disrepair in the network (timing) and the policy resources available to the public agencies at the moment of government action. Consistent with the work on institutional development (Dorf and Sabel 1998; Fligstein 2001; Haggard and Maxfield 1996), timing is often a function of moments of crisis. But the resources and consistency needed for different public actors to learn and build on their institutional experiments depends on coalition politics. That is, since the exploration of new restructuring and institutional policies demand a change in the distribution of policymaking power from the status quo (depoliticization, in this case), the key political leaders need to cede power to other political actors. To the extent that the coalition is secure and balanced, then the coalition members are more likely to share power and allow different public agencies the time and discretion to build new restructuring and institutional solutions. To the extent that the coalition is in turmoil, such discretion is curtailed and ad hoc temporary solutions are used.

In what followed, crises would compel the Klausians to shift policy and engage members of Skoda and SST, leading to a dramatic change in the network authority structures. But coalition politics would shape the extent to which the government could sustain and open up participatory restructuring experiments.

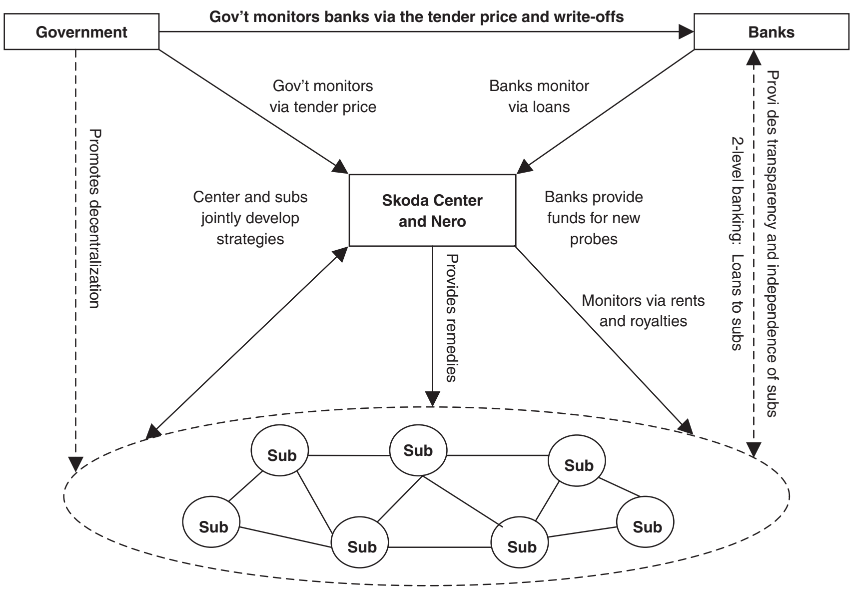
### Stabilizing Skoda

In September 1992, Skoda's management board resigned, and the holding shut down three major units and defaulted on its loans. Given the size of holding companies and the close interdependencies between industrial firms and the few main Czech banks, Skoda's collapse threatened to bring down the banking system and damage whole sectors and regions. The political calculus of the Klausians to respond aggressively to this crisis was twofold. First, a collapse of whole sectors and the banking system would severely undermine the voucher privatization policy, which was still being implemented and was Klaus's main policy plank. Second, bolstered by its strong electoral victory in June 1992 and with all the key economic ministries and agencies in its control, the Klaus-led coalition felt more secure to tinker with policy levers. Skoda, in turn, became the first case for Klausians to support negotiated restructurings, and a model for its future engagement with other holdings.

This trial-and-error experiment started with a failed attempt to use a public tender and incentive contracts but ended with a multi-level governance structure that both limited self-dealing and altered the authority structure of the existing network. The government had two resources at its disposal: the shares of Skoda Holding that remained in the privatization agency for the proposed JV (about 40%), and the existing bank debts of Skoda related to communist-era programs. The initial tender chose two delegates: a firm of ex-Skoda managers, Nero; and a consortium of Skoda's two largest creditor banks, KB and IB. The incentives were that the parties could receive the remaining equity at reduced prices and that the government would absorb some of the old large debts. But the parties failed to cooperate, as the banks were unwilling to invest in Skoda projects without greater transparency and improved coordination among the Skoda members. In turn, the government remained a partner for almost three years by combining the tools of delegation and deliberation, to alter the balance of power in the network and improve multi-party monitoring.

