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1

Adaptive Efficiency and the Evolving Diversity of Enterprise Ownership and Governance Forms: An Overview

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There is an extensive body of literature promoting the conventional paradigm that private investors should own the firm and that the existence of well-defined, personalized property rights is a basic precondition for the proper functioning of a market economy. The intuition underlying this wisdom is that placing property under the exclusive control of private owners makes them liable for the consequences of bad decisions but also entitles them to the rewards of good ones, thus making them more willing to motivate managers and workers.

However, reality confronts the prevailing paradigm with a rich diversity of ownership structures, even in the bastions of the free market economy: the United States and Western Europe. In the developed world, employee-owned firms are widespread in the professions including law, accounting, investment banking and medicine. Employee stock ownership is spreading in the industrial sector. Institutional investors have become the dominant shareholders of large publicly traded corporations. Farmer-owned cooperatives dominate the markets for basic agricultural products. Moreover mutual companies owned by their policyholders sell half of all life insurance and a quarter of all property and liability insurance (Hansmann, 1996; Gates, 1998). Another striking fact is that in most economies around the world, state ownership is widespread, with the state being the single most important large shareholder after individual families (La Porta *et al.*, 1999).

These facts indicate that the conventional wisdom on ownership is descriptively narrow. The claim that private investors should own the

firm is not the logical consequence of free markets and free enterprise. It is of both theoretical and policy importance to examine the emergence of unconventional ownership and governance forms of enterprises across economies, to investigate the driving forces behind the evolving dynamics of these emerging forms, and to search for new paradigms on ownership and governance. This book addresses these concerns and seeks to advance the debate.

In this book five unconventional ownership forms are examined to reveal their major characteristics: institutional ownership of large publicly traded corporations; employee stock ownership in the United States; large-scale employee stock ownership in China; joint ownership and shifting governance in Silicon Valley firms; and the famous Mondragón cooperative group in Spain and the Italian cooperatives in the La Lega network. Two cases involving state ownership are also analysed and compared. They demonstrate that it is possible, in a number of alternative ways, to harden the budget constraints of state-owned enterprises (SOEs). One case is Italy's success in imposing and sustaining a hard budget constraint on SOEs by means of supranational forces; the other is the successful experience in China of hardening the budget constraints on local governments and local SOEs through fiscal decentralization and monetary centralization. In this chapter we highlight the main reasons why these new developments are unconventional, summarize the complementary theoretical perspectives developed in the search for new paradigms, and explore the policy implications of the research for developing and transitional economies.

Why are these new developments unconventional?

Institutional investors as large shareholders and information transmitters

Pension funds, mutual funds, insurance companies, foundations and university endowments – collectively known as institutional investors – have become the dominant shareholders of corporations in the United States and other developed countries. In 1999–2000, US institutional investors held securities worth twice their country's GDP (about US\$17.3 trillion). Of their security holdings, over 45 per cent (US\$7.8 trillion) were equity in large corporations (OECD, 1999: 26, 34; OECD, 2001: tables 1, 2). It is estimated that institutional investors as a whole now hold about 51 per cent of all outstanding shares of US corporations, up from just 16 per cent in 1965 (Blair, 1995: 45–6; OECD, 2001: tables 1, 2).

The situation is similar in the UK: by the end of 1999, institutional investors held financial assets worth more than twice their country's GDP (US\$3 trillion), of which over two thirds were shareholdings in large corporations (OECD, 1999: 26, 34; 2001: tables 1, 2). In the whole OECD area, institutional investors controlled over US\$29 trillion of financial assets (about 128 per cent of GDP) by the end of 1998, of which about 35 per cent were shares in large corporations (OECD, 2000: tables F.4, S.1, S.2).

The growth record of equity investment by institutional investors is spectacular. Over the period 1990–96, while the total financial assets controlled by institutional investors in the OECD area increased by an average annual rate of 9 per cent, the value of their equity investment grew by 18 per cent on average. In the United States, while the assets of institutional investors doubled during the period, the value of their equity investment almost quadrupled (OECD, 1999: 9–10, 34).

