# 12. Smart Business Networks with Chinese Characteristics

## Barbara Krug<sup>1</sup> and Hans Hendrischke<sup>2</sup>

#### **Abstract**

This study contributes to the research on Chinese business networks which are a ubiquitous element of China's emerging private enterprise sector. The two standard features of the research literature on Chinese business networks are its sociological and cultural orientation and the representation of business networks as family networks. Analyzing Chinese business networks from an institutional and transition economics perspective, we find that business networks are better represented as public-private networks and economic actors. They form a crucial link between local entrepreneurs and local governments and participate in institution building. Their institutional competence is as important as their market and technological competence.

#### Introduction

In China as in all transition economies the emergence of a competitive business sector depends on the development of three competences. Market competence is the ability to explore new market opportunities and cope with competition; technical competence is the ability to develop and utilize new technology; and institutional competence is the ability to invent and organize business processes that facilitate the operation of a firm. While market and technical competence and their interplay are at the core of management studies (Dosi, Nelson, & Winter, 2000; Nelson & Winter, 1982), institutional competence remains an under-researched topic. Re-search on transition economies shows that institutional competence is crucial for the emergence, survival and expansion of firms, and ultimately, the emergence of a market economy (Frye, 2002). Without institutions that facilitate the emergence of market-conforming firms, organizations and behavior market reforms might get stuck in rent-seeking coalitions and accompanying non-productive

<sup>&</sup>lt;sup>1</sup>Rotterdam School of Management, Erasmus University Rotterdam, The Netherlands, bkrug@rsm.nl

<sup>&</sup>lt;sup>2</sup>University of New South Wales, Australia, h.hendrischke@unsw.edu.au

investments (Meyer & Peng, 2005). Only the interplay between change at the micro-level of firms and the macro-level of political institutions crates the coevolutionary process that shapes the institutional architecture of an emerging business system

China's economic success as a transition economy is obvious in terms of entrepreneurship and total factor productivity, integration into the international value chains, increasingly brokered by outward FDI, export performance and rapid usage of modern technology and R&D investment (OECD, 2006). Chinese entrepreneurs and firms were quick in developing market and technical competences. In fact, their commercial success has over-shadowed their institutional competence that enabled them to build an internationally competitive, private business sector within less than two decades. Our question is how Chinese firms generated such an institutional competence.

In our view, networking in China is neither a cultural institution as claimed by cultural approaches (e.g. Hofstede, 2007) nor a static, group-based form of corporatism (as claimed e.g. by Walder, 1995). We argue that in China the interplay between change at the micro-level of firms and the macro-level of political institutions happens through public-private networks in form of a co-evolutionary process that is specific to the institutional architecture of China's emerging business systems. From an individual (firm's) perspective networking is a strategic tool with three components: business management, i.e. searching for the best alignment with the changing market environment, innovation management, i.e. searching for incentives that facilitate organizational and technical innovation, and politics management, i.e. searching for the best alignment with local and national state agencies and their vested interests. Business networks therefore include private, corporate and public partners. From a macro perspective, the public-private networks are potentially able to mediate between private and public interests. We aim to show that in local Chinese business environments, networks play a crucial role as a means for institutional co-evolution and the generation of organizational capabilities and institutional competence.

The chapter proceeds as follows. We start with a short overview of the relevant literature on institutions and competence in ill-functioning markets. We then propose and elaborate our definition of institutional competence in terms of the interaction between networks and China's emerging business sector the links between institutional competence and institutional change, and relations between institutional competence and the development of a new institutional architecture in China. In the conclusion we sketch out how "Western" firms can make use of our findings. We are not proposing that networking is an undisputed solution; the coordinated institutional competence we observe is not without costs.

## **Analyzing Institutional Competence**

The Comparative Business Systems literature and macro-economic comparative studies have shown that emerging markets and transition economies cannot be used as merely another data (sub-) set confirming conventional assumptions about firms and their behavior (Djankov, Glaeser, La Porta, Lopez de Silanes, & Shleifer, 2003; Hoskisson, Eden, Lau, & Wright, 2000). Different institutional frames such as emerging markets, transition economies or market economies lead to different organizational forms of firms and different strategic decisions (Crouch, 2005; Nelson, 1992). In China reforms did not start with the privatization of assets but with decentralization and devolution of decision making power to local state agencies and (private) entrepreneurs. Their response to the new opportunities offered by the reforms is not a given, but an open empirical question.