The government delegated to Skoda's new central management team of Nero the authority to rebuild the internal organization of the firm, namely, increasing the power of the newly formed subsidiaries, and transparency. The banks had to

Figure 4.
Monitoring Triangles for Skoda Restructuring




*Source:* McDermott (2002: Ch. 4)

finance this reorganization, but gained direct access to the subsidiaries and valuable collateral. Deliberations emerged by the government using debts and the vague pricing of shares to provoke the parties to reveal information about their actions and monitor one another's progress in meeting their restructuring obligations. The ensuing pattern of negotiations set the foundations for two levels of interlinked structured deliberations that governed restructuring (see Figure 4). In the 'external triangle' the government, the banks, and the central management team exchanged information and control rights in deliberating each other's contribution to debt restructuring, decentralization, and financial transparency. In the 'internal triangle' Skoda's Center, the banks, and the subsidiaries similarly exchanged information and control rights in negotiating debts, transfer prices, and project finance.

In many ways, the government's use of the dual monitoring triangles resembled public–private workout institutions in advanced developed nations and was an effective means of restructuring the holding companies (Hayri and McDermott 1998). This may not be surprising. Provan and Milward (1995) argue that network stability and effectiveness can improve in newly emerging institutional environments when state control is direct and networks are integrated through a principal intermediary. Skoda's Center was acting as this intermediary in screening projects and forging compromises. Pressure to do this came from the state and empowerment of the subsidiaries via increased decision-making rights and direct access to the banks. Moreover, state intervention and the combination of deliberation and delegation improved the legitimacy of the new organizational form in the eyes of the participants (Human and Provan 2000). By 1995, Skoda's debt had fallen to 50% of its 1992 level, revenues had increased over 50%, and employment was increasing significantly. Skoda's rebound was even recognized by independent observers such as the stock market, the international business media (e.g. *The Economist* 1995 and the *Wall Street Journal* 1996), and international banks that would go on to finance new Skoda ventures.

But by empowering a number of firm-level actors through sustained use of delegation and deliberation, the government also forced a radical change in the authority structure of Skoda. The holding that grew out of a hierarchically commanded network was now very decentralized. Key decisions were reached through collaboration, not fiat. No longer did a single member monopolize outside economic and political channels. Rather, government oversight and the monitoring triangles empowered subsidiaries by granting them greater legal rights and giving them the space to develop greater operational autonomy and stronger direct links with outside banks, clients, and suppliers.

### Stabilization of SST through State-backed Domination

The decline of the SST network was more gradual and not as threatening, since members were independent firms geographically dispersed throughout the country and without their debts piled high in a few banks, like Skoda. With the SST network fragmenting and bordering on insolvency, one member firm, ZPS, attempted to bring stability to the network through control of the others and key financial institutions. But only after this strategy threatened the stability of the financial institutions did the Czech government engage SST and ZPS.

Between 1992 and 1995, ZPS had more than doubled its total sales and exports by redesigning several of its final and semi-finished products and often selling them at or below cost to gain market share. ZPS had also cultivated a new network of its former employees as well as networks of the past regional council and big banks. This new network, referred to locally as the 'Zlin Mafia', had at its core ZPS, the independent and rapidly growing investment fund PPF, and a newly found but also rapidly growing bank, Pragobanka. Managers from all three sat on each other's boards. As SST relationships fragmented, ZPS found it too risky to engage its initial strategy of gradually spinning off certain plants and utilizing other SST firms for subcontracting. Instead, ZPS sought to impose its own order over the network and acquire other SST firms by mid-1995.

How the depoliticization approach of the government constrained institutional development cut two ways into the ambitions of ZPS and its allies. On the one hand, the lack of workout institutions, as discussed above, limited the willingness of the main banks to finance and mediate the restructuring proposals of ZPS and other SST firms. On the other hand, the government had left the banking and capital market regulatory institutions severely underdeveloped (World Bank 1999). In turn, financing ZPS's domination strategy was possible by exploiting regulatory holes, even if it bordered on manipulation. ZPS and its local allies used their elaborate network of new banks and investment funds to gain strategic control of ZPS shares, to manipulate share prices of ZPS and other companies, and to channel financing to ZPS from bank depositors, notably the partially privatized Czech Insurance Company. At the same time, it sought to control the SST board and its engineering investment fund mentioned above (see Figure 3). With its new finances, the aid of PPF, and influence over SST's fund, ZPS orchestrated a series of takeovers of four of the largest SST member firms. To gain additional financial resources, PPF began to buy up stakes in the Czech Insurance Company and sought to weaken the power of the main Czech banks by going public with charges that the banks were illegally favored in the privatization plans for the remaining shares of the Czech Insurance Company (McDermott 2002: Ch. 5).