The rapid rise of institutional investors has led both to exhilaration and to anxiety among scholars, commentators and decision makers. The exhilaration has been mainly stimulated by the acceleration of innovation and institutionalization in the financial service sector and by the rise of professional fund managers in national and international financial markets. The anxiety is closely linked to the increasing disconnection between investors and corporate ownership, which is characterized by a three-way separation of ownership and control: direct shareholders (owners of shares), indirect shareholders (fund portfolio management) and executives (firm managers).

Exhilaration: conventional evolution induced by financial market development and modernization

From the perspective of financial market development and modernization, the rapid rise of institutional investors is regarded as a natural consequence of socioeconomic development, technological progress and increasing competition. Increasingly wealthy and sophisticated individual investors need advanced financial instruments to reduce firm-specific risk through fund pooling and portfolio diversification, and at the same time to avoid a significant rise in the agency costs they bear as owners of corporate equity. The rapid ageing of the population in the OECD area has increased the demand by private households for the pension products offered by various financial institutions, including pension funds, insurance companies, investment funds and banks.

On the supply side, the deregulation of the banking and securities sectors and the liberalization of the activities of institutional investors

since the beginning of the 1980s have created a highly competitive and liberalized environment for the development of the financial services sector. Spectacular advances in information and communication technology have enabled in much more reliable and efficient clearing and settlements systems for securities and payments, as well as new financial instruments for risk management purposes. Professional fund managers have accumulated highly specialized knowledge and technical skills and played an increasingly active role in developing asset allocation strategies, taking investment decisions and monitoring corporate managers (Blommestein, 1998; *The Economist*, 30 October 1999: 77–8, 6 November 1999: 107–8).

Anxiety: unconventional role in corporate ownership and governance

From the perspective of corporate ownership and governance, of great concern is what it means to 'own' when ownership is institutionalized. In comparison with the highly concentrated, highly personalized, hands-on ownership of the traditional capitalist proprietor, institutional investors look more like fiduciaries or trustees than 'natural owners'. For example, although pension funds in the United States held US\$7.4 trillion by the end of 1998, over 80 per cent of those assets were delegated to external fiduciaries to manage, including investment advisers, investment companies, insurance companies and banks (Monks and Minow, 2001: 110–15). Furthermore, dodging the difficulties of exercising traditional ownership rights, many institutional investors, especially the large public-sector pension funds, rely on an 'index' strategy when investing. They maintain highly diverse portfolios that are selected to match an index of companies in a given stock exchange, such as Standard & Poor's 500 index. As a consequence these institutional investors buy and sell only because a company is part of an index being tracked, not because of any knowledge about the company. For example, between 1986 and 1996 the amount of US mutual-fund money invested in the mostly widely held stock index funds increased a hundredfold to US\$65 billion, a growth rate eighteen times that of the fund industry as a whole (*New York Times*, 28 January 1997: 1; Gates, 1998: 36–8, 333).

There is evidence of institutional shareholder activism. It is reported that institutional investors routinely put pressure on companies to curb excessive salaries for executives, to make boards more independent, and even to sack poorly performing managers. According to *The Economist* (30 October 1999: 77), Rakesh Khurana of the Sloan School of Management at the Massachusetts Institute of Technology has examined 1300 occasions between 1980 and 1996 when chief executives of Fortune

500 firms left their jobs. In a third of cases the person was sacked. For a similar level of performance, a chief executive appointed after 1985 is three times more likely to be fired than one appointed before that date. The California Public Employees Retirement System (CalPERS), a pension fund of more than \$80 billion, compiles and publishes an annual list of 'crummy companies', judged by their stock performance and management style, and sends in people to interrogate their bosses and directors (*The Economist*, 10 August 1996: 51).