We therefore take firms not merely as the unit of analysis but as a crucial source for information when questioning entrepreneurs about formal and informal incentives and constraints in their direct business environment (Krug & Hendrischke, 2007). Our results support the findings in the International Business literature that the institutional context of entrepreneurship and competition merit detailed scrutiny (see also Grabher & Stark, 1997; Yamakawa, Peng, & Deeds, 2008). The concept of dynamic organizational capabilities, which endogenize external institutions (Dosi et al., 2000) is better suited to this approach than the resource based view with its focus on internal resources and learning. We draw support from strategic management literature which has shown that strategic political management creates firm-specific value (overview in Pearce et al., 2008) and that ownership forms of firms and location-decision (Chen & Chen, 1998) reflect changing political constraints.

Hence, analyzing institutional competence requires a dynamic perspective in order to identify the systemic factors in building up competences for aligning the firms' interests with political actors, business partners, competitors, or (foreign or domestic) investors (Krug & Polos, 2004). Such an analysis has to include informal institution building and therefore transcends the legalistic perspective which concentrates on formal (politically defined) institutions. Firms are not only subject to and recipients of institutional change. They actively create new institutions by setting local technical standards, defining business practices and routines, and by participating in local public governance. In this process firms create inter-firm capabilities and form alliances with political or administrative agents. Disregarding these informal aspects of institution building is tantamount to excluding a large part of China's economic dynamism from analysis (Li et al., 2006).

All in all, a definition of institutional competence that satisfies the three considerations above reads as follows: Institutional competence involves the ability to configure an organization so that it can identify and monitor volatile key resources and search for innovative organizational capabilities and routines in order

to influence the external environment, including potential business partners or government agencies, in the interest of the organization. The organizational form which controls this competence is a network. A network is understood here as a group of people with flexible membership who crystallize around business ideas by drawing in people who control the required resources.

### The Emergence of Institutional Competence

Institutional competence in its organizational form of networking is the response of firms to ill-functioning markets (Hoskisson et al., 2000). Networks serve as a 'surrogate' for formal institutions by achieving a better alignment with the market (Xin & Pearce, 1996). In transition economies, two other problems are connected to the 'liability of newness' of the whole private sector (Krug & Polos, 2004). In the absence of a regulated environment, firms cannot rely on existing business routines nor can they acquire expertise about best practices through the formal education system. Second, there is no 'template' for success or failure of private firms, as there is not (yet) a collective memory of what can go wrong. Individuals, firms or collectives, such as villages, respond to this situation by forming networks for pooling assets, information, privileges, knowledge and interests.

In other words, the institutional competence of networks precedes and is embedded in firms which are the outcome of pooling resources and strategic decisions on how to best exploit market opportunities (Peng, 2001). The pooling of resources is not limited to physical resources or capital. As shown by Boisot & Child (1996), "intangible assets", such as access to market information or prior knowledge about policy changes, are crucial components in the initial endowment of firms. Moreover, in an environment of rapidly increasing competition with fluctuating relative prices and ongoing political change, firms opt for a strategy which secures maximum flexibility in recombining productive forces (Grabher & Stark, 1997). Firm formation in China is thus an iterative process that involves changes in product, labor, financial or even political structures with the aim to find the best adaptation to and embeddedness in a dynamic local environment.

# **Institutional Competence and Networks**

In contrast to popular clichés, Chinese business networks are not family based organizations (Hendrischke, 2007; Pistrui, Huang, Oksoy, Zhao, & Welsch, 2001). Neither are they merely transaction cost saving devices based on the ability to overcome constraints imposed by an adverse political environment. Not unlike diversified business groups (e.g. Hokisson et al., 2005) networks are rather a rational

organizational response to an environment with limited constitutional and legal protection (Child, Lu, & Tsai, 2007) leaves many resources untapped. Economic actors in such an environment require the ability to mobilize resources across a range of local organizations and power holders.

First, networks centre on personal relations, which can be mobilized for political and economic purposes. Once the collaboration has outlived its productive usefulness, the business side of the relationships is de-activated, while the social side remains. It is this activating — de-activating mechanism, which allows economic actors to switch from political to economic links and to adapt quickly to changing economic situations at low cost, since the de-activation does not imply the end of a contract, let alone a break-up of the social relationship. The advantage of personalizing business relations lies in the fact that social sanctioning mechanisms can be hijacked for economic purposes.