Ultimately, such a scheme can lead to systemic failure, when the state can no longer ignore the damage. Just as ZPS was attempting to complete its conquest, with the acquisition of two more SST firms, and PPF was battling the main Czech banks, in 1996, regulators seized one of their allied banks, declared an emergency at the Czech Insurance Company, and placed Pragobanka on a watch list. The domination strategy for ZPS had reached back into the heart of the public domain.

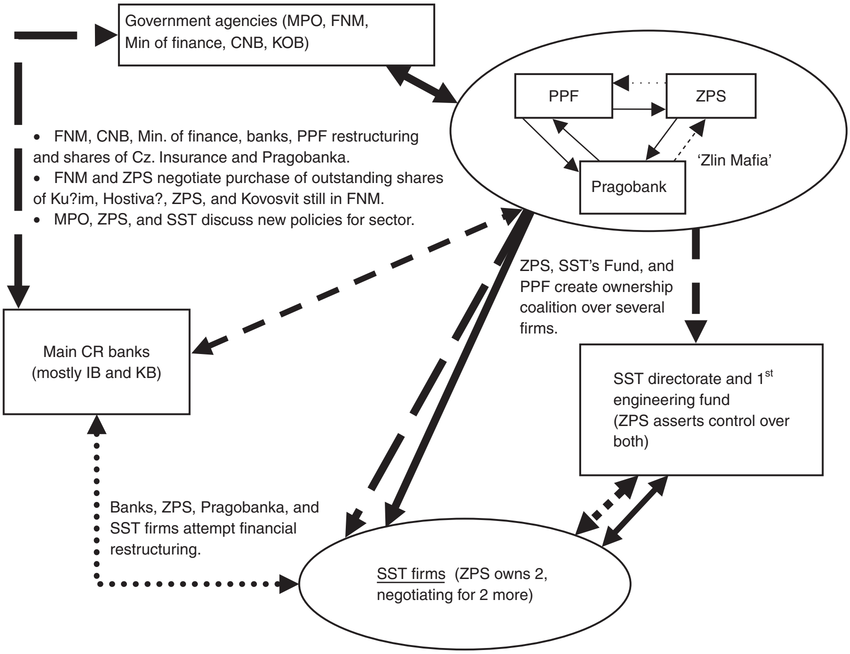
The Klausians were, however, much more reluctant to intervene. The political conditions for another round of participatory restructuring had changed since the Skoda experiment. The government had little immediate bargaining leverage, as it had no equity in ZPS or in hardly any of the other SST firms. Leverage could only come from new policy initiatives and further empowerment of relevant agencies (like those previously involved in Skoda). But such changes were no longer politically viable. By early 1996, with the holdings and main banks stabilized, political infighting within the ruling coalition and the pending general elections in June led Klaus to declare an end to transformation policies and to reconsolidate his party's control over the relevant economic agencies and ministries. In turn, the Klausians sought an expeditious solution to the new crisis by constraining the discretion of the architects of the Skoda experiment, limiting the number of participating firms, and effectively appeasing ZPS and PPF. PPF and the main banks were given joint control of the Czech Insurance Company and, with ZPS, of Pragobanka. The Ministry of Industry also invited ZPS and its subservient SST directorate to participate in discussions over the future of the sector.

Consequently, the Czech government's delayed and weak response to the crisis effectively reinforced the Zlin Mafia's control over SST (see Figure 5). The once polycentric structure of ex-TST firms now looked very hierarchical. The past consensus decision making was replaced with the power and fiat of a much more powerful ZPS.