In general, however, institutional investors are passive investors. Besides the fact that regulations may prohibit some categories of institutional investor to have a direct or dominant influence over the management of a company, institutional investors are not usually interested in or capable of exercising traditional ownership rights in a direct, sustained and responsible fashion. The smaller insurance companies and pension funds typically give portfolio management mandates to outside fund management teams. The larger funds are constrained in many ways not to exercise traditional ownership rights. The main constraint is the forbiddingly high cost of acquiring firm-specific knowledge and information. For example CalPERS invests in hundreds of companies and it would be impossible for its trustees to sit on so many boards of directors, attend hundreds of shareholder meetings or evaluate thousands of quarterly financial statements in a professional manner. The US nationwide pension plan for teachers and researchers, TIAA-CREF, indexes two thirds of its stock portfolio and directly manages only about one hundred stocks. Nevertheless, even one hundred companies are a lot to monitor, apart from the problems linked to 'collective action' dilemmas, such as free riding by other shareholders (Blommestein, 1998: 36; Gates, 1998: 300).

Our view: four channels to lessen the severity of the corporate governance problem

We argue that the difference between the traditional 'natural owner' and the new institutional owner has been largely exaggerated due to popular misconceptions about the traditional natural owner, and that there are alternatives to reduce the severity of the corporate control problem linked to institutional shareholders. In a typical joint-stock company, what shareholders really own are their shares, not the corporation. When investors purchase the initial public offerings of a corporation's shares, the assets available to the corporation become the firm's property. Shareholders may sell their shares if they are dissatisfied with the performance of the firm, and in combination with other shareholders they

may vote to sell the firm. What they cannot do individually is insist that the corporation buys back their shares. The inability of investors to force the firm to repurchase outstanding shares gives professional managers greater control over equity capital. The corporation as a legal person, not the shareholder, has title to the assets secured from its initial sale of stock (Monks and Minow, 2001: 10). If shareholders could reclaim these assets, the severity of the corporate governance problem would be greatly lessened. In other words, disappointed shareholders, acting individually but in large numbers, could demand payments that would strip the management of corporate assets (Demsetz, 1988: 114; 1997: 50–1). In this regard, there is little difference between natural and institutional owners, especially when there is a highly diffuse ownership structure.

As Gillan and Starks argue in Chapter 2, for companies with very diffuse shareholders, the rise of institutional shareholders would lessen the severity of the corporate governance problem in three ways. First, by pooling investment, institutional investors would be in a better position than individual investors to aggregate the ownership interest of individual investors into a controlling fraction of a corporation's stock. Second, institutional investors would be in a better position than individual investors to undertake the functions of corporate governance due to their specialization in investment and corporation control in terms of both knowledge and time. Third, large institutions would have less incentive to unload shares because unloading could cause the share price to plummet, the financial equivalent of shooting themselves in the foot. This position would make them more interested in monitoring the performance of corporations in which they have a controlling share of the total stock.

In addition, as suggested by Demsetz (1997: 51–2), financial institutions such as open-end mutual stock funds have the ability to reduce the severity of the corporate governance problem. An open-end mutual stock fund pools capital from retail investors and uses its skill to invest in the shares of other corporations. The fund's business activity does not depend on the availability and continued deployment of specialized assets, unlike the business of a manufacturing company. Capital placed at its disposal can be withdrawn by its investors without seriously compromising its commitments to others. General dissatisfaction with the management of a fund can cause investors to reclaim most of its capital, even though none of the individual investors has invested a significant sum. This disciplining force serves as a powerful mechanism to make the fund accountable. The fund can gather enough invested

wealth to allow it to obtain a controlling fraction of equity in some corporations and at the same time to maintain its ability to diversify. It can act somewhat as a collectivist individualist (*The Economist* 6 November 1999: 107). Such funds might be able to play a significant role in transitional economies and developing economies in which low levels of wealth but also the egalitarian distribution of wealth have been the norm.

In short the institutionalization of corporate ownership has brought new dilemmas in the field of corporate governance. However, in comparison with individualized ownership of a company with a broad shareholding, it represents historical progress in terms of creating new opportunities for innovations and improving corporate governance.