Second, networks in China are fluid, non-structured organizational forms for co-coordinating resources and strategic decisions. Centered around a social or functional group (such as investors) they expand or shrink according to business opportunities and constraints. Networks are economic actors able to activate and de-activate their membership in line with commercial opportunities. The dynamic capabilities of networks include the ability to accumulate technical and organizational capabilities and to allocate property rights to firms, investors, stakeholders or managers. By the same token, property rights can be re-allocated or firms can be closed down in case of failure or reconfigured if a re-combination of assets promises higher returns. This fluid concept of property rights is akin to socially generated property privileges, but at the same time exploits the legal benefits of incorporation. It is in striking contrast to the legal concept of private property rights which are granted and protected independent of the (profitable) usage of resources.

Third, networks with their formal and informal information channels make it possible to convert informal ad hoc practices as employed between firms or between firms and local regulatory agencies into procedures or, by extension, into sectoral and formal local business standards. In this sense networks are institutional entrepreneurs and initiate entrepreneurial activity that precedes formation and strategic decisions of firms (see an interesting example in Child et al., 2007). At the same time, networks give voice to firms in the creation of local business procedures and thereby generate firm-specific value.

Fourth, networks function as repositories of productive slack. This includes un- or underused assets for which the network has not yet been able to calculate best employment. Productive slack refers further to the accumulation of knowledge, information as well as management skills learned by experience.

For these networks, the control of local politics is a core competence at par with the required market and technical competence. In general, networks aim to search for the most effective governance structure, including the organizational form of firms. Alignment with local politics promises access to prior information about further reform steps, protection of property rights and business agreements,

if not participation in local political decision making. From a firm's perspective, the underlying role of networks is important in three main aspects.

Networks respond to market shifts when they search for organizational solutions that mitigate the effects of market fragmentation, lack of market information, and local embeddedness. Effective governance structures allow appropriating arbitrage, jurisdictional arbitrage, as well as generating enough leverage to limit local government intervention.

Networks align the interests of the firm with the interests of potential investors by designing incentives which secure (ongoing) private investment, exclusive access to shared or jointly produced knowledge, information or business routines; and commitments by investors and local authorities to limit moral hazard.

Finally, networks establish a political architecture when aligning the interests of political actors and other stakeholders with the interests of managers or entrepreneurs. Such alignment promises access to prior information about further re-form steps, protection of property rights and business agreements, if not participation in political decision making at the local level.

### **Institutional Competence and Institutional Change**

As argued above networks establish firms by allocating property rights or delegating control rights to certain people and by doing so, determine the type of firm and its corporate governance. The empirical picture of China's business sectors shows that over the last two decades the organizational form of firms moved from collective enterprises with fuzzy ownership rights and non-professional management to those with registered capital and individual property rights and clear separation of managerial tasks. Each of the dominant forms of firms, such as Township and Village Enterprises (TVEs), privatized TVEs, Public/Private partnerships, and incorporated firms can be positioned within a continuum that runs from socialist firms to "market firms" with State-owned enterprises (SOEs) as the organizational form of socialist firms and foreign Multi-national corporations (MNCs) operating as market firms. Their hybrid character reflects the need to align the firms with the interest of local state agencies as well as the market and overall the willingness to 'innovate', as described in Fig. 12.1 below.

A descriptive analysis of the institutional competence of networks in aligning firms with markets, technology change and local politics over two decades or privatization, suggests the following framework:

Organizational choice	Alignment with markets	Innovation	Alignment with politics
Township- village enterprise	Negotiated access to local markets	Innovation through mobilizing local resources	Township and Village employment creation
Privatized TVE	Negotiated gradual expansion into other local markets, e.g. Joint ventures with other TVEs		Local tax and non- tax revenue plus l ocally controlled real estate market
Public/private partnership	Integration of local markets, promotion of market – conforming institutions, multi market operations in different sectors	Access to non-tradable R&D and state controlled technologies, access to inter- national know-how	Exploiting state investment in local infrastructure, market coordination in local economy, reducing local state taxation
Incorporated firm	inter-firm networking without government interven- tion, internal competition instead of external competition	Inter-firm synergies, rate of return driven innovation, trading equity for innovation	replacing cash flow access by formal taxation and informal subsidies