## Epilogue

Klaus's return to depoliticization in 1996 underscored the ways the contentious politics of unpacking public power could impact network stability. To reconsolidate his hold on power, he curtailed the discretionary power of the central

Figure 5.
New Control Structure of SST, 1996




*Note:* Thick, solid lines denote stronger link and control than thin, dashed lines. Arrows denote direction of control.
Source: McDermott (2002: Ch. 5)

ministries and agencies that were under the control of other coalition parties. These were the principal public actors engaged in new initiatives that began with the Skoda intervention, and responsible for correcting the abuses of firms like ZPS and PPF. Subsequently, as the government withdrew from Skoda and other holdings, it simply left them to be governed by the same capital markets and bankruptcy rules that had hindered restructuring in the first place. No new institutional policies were pursued to promote workouts, effective investor protection, FDI, and exports. In turn, firms like Nero, which was the manager-owner group running the center of Skoda, and ZPS were left in a poor governance and regulatory regime and resorted to undertaking dubious investments. Klaus's government collapsed in mid-1997. In the wake of the 1997–1998 Asian and Russian crises, both Skoda and ZPS became insolvent. Creditors of both firms tried and failed for a year to form voluntary standstill agreements to reorganize the assets. In 1999, Skoda, ZPS, several holdings, and the main banks entered into a new public–private restructuring and reprivatization agency that was created by the newly formed social-democratic government. Once again, the Czechs would embark on rebuilding their economic institutions while restructuring their industrial networks.

## Conclusions

This article has argued for a more political constructionist approach to analyzing the reproduction and change in inter-firm networks and their attendant social capital, particularly during periods of institutional transformation. If one assumes that structural and relational variables are prior to and virtually autonomous of the political–institutional environment, networks and social capital can appear largely self-governing and static. The industrial networks examined in the article were, indeed, imbued with long histories, strong socio-economic ties, and specific distributions of resource control. They were also subject to the same laws and unions and similar technologies and economic shocks. Yet, as we saw, these networks were not self-governing — historical socio-economic ties, repeated interactions, and the use of contracts and ownership were insufficient to help network firms and plants resolve restructuring conflicts and gain investment.

In pointing out these deficiencies, the aim of the article was not to discard socio-economic variables, but rather to show how their interaction with political–institutional variables helps identify factors of continuity and change. On the one hand, the social and economic ties of the respective networks clearly shaped the organizational and privatization strategies during the initial period of transformation. On the other hand, the politics of institution building had profound impacts on the authority structures of industrial networks and, in turn, the adaptability and reconfiguration of the networks when faced with new economic uncertainties. By advancing their depoliticization approach to institution building, the Klausians centralized political power, severely weakened subnational governments, and offered virtually no mechanisms to promote collective workouts. For firms, this meant that the existing authority structures of respective networks were radically altered and members had few resources at their disposal for forging new, stable structures for internal governance. Only when the government began embracing a participatory restructuring approach by sharing some of the risks, and mediating disputes, did restructuring proceed along with network stability. But different political conditions varied the extent to which the Czech government empowered and included public and private actors in negotiated restructurings. For Skoda, the empowerment of multiple firm-level actors brought stability by supporting a new, multi-polar authority structure that changed the configuration of the former hierarchical network. Yet, for SST, coalition politics and limited resources led to a weak government response that provided temporary stability via solidifying the Zlin Mafia's control over the once multi-polar structure of SST.

In many ways, the argument presented here reflects a recent current in economic sociology and political economy to show how government policy shapes the organizational forms and social capital in underdeveloped economic settings. For instance, Guillen (2001), Fligstein (2001), and Hamilton and Biggart (1988) have shown how the variation in development policy impacts the creation of new corporate forms. In their analysis of Russian and Czech capital markets, Kogut and Spicer (2002) have demonstrated how government approaches to regulatory institutions can embolden or weaken the extended chains of trust that are vital for investment and governance. Stark and Vedres (2005) and Powell et al. (2005) have argued that changes in political and institutional fields can alter network structures. Provan and Milward (1995) have also shown how direct state intervention in nascent institutional settings can bring stability to decentralized networks.

My embedded politics approach pushes this line of research further by making a more explicit link between the struggles over the distribution of public power and economic networks. First, the authority structure of an inter-firm network, in turn the constituent pattern of associationalism and resource distribution, is derived from the ways certain network firms gain resources and privileges from public institutions. Second, the political approaches that governments take to build new institutions will alter the authority structures of networks but also vary the stability and reconfiguration of networks. To the extent that political leaders are able to empower and monitor a variety of public actors to experiment with new institutional roles, network firms would appear more likely to extend their time horizons and pursue negotiated modes of reorganization (McDermott 2004). To the extent that political leaders seek to insulate and centralize public power, fragmentation and winner-take-all strategies are likely to prevail in the network.