Employee stock ownership and the increasing desire for shared ownership

Employees have become significant players in capital ownership worldwide, especially in the United States.¹ Table 1.1 shows the scale of four types of major employee ownership plans in the United States. It shows that in early 2002 there were about 18 500 company plans in which capital ownership was shared broadly with employees. About 30–40 million employees owned about US\$1 trillion in stock through

Table 1.1 Number of employee ownership plans and employee participants, and the value of plan assets, early 2002

<i>Type of plan</i>	<i>Number of plans</i>	<i>Number of participants¹ (million)</i>	<i>Value of plan assets (\$ billion)</i>
ESOPs and stock bonus plans	11 000	8.8	>400
410(k) plans	2 200	11	>160
Broad-based stock option plans ²	4 000	8–10	(several hundred)
Stock purchase plans	4 000	15.7	(not realistic to estimate)

Notes:

1. Because many companies offer multiple plans and many employees participate in more than one plan, the sum of this column is certainly greater than the real total number of employee participants.
2. Broad-based stock option plans are those which grant stock options to 50 per cent or more of the full-time employees of the company.

Source: NCEO (2002a).

employee stock ownership plans (ESOPs), 401(k) plans, broad-based stock option plans and stock purchase plans.

While ESOPs experienced spectacular growth in the 1970s and 1980s after tax benefits and regulatory guidelines were made available in the 1970s, broad-based stock option plans have become popular only since the early 1990s. According to Geer (1997: 158), in 1997 about 30 per cent of the largest US companies had broad-based stock option plans covering more than half their employees, up from 17 per cent five years previously. Another 1997 survey of 1100 publicly traded companies, conducted by ShareData and the American Electronics Association, indicated that of those companies with 500–1999 employees, 51 per cent offered stock options to all employees: the corresponding proportion in 1994 was 30 per cent. Of those companies with 2000–4999 employees, 43 per cent offered stock options to all employees, compared with 10 per cent in 1994. Forty-five per cent of those companies with 5000 or more employees offered stock options to all employees, compared with 10 per cent in 1994 (NCEO, 2000). While the sample may have been biased in favour of stock option plans, the expansion rates revealed by the survey are extraordinary by any standard. A 1995 survey conducted by the Association for Quality and Participation found that 13 per cent of the Fortune 1000 companies offered stock options to 60 per cent or more of their employees (NCEO, 2000). In 2001 up to 10 million employees received stock options (Table 1.1). It is also reported that about 125 listed companies had at least 20 per cent employee ownership in 1996 (Gates, 1998: 61). In July 2002, companies with majority employee-ownership included United Parcel Service (344 000 employees), Publix Supermarkets (111 000), United Airlines (98 400), Science Applications International (41 000) and Lifetouch (25 890) (NCEO, 2002b).

Broad-based stock options are now the norm in high-technology companies and are rapidly gaining popularity in other industrial sectors as part of an overall equity compensation strategy. Blasi *et al.* (2000) provide evidence that companies with broad-based stock option plans have significantly higher productivity levels and annual growth rates than public companies in general and their peers.

The rapid expansion of employee stock ownership clearly contradicts the mainstream theoretical prediction that employee ownership in general will lead to underinvestment, inefficient decision making and inadequate supervision, and thus poor performance.² The discrepancy between theoretical prediction and the real development of employee stock ownership has stimulated a great deal of empirical research in the

past three decades. As discussed by Sesil *et al.* in Chapter 4, the empirical literature suggests that employee ownership is associated with either improved or unaffected employee attitudes and behaviour, and with better or unchanged performance. Almost no studies have found worse employee attitudes or behaviour, or worse corporate performance under employee ownership.

The research reported in this book suggests an extra reason for the existence and expansion of employee stock ownership in publicly traded companies, in addition to the traditional reasons of broadening the distribution of wealth, providing additional employee benefits, gaining tax advantages, improving firm performance and defending against potential takeover threats. With the help of information technology developments in the financial services sector, individual investors now have convenient means of avoiding the risk of being locked into the business fortunes of a specific firm and thus being liable for the consequences of its failure. We argue that the increasing weight of employee ownership and institutional ownership of a corporation may compensate for the decreasing liability of diverse individual shareholders and restore a desirable balance of power among the major corporate players. Under the new equilibrium, owners and employees would be able to keep managers' moral hazard in check, owners and managers could be protected from extortion or shirking by employees, and managers and employees could be assured that opportunistic behaviour by owners would not keep them from realizing a reasonable return on their firm-specific investments.