Fig. 12.1 Institutional competence of networks in China, 1988–2008

The descriptive framework helps to put specific properties of Chinese networks into a chronological and transitional perspective. Each column in Fig. 12.1 describes from top to bottom the accelerating trend towards privatization unleashed by corporate reforms in 1988. Before going into details a remark about the general validity of this trend seems to be appropriate. We do not want to give the impression that this is a homogenous and centrally coordinated development trend. On the contrary, we observe a great diversity with large parts of China lagging behind advanced provinces (Krug & Hendrischke, 2007). However, the centre of business activity and institutional innovation are generally shifting towards incorporated firms operating in an environment of market coordination, "state-free" inter-firm relations and return-driven innovation.

The right hand column illustrates how the organizational form of firms moved from collective enterprises with fuzzy ownership rights and unspecified management roles to firms with statuary and legally enforceable corporate governance. The change in organizational forms is accompanied by decreasing political constraints and increasing scale of economic incentives and risk diversification. As a result, management tasks (alignment with markets and innovation) become more professionalized and absorb more formal elements as they expand in scale.

The alignment with markets started with local market, rather than sectors and industries. The formation of a national market is still not complete. Firms started off from local markets where they could rely on local supply and protection of third property rights. The expansion of markets followed geographical-jurisdictional lines rather than sectoral markets. As a result, the decision where to produce or sell precedes the decision what to produce. The organizational response are multi-market firms aimed at aims at pooling risks across locations as well as industries. The integration of local market into an 'economic region' and access to new market-conforming organizations, such as banking, R&D facilities and foreign partners leads to the generation of inter-firm capabilities coordinated by networks in which the influence of state agencies looses out. These inter-firm capabilities allow trading goods and services 'internally', based on transfer prices thereby escaping both state intervention and (still) distorted market prices.

Innovation started with shop floor innovation based on first hand knowledge how productivity. From removing supply side constraints by tapping into private savings or capital accumulation within firms, collaboration with (foreign) companies or state research facilities, technical and organizational capabilities became located within inter-firm relations, such as supply chains or the networks in the background. Incorporation of firms and increasing competition set incentives to swap equity for innovation and to increase in-house R&D facilities.

Alignment with politics started from townships and counties which had a remarkable degree of local autonomy, including institutional autonomy, or example in the form of 'fiscal federalism.' This shows in the increasingly diversified revenue portfolio. Instead of depending on central budget transfers local government agencies appropriated the following revenue sources: share on national taxes, revenue from local taxes and fees plus income from local commercial activities such as public utility revenues, ownership on "non state" firms and real estate. The richer a locality in terms of (prices of) land and capital income, the stronger the autonomy for local government agencies and, in turn, the tendency to cooperate with economic networks.

# Foreign Companies and Institutional Competence

The dynamic analysis above offers some insights why foreign companies in China's dynamic environment would move away from their state oriented position toward organizational forms that resembles more those of their private Chinese counterparts.

Like domestic firms, foreign firms too need to build up networks for generating institutional competence in order to find the best fitting strategy that allows aligning with (local) politics and markets while searching for innovation and an appropriate form of (corporate) governance.

Organizational choice in the Chinese context is not limited to ownership and agency considerations but includes decision about private-public partnerships, multi market firms, or supply chain contracts that ensure political support and innovative slack. In order to benefit from the institutional competence of their Chinese partner firms, foreign investors need to permanently reconfigure themselves by aligning and re-aligning to changing political and market environments.

The empirical analysis suggests further that there is not one strategy or organizational form that fits best the Chinese business environment. Instead, the best fitting combination will vary according to location, industry, age of firm and conformity in behavior of business partners. The more competitive the sector or location the less alignment with politics plays a role. Thus, for example in a location such as Hangzhou or in the standard software industry, firms can place their emphasis on market driven strategies. On the other hand, in provinces such as Shandong or the pharmaceutical sector, alignment with politics will have a significant influence on firms' performance. The newer the firm or sector in which the firm operates the more important it is to gain "social legitimization" via alliances with local government agencies. The stronger the prevailing conformity in business behavior the more firms are able to pursue business collaboration outside vertical integration or formal joint ventures.