In sum, although the broader applicability of the findings here is constrained by attention to one country, and applicability to transforming countries, this article points to new areas of research on the origins and evolution of social capital and networks. To begin with, researchers should try to identify how the authority structures and informal rules of networks emanate from specific institutional supports and public policy. From there, one can examine network change in two ways. One is to examine how existing institutional and political variables inhibit and enhance network adaptation to external technological and economic shocks. The other is to analyze how different political approaches to institutional reform impact the stability and adaptation of the economic networks themselves.

## Note

The author would like to thank the Reginald H. Jones Center of the Wharton School and the URF of the University of Pennsylvania for their generous financial support and thank the participants in the seminars at EGOS 2003 and the Jones Center. Special thanks to the editors and anonymous reviewers of *Organization Studies* for their comments. The usual exculpations apply.

## References

Allio, Lorene, Mariusz Mark Dobek, Nikolai Mikhailov, and David L. Weimer
1997 'Post-communist privatization as a test of theories of institutional change' in *The political economy of property rights: Institutional change and credibility in the reform of centrally planned economies*. D. L. Weimer (ed.). Cambridge: Cambridge University Press.

Baum, Joel, Andrew Shipilov, and Tim Rowley
2003 'Where do small worlds come from?' *Industrial and Corporate Change* 12: 597–725.

Boycko, Maxim, Andrei Shleifer, and Robert Vishn
1995 *Privatizing Russia*. Cambridge, MA: MIT Press.

Buchtikova, Alena, and Vladislav Flek
1993 'Income policy and wage development in the Czech Republic'. Institut Ekonomie, Czech National Bank Working Paper 12.

Burawoy, Michael
1985 *The politics of production: Factory regimes under capitalism and socialism*. London: Verso.

Burt, Ronald
2000 'The network structure of social capital'. *Research in Organizational Behavior* 22: 345–423.

Cacciatori, Eugenia, and Michael G. Jacobides
2005 'The dynamic limits of specialization: Vertical integration reconsidered'. *Organization Studies* 26/12: 1851–1883.

Chavance, B., and E. Magnin
1997 'Emergence of path-dependent mixed economies in Central Europe' in *Beyond market and hierarchy: Interactive governance and social complexity*. A. Amin and J. Hausner (eds). Cheltenham: Edward Elgar.

Djelic, Marie-Laure, Bart Nooteboom, and Richard Whitley
2005 'Introduction: Dynamics of interaction between institutions, markets and organizations'. *Organization Studies* 26/12: 1733–1741.

Dorf, Michael, and Charles F. Sabe
1998 'A constitution of democratic experimentalism'. *Columbia Law Review* 98/2: 267–473.

EBRD
1995 *Transition report*. London: European Bank for Reconstruction and Development.

Economist, The
1995 'Something clunky out east'. *The Economist*, 18 February.

Eisenhardt, Katherine M.
1989 'Building theories from case research'. *Academy of Management Review* 14/4: 532–550.

Evans, Peter
1995 *Embedded autonomy: States and industrial transformation*. Princeton: Princeton University Press.

Eyal, Gil
2000 'Anti-politics and the spirit of capitalism: Dissidents, monetarists and the Czech transition to capitalism'. *Theory and Society* 29/1: 49–92.

Fligstein, Neil
2001 *The architecture of markets: An economic sociology of capitalist societies*. Princeton: Princeton University Press.

Frydman, Roman, and Andrzej Rapaczynski
1994 *Privatization in eastern Europe: Is the state withering away?* London: Central Europe University Press.

Granovetter, Mark
1985 'Economic action and social structure: The problem of embeddedness'. *American Journal of Sociology* 91: 481–510.

Guillen, Mauro
2001 *The limits of convergence: Globalization and organizational change in Argentina, South Korea, and Spain*. Princeton: Princeton University Press.

Gulati, R., and M. Gargiulo
1999 'Where do interorganizational networks come from?' *American Journal of Sociology* 104/5: 439–1493.

Haggard, Stephan, and Robert Kaufman
1995 *The political economy of democratic transitions*. Princeton: Princeton University Press.

Haggard, Stephan, and Sylvia Maxfield
1996 'The political economy of financial internationalization in the developing world'. *International Organization* 50/1: 35–68.

Hall, Peter, and David Soskice, editors
2001 *Varieties of capitalism: The institutional foundations of comparative advantage*. Oxford: Oxford University Press.

Hamilton, Gary, and Nicole Biggart
1988 'Market, culture, and authority: A comparative analysis of management and organization in the Far East'. *American Journal of Sociology* 94 (supplement): S52–S94.