Joint ownership and shifting governance in Silicon Valley firms

Silicon Valley has become an icon for its success in nurturing a large number of outstanding high-tech firms and has remained the forerunner in the field of technological system innovations. The most illustrative example of the Silicon Valley phenomenon is the computer industry (Baldwin and Clark, 2000). In the United States the computer industry was virtually dominated by IBM until the mid 1970s, but from the early 1970s a group of entrepreneurial firms funded by venture capitalists began to gain ground in R&D activities. These firms did not try to compete with IBM in the production of stand-alone product systems but specialize in the development and production of modular components for product systems. The innovative way in which these firms operated drastically changed the landscape of the computer industry. New product systems are now evolutionarily formed by selecting and integrating new modular products developed by entrepreneurial firms.

Hence many new subindustries have grown out of the traditional computer industry, which was characterized by highly vertically integrated manufactures.

The Silicon Valley phenomenon includes multifaceted interactions between a cluster of entrepreneurial start-up firms and venture capitalists (including leading firms in related niche markets). Aoki and Takizawa (2002) have modelled the information-processing relationship and the incentive structure between venture capitalists and a cluster of entrepreneurial firms in Silicon Valley. The information-processing mechanism is captured in a team-theoretic model with venture capitalists and entrepreneurial firms while the incentive structure is characterized as a tournament game. Their paper provides a novel comparative perspective on ownership and governance based on the informational structure of three types of R&D organization: hierarchical R&D organization, which is typical of the traditional vertically integrated firm, interactive R&D organization, which is modelled on the Japanese chain-linked system for innovations, and the Silicon Valley model of venture-capitalist-mediated (V-mediated) information encapsulation.

A more general feature of the ownership and governance structure of Silicon Valley firms, is that human capital has become the most vital asset, in contrast with traditional firms, in which highly specialized inanimate assets are the most important resource for growth. Put differently, in Silicon Valley the essential resources for future growth are the entrepreneur's professional human capital, the firm's inanimate assets, and a web of information generation and sharing arrangements. As a consequence, property rights arrangements combine elements of joint ownership and bilateral option rights. Hence venture capitalists have the right to exit if the firm runs into bad times (that is, they have liquidation rights) while the entrepreneurs' right to the issued options is contingent on subsequent performance. With regard to control rights, there is a shifting arrangement: if the firm performs poorly the venture capitalists obtain full control; as the firm's performance improves the entrepreneur retains or obtains more control rights; if the firm performs very well the venture capitalists retain their cash flow rights but relinquish most of their control and liquidation rights (see Chapter 3; see also Kaplan and Strömberg, 2000; Aoki, 2001). This form of joint ownership and shifting governance is clearly unconventional but is characteristic of the novel institutional arrangement for technological product system innovation in Silicon Valley.

Ways to harden the budget constraints of SOEs: the cases of Italy and China

Economists have long argued that private ownership is generally preferable to state ownership, particularly in terms of providing a strong incentive to innovate and contain costs (Shleifer, 1998). Hence the privatization of SOEs is usually seen as desirable. However, even in developed economies the process of privatization has proved to be technically difficult and the precise effect of privatization on performance is still open to discussion (Boylaud and Nicoletti, 2000; Joskow, 2001). In the developing world the pace of privatization has been uneven but generally slow. According to the World Bank (1995: 34), during 1978–91 in low-income developing countries the share of SOEs in GDP was fixed at about 14 per cent; in middle-income developing countries this share oscillated between 8 per cent and 10 per cent, a level comparable to that in the developed world. According to an estimate by Ramamurti (1999: tables 2, 3), during 1988–96 only about 9 per cent of SOE assets in the developing world were divested. In large developing economies such as India, Indonesia and Nigeria, less than 7 per cent of SOE assets have been privatized.