## **Conclusion: Institutional Competence and Networking**

The preceding analysis showed that institutional competence involves the ability to configure an organization so that it can identify and monitor volatile key resources while at the same time influence the behavior of potential business partners and government agencies. In the case of China such an organization is a network and not a firm, as general economic literature suggests. Firms are the outcome of the accumulated institutional competences of networks. Instead of firms engaging in networking activities, we find networks as economic actors engaging in the establishment of "open border" firms that have an optimum fit with the local institutional environment.

The need to cope with the external environment defines the search process and management tasks of networks in line with their competences. Networks respond to market shifts when they search for organizational solutions to avoid local protectionism and market fragmentation (market management). Networks align the interests of the firm with the interests of potential investors by securing access to shared or jointly produced knowledge, information or business routines (technical management). Networks influence the political environment by aligning the interests of political actors and other stakeholders with the interests of managers or entrepreneurs (institutional management).

Networks, in a dynamic institutional environment, are mobilized for economic purposes. They are fluid, non-structured organizational forms for co-coordinating

resources and strategic decisions with the ability to flexibly activate and de-activate individual economic actors. Their openness and use of formal and informal information channels makes it possible to convert informal ad hoc practices as employed between firms or between firms and local regulatory agencies into procedures or, by extension, into sectoral and formal local business standards. In this way networks and their related firms synchronize changes at the micro level in their business sector or locality with institutional changes at the macro-level, i.e. politics (co-evolution).

The expansion of network control raises the issue of the costs of Chinese networks. In contrast to general literature on networks and our own detailed research which confirm the transaction cost savings role of networks in transition economies, the economic literature on rent-seeking and collective action also points to potential drawbacks. As these are frequently raised in Chinese public debates and the media, we take up jurisdictional competition and the future of networks.

Jurisdictional competition between localities may not be strong enough to ensure the integration of network driven local business system into national markets. Instead, segmentation of markets hardened by different local legislation and policy practices will become salient features of the institutional landscape. This risk is evident in China's domestic market barriers and local protectionism.

For the time being and pending further research, we find that China's institutional architecture will be characterized by the co-existence of different business systems in various stages of market transition and corporate transformation. The expansion of these local business systems into larger national and international markets is driven through institutional coevolution by growing institutional and professional competence of networks.

#### References

- Boisot, M. H., & Child, J. (1996). From fiefs to clans: explaining China's emerging economic order. *Administrative Science Quarterly*, 41, 600–628.
- Chen, H., & T. Chen (1998). Network linkages and location choice in foreign direct investment. *Journal of International Business Studies*, 29, 445–467.
- Child, J., Lu, Y., & Tsai, T. (2007). Institutional entrepreneurship in building an environmental protection system for the People's Republic of China. *Organization Studies*, 28, 1013–1034.
- Crouch, C. (2005). Capitalist diversity and change. recombinant governance and institutional entrepreneurs. Oxford: Oxford University Press.
- Djankov, S., Glaeser, E., La Porta, T., Lopez de Silanes, F., & Shleifer, A. (2003). The new comparative economics. *Journal of Comparative Economics*, 31, 595–619.
- Dosi, G. R., Nelson, R. R., & Winter, S. G. (2000). *The nature and dynamics of organizational capabilities*. Oxford: Oxford University Press.
- Frye, T. (2002). Capture or exchange: business lobbying in Russia. *Europe Asia Studies*, 54, 1017–1036.