Hayri, Aydin, and Gerald A. McDermott
1998 'The network properties of corporate governance and industrial restructuring: A post-socialist lesson'. *Industrial and Corporate Change* 7/1:153–193.

Hoshi, Iraj, Jan Mladek, and Alison Sinclair
1998 'Bankruptcy and owner-led liquidation in the Czech Republic' in *Enterprise*

*exit processes in transition economies*. E. Balcerowicz, C. Gray and I. Hoshi (eds). Budapest: CEU Press.

Human, Sherrie E., and Keith G. Provan
2000 'Legitimacy building in the evolution of small-firm multilateral networks: A comparative study of success and demise'. *Administrative Science Quarterly* 45/2: 327–365.

Jacoby, Wade
2000 *Imitation and politics: Redesigning Germany*. Ithaca: Cornell University Press.

Johnson, Juliet
2001 'Path contingency in postcommunist transformations'. *Comparative Politics* 33/3: 253–274.

Kogut, Bruce
2000 'The network as knowledge: Generative rules and the emergence of structure'. *Strategic Management Journal* 21: 405–425.

Kogut, Bruce, and Andrew Spicer
2002 'Capital market development and mass privatization are logical contradictions: Lessons from Russia and the Czech Republic'. *Industrial and Corporate Change* 11/1: 1–37.

Kogut, Bruce, and Gordon Walker
2001 'The small world of Germany and the durability of national ownership networks'. *American Sociological Review* 66/3: 317–335.

Lastovicka, Renata, Anton Marcincin, and Michael Mejstrik
1994 'Privatization and opening the capital markets in the Czech and Slovak Republics'. CERGE-EI Working Paper #54.

Lizal, Lubomir, Miroslav Singer, and Jan Svejnar
1995 'Manager interests, breakups, and performance of state enterprises in transition' in *The Czech Republic and economic transition in eastern Europe*. J. Svejnar (ed.). San Diego: Academic Press.

McDermott, Gerald A.
2002 *Embedded politics: Industrial networks and institutional change in post communism*. Ann Arbor: University of Michigan Press.

McDermott, Gerald A.
2004 'Institutional change and firm creation in east-central Europe: An embedded politics approach'. *Comparative Political Studies* 37/2: 188–217.

Mihola, Jiri, and Vaclav Havlin
1991 'Adaptace podniku v prvnich mesicich transformace cs. Ekonomiky'. Ustredni ustav narodohospodarskeho vyzkumu. Prague: Mimeo.

Mihola, Jiri, Vaclav Havlin, and Miroslav Skal
1992 'Volne ruce pro rozhonovani'. *Hospodarske noviny*, 31 January.

Nooteboom, Bart
2000 'Institutions and forms of co-ordination in innovation systems'. *Organization Studies* 21/5: 915–939.

Orenstein, Mitchell
2001 *Out of the red: Building capitalism and democracy in postcommunist Europe*. Ann Arbor: University of Michigan Press.

Ostrom, Elinor
1995 'Self-organization and social capital'. *Industrial and Corporate Change* 4/1: 131–159.

Padgett, John F., and Christopher K. Ansell
1993 'Robust action and the rise of the Medici, 1400–1434'. *American Journal of Sociology* 98/6: 1259–1319.

Pfeffer, Jeffre
1992 *Managing with power: Politics and influence in organizations*. Boston: Harvard Business School Press.

Piore, Michael, and Charles Sabel
1984 *The second industrial divide: Possibilities for prosperity*. New York: Basic Books.

Podolny, Joel, and Karen Page
1998 'Network forms of organization'. *Annual Review of Sociology* 24: 57–76.

Polanyi, Karl
1944 *The great transformation: The political and economic origins of our time*. Boston: Beacon.

Portes, Alejandro
2000 'The two meanings of social capital'. *Sociological Forum* 15/1: 1–12.

Powell, Walter W., Douglas R. White, Kenneth W. Koput, and Jason Owen-Smith
2005 'Network dynamics and field evolution: The growth of interorganizational collaboration in

the life sciences'. *American Journal of Sociology* 110/4: 1132–1205.

Prokop, Jan
1996 'Marketization in Russia's regions, 1990–1994'. Doctoral dissertation, Department of Government, Harvard University.