In transitional economies such as the Czech Republic, Hungary and Russia, although the pace of privatization has been unprecedented and many studies estimate that 50 per cent or more of economic activities have been privatized, the state still accounts for 40–50 per cent of GDP. Furthermore, taking the Czech Republic as an example, almost half the shares in so-called ‘privatized’ firms in fact belong to the National Property Fund or to voucher funds controlled by state-owned banks (Spulber, 1997; Ramamurti, 1999). The hard reality in many developing and transitional economies is that weak market institutions are matched by equally weak legal, financial and government institutions. In such circumstances the policy issue of how to improve the performance of SOEs may be at least as pressing as privatization, if not more so. In cases where privatization often results in the large-scale closure and liquidation of SOEs rather than their revitalization, or where privatization means not only moving assets from the state to the private sector but also moving them from the formal to the informal sector, pressing for rapid privatization may amount to shooting at the wrong target and could induce social and political misery.

In the policy debate on how to improve the performance of SOEs, it has been claimed that the lack of means to establish and sustain a hard budget constraint on SOEs is one of the main reasons why the performance of SOEs in many countries is disappointing. Firms that face

a soft budget constraint, irrespective of whether they are private or state owned, have little incentive to take market disciplines and financial pressures seriously (Shleifer and Vishny, 1994, 1997; World Bank, 1995; Kornai, 2001).

Numerous studies have shown that a combination of decentralizing the fiscal system (by devolving taxation and spending authority downwards to competing local governments) and simultaneously centralizing the monetary authority hardens SOEs' budget constraint because this combination creates competition and makes *ex post* renegotiation more difficult (Qian and Roland, 1998; Berglof and Roland, 1998; Maskin and Xu, 2001). In Chapter 5 Bertero and Rondi identify an alternative mechanism to harden SOEs' budget constraint and show that the market-promoting federalist structure also works with the 'upward devolution' of the monetary and key regulatory authorities. They state that the hardening of the budget constraint on Italian SOEs can be largely attributed to the financial discipline imposed by supranational EU institutions and agreements (such as European Monetary Union, EMU) on the Italian government.

Until the early 1990s SOEs were a major part of the Italian economy, accounting for around 15 per cent of non-agricultural employment, 20 per cent of value-added and 25 per cent of fixed investment (1991 data). In Italy SOEs are organized through fully state-owned holding companies with controlling interests in diverse subholdings. The subholdings may have minority private shareholders and in turn own individual enterprises. The environment in which Italian SOEs operated from the 1970s to the mid 1980s was characterized by political interference, accommodating endowment funds and large loans from accommodating state-owned banks. Consistent with the soft budget constraint that SOEs enjoyed, poor profitability, low productivity, high debt and heavy losses were the norm for SOEs during that period.

In the early 1980s a combination of three factors, mostly exogenous to Italian government policy, induced a radical shift from a soft to a hard budget constraint. These three factors were mounting public debt, EU pressure to reduce state aid and accelerate the privatization programme, and Italy's attempt to qualify for first-round participation in EMU. The existence of high and rising public debt, which included substantial transfers to SOEs, was inconsistent with the rules of participation in the European Monetary System (EMS) and led to the first wave of disciplinary fiscal and monetary policies. For example the Bank of Italy was given greater independence and encouraged to become more market-oriented. Moreover the banking system increasingly faced

external market pressure from international competition and the restructuring of the European banking industry following capital market liberalization. In addition the tightening of competition policy by the European Commission put a rein on state aid to SOEs, and public opinion required harsher scrutiny of the management of state funds. As a consequence, in the late 1980s the environment in which Italian SOEs operated was characterized by increasing competition at the European level, the drying up of government endowment funds, the disappearance of soft credit from state-owned banks and the threat of privatization. In other words, SOEs now had to face a hard budget constraint. Finally, Italy's attempt to qualify for EMU gradually led to further submission of control power over monetary policy and the power to take decisions on SOE financing. In the early 1990s the government was forced into a privatization programme, although by then many SOEs had become accustomed to a hard budget constraint and had been restructured to make them palatable to private investors.