- Grabher, G., & Stark, D. (1997). Organizing diversity: evolutionary theory, network analysis and post socialism. *Regional Studies*, 31, 533–544.
- Hendrischke, H. (2007). Networks as business networks. In B. Krug & H. Hendrischke (Eds.), *China in the 21st century: economic and business behaviour* (pp. 227–248). Cheltenham: Edward Elgar.
- Hofstede, G. (2007). Asian management in the 21st century. Asia Pacific Journal of Management, 24, 411–424.
- Hoskisson, R., Eden, L., Lau, C. M., & Wright, M. (2000). Strategy in emerging markets. *Academy of Management Journal*, 43, 249–267.
- Krug, B., Hendrischke, H. (2007). Framing China: Transformation and institutional change. Management and Organization Review, 4, 81-108.
- Krug, B., & Polos, L. (2004). Emerging markets, entrepreneurship and uncertainty: the emergence of a private sector. In B. Krug (Ed.), *China's rational entrepreneurs. The development of the new private business sector* (pp. 72–96). London: Routledge.
- Meyer, K. E., & Peng, M. W. (2005). Probing theoretically into Central and Eastern Europe: transactions, resources, and institutions. *Journal of International Business Strategy*, 36, 600–621.
- Nelson, R. R. (1992). National innovation systems: A comparative analysis. New York, NY: Oxford University Press.
- Nelson, R. R., & Winter, S. G. (1982). An evolutionary theory of economic change. Cambridge, MA: Harvard University Press.
- OECD Science, Technology and Industry Outlook 2006. Paris: OECD.
- Pistrui, D., Huang, W., Oksoy, D., Zhao, J., & Welsch, H. (2001). Entrepreneurship in China: characteristics, attributes, and family forces shaping the emerging private factors. *Family Business Review*, *XIV*, 141–158.
- Walder, A. G. (1995). Local governments as industrial firms: an organizational analysis of China's transitional economy. American Journal of Sociology, 101, 263–301.
- Xin, K. R., & Pearce, J. L. (1996). Guanxi: connections as substitutes for formal institutional support. *Academy of Management Journal*, 39, 1641–1658.
- Yamakawa, Y., Peng, M.W., & Deeds, D.L. (2008). What drives new ventures to internationalize from emerging to developed economies? *Entrepreneurship, Theory and Practice*, 32, 59–82.

# Review of "Smart Business Networks with Chinese Characteristics"

# **Focus on Institutional Competence**

#### Jens Ove Riis

Center for Industrial Production, Aalborg University, Denmark, riis@production.aau.dk

A common perception of governance of China is that "The Country in the Middle" has a strong central government. However, as a connoisseur of the Chinese political situation once expressed the situation, we should view China in the same way as we look at Europe as a collection of rather inhomogeneous and independent states (provinces). And even further, as pointed out in the paper, the local institutions have gained economic strength and can exercise political power for instance over allocation of property rights to companies. The local authorities have gained significant influence because local decisions are detached from national and regional policies and are primarily governed by local political interests.

A foreign company or business network operating in China, or planning to start activities there, needs to devote much attention to dealing with institutions at various levels, not the least at the local level. The paper addresses this issue and argues that a company or business network operating in China needs to develop institutional competence in addition to technical and market competence.

The authors find that networking constitutes a key organizational form for developing institutional competence. Networks tied in with local governmental institutions are centered on personal relationships and are fluid, non-structured organizational forms with an "activating—de-activating" mechanism that allows economic actors to switch from political to economic links and to adapt quickly to changing economic situations at low cost.

Based on a comprehensive literature review, the paper provides an interesting overview of the development of China's business sectors over the last 25–30 years in which the organizational form of firms moved from collective enterprises with fuzzy ownership rights and non-professional management to those with registered capital and individual property rights and clear separation of managerial tasks.

Still, today there is a continuum of firms from state-own companies, via firms with joint public and private ownership to private companies. And the paper discusses interesting, recent developments in the composition of firms along this continuum.

The importance for a foreign company of the institutional competencies will vary from sector to sector and location in China. The more competitive the sector or location is, the less does alignment with politics play a role. On the other hand, the

newer the firm or sector is, the more important it is to gain "social legitimization" via alliances with local government agencies. The authors anticipate that foreign firms need to build up networks for generating institutional competence.

It is impressive how a centralized socialist economy over a relatively short period of time has transformed itself to a rather open society with modern infrastructure and buildings that supports an internationally oriented business community experiencing a remarkable growth which seems to continue. This suggests a look into the future. The paper presents general projections of how foreign and national firms will interact with governmental institutions in years to come. But it would seem that also the role and practice of especially local institutions will need to adjust to a more open and international competitive market situation. It would seem fair to expect that the three institutional levels (national, regional, and local) will need to operate in a more coordinated way like in Western economies, and perhaps that the power balance will shift towards the national level, partly due to the need for expected transparent procedures and policies and compliance with WTO.

Hence, the theme of institutional competence is important for a single company as well as business networks in China and other transforming economies. And there is a need for further research in this area; for example to study the nature of networking practiced today and in the future, the needed transformation of governmental institutions, and how the notion of smart business networks could play a role seen from both a single business firm and a governmental agency.