Provan, Kieth G., and H. Brinton Milward
1995 'A preliminary theory of interorganizational network effectiveness: A comparative study of four community mental health systems'. *Administrative Science Quarterly* 40/1: 1–33.

Putnam, Robert, Robert Leonardi, and Rafaella Nanetti
1993 *Making democracy work: Civic traditions in modern Italy*. Princeton: Princeton University Press.

Ragin, Charles
1987 *The comparative method: Moving beyond qualitative and quantitative strategies*. Berkeley: University of California Press.

Rodrik, Dani
2004 'Industrial policy for the twentieth century'. Paper prepared for UNIDO.

Rona–Tas, Akos
1997 *The great surprise of the small transformation: The demise of communism and the rise of the private sector in Hungary*. Ann Arbor: University of Michigan Press.

Sabel, Charles F.
1993 'Constitutional ordering in historical perspective' in *Games in hierarchies and markets*. F. Scharpf (ed.). Boulder, CO: Westview Press.

Salancik, Gerald R.
1995 'Wanted: A good network theory of organization'. *Administrative Science Quarterly* 40/2: 345–349.

Schneider, Ben Ross
2004 *Business politics and the state in twentieth-century Latin America*. New York: Cambridge University Press.

Spenner, Kenneth, Olga Suhomlinova, Sten Thore, Kenneth Land, and Derek Jones
1998 'Strong legacies and weak markets: Bulgarian state-owned enterprises during early transition'. *American Sociological Review* 63/4: 599–618.

Spicer, Andrew, Gerald McDermott, and Bruce Kogut
2000 'Entrepreneurship and privatization in central Europe: The tenuous balance between destruction and creation'. *Academy of Management Review* 25/3: 630–649.

Stark, David
1986 'Rethinking internal labor markets: New insights form a comparative perspective'. *American Sociolgical Review* 51/4: 492–504.

Stark, David
1996 'Recombining property in east European capitalism'. *American Journal of Sociology* 101/4: 993–1027.

Stark, David, and Laszlo Bruszt
1998 *Post-socialist pathways: Transforming politics and property in eastern Europe*. New York: Cambridge University Press.

Stark, David, and Balazs Vedres
2005 'Politicized business ties: Network foundation and party competition in Hungary, 1987–2001'. *Meetings on Socio-Economics*. Budapest, 1 July 2005.

Szelenyi, Ivan
1988 *Socialist entrepreneurs.* Cambridge: Polity Press.

Uzzi, Brian, Jarrett Spiro, and Dimitri Delis
2002 'Emergence: The origin and evolution of career networks in the Broadway musical industry, 1877 to 1995'. Working Paper, Northwestern University, Evanston, IL, December.

Voskamp, Ulrich, and Volker Wittke
1991 'Industrial restructuring in the former GDR'. *Politics and Society* 19/4: 341–371.

Wall Street Journal
1996 'Czechs offer peek at new corporate East'. *Wall Street Journal* 8 May.

Whitley, Richard
2000 'The institutional structuring of innovation strategies: Business systems, firm types and patterns of technical change in different market economies'. *Organization Studies* 21/5: 855–886.

Woodruff, D
1999 *Money unmade: Barter and the fate of Russian capitalism*. Ithaca: Cornell University Press.

Woolthuis, Rosalinde Klein, Bas Hillebrand, and Bart Nooteboom
2005 'Trust, contract and relationship development'. *Organization Studies* 26/6: 813–840.

World Bank
1996 *From plan to market*. New York: Oxford University Press.

World Bank
1999 *Czech Republic: Capital market review*. Washington, DC: World Bank.

**Gerald A. McDermott**

Gerald A. McDermott is Assistant Professor of Management at the Wharton School of the University of Pennsylvania and holds a secondary appointment in the Department of Political Science. His research has focused on the impact of industrial networks on the creation of economic governance institutions in post-communist countries. His current research analyzes the impact of participatory forms of democratic and market governance on industrial restructuring in Latin America and east–central Europe. He has published in journals such as *Academy of Management Review, Comparative Political Studies*, *Review of International Political Economy*, and *Industrial and Corporate Change*, and has published a book, *Embedded Politics: Industrial Networks and Institutional Change in Post-Communism* (University of Michigan Press, 2002).
*Email:* mcdermott@wharton.upenn.edu
*Address:* Management Department, The Wharton School, University of Pennsylvania, 2000 Steinberg Hall-Dietrich Hall, Philadelphia, PA 19104, USA.