Based on a sample of 150 Italian SOEs over the period 1977–93, Bertero and Rondi (2000, 2002) empirically demonstrate that Italian SOEs made virtually no response to financial pressure during the period of soft budget constraint, but actively responded to such pressure during the period of hard budget constraint, with behaviour similar to that of private enterprises. The SOEs in the sample made a significant effort to increase their total factor productivity and reduce their staffing level. Furthermore the budget regime shift brought about an important change in the investment behaviour of SOEs, with managers losing their discretion to collude with politicians, empire build and make wasteful investments.

With regard to policy implications, the experience of Italian SOEs with the EU institutions exemplifies a mechanism that is likely to work beyond the context of this case study. The hardening of Italian firms' budget constraints through the dictates of supranational institutions provides a valuable preview of the financial pressure that will be exerted on state-owned and privatized companies in EU accession countries and other transitional economies. Other supranational organisations – such as the IMF, the World Bank and the WTO – may exert similar pressures, although perhaps less powerful, on governments, on their budgets and ultimately on SOEs. Finally, the competitive pressure of globalization in general and financial markets in particular may have a similar impact on the state-owned sector in many open economies.

The case of SOEs run by local governments in China has direct policy implications for the national government. From the early 1970s local

governments at the county and city levels came to control all the small and a large proportion of the medium-sized SOEs. Unlike in the former Soviet Union and Eastern Europe, most SOEs in China are small or of medium size, and they are distributed throughout the country rather than being geographically concentrated (Gu, 1999). Therefore the ownership restructuring of these locally controlled SOEs is as significant as the restructuring of the large ones controlled by the central or provincial governments.

For decades the SOEs run by county and city governments were highly inefficient. They were often too small to apply economies of scale but too bureaucratic to exploit the advantage of their small size, which township and village enterprises (TVEs) were able to do. Their survival depended on soft taxation and other fiscal support by the local government and on soft credit from local branches of the state banks. However in 1993 and 1994 the environment started to change. In 1993 the central bank reversed the long-standing practice of monetary decentralization and deprived local governments of administrative control over local branches of the state banks. Since then local governments have had no right to supervise these branches. In 1995 the Central Bank Law was passed to give the central bank the mandate for monetary policy, independent of local government, and in 1998 the central bank replaced its 30 provincial branches with nine cross-province regional branches, as in the US Federal Reserve system. While these reforms might not have fully removed the influence of provincial governments over monetary policy and credit allocation decisions, they have certainly left little room for county and city governments to exercise their influence.

With regard to the tax and fiscal system, on 1 January 1994 China introduced major tax and fiscal reforms that were more aligned to international practices. A national tax bureau was established, a clear distinction was made between national and local taxes and a strict division of labour between the national and local tax bureaus was introduced. The reform also established fixed tax rules between the national and local governments. These reforms made it very difficult for local governments to act to reduce the national taxes, which they had done in the past. In 1995 the new Budget Law took effect. This law prohibits the central government from borrowing from the central bank and from deficit financing its current account. The law also imposes more stringent restrictions on local governments. In addition to the original requirement to balance local budgets, the law strictly controls bond issuance by local governments and restricts their borrowing in

financial markets. To ensure enforcement of the Budget Law, an independent auditing system was introduced (Dong, 1997).

As a consequence of these fiscal and monetary reforms, the overall budget constraints of local governments and their local SOEs became much harder in the second half of the 1990s (Qian, 2000). Without the help of soft credit from local branches of state banks and soft taxation from the old fiscal system, local governments were no longer able to bail out loss-making SOEs. As a consequence, since then diverse means have been employed to restructure the ownership and governance of local SOEs, including selling, leasing, takeovers, mergers, restructuring through Sino-foreign joint ventures, corporatization and conversion to joint-stock cooperatives. All these moves represent a quite radical departure from traditional socialist ideology. By the late 1990s, in many cities and counties SOEs had largely disappeared and their replacements are typically characterized by hybrid ownership or fully private ownership.

The Chinese experience indicates that fiscal decentralization combined with monetary centralization can provide positive incentives to and place a hard budget constraint on local governments. Delegating control rights over SOEs to local governments that face a hard budget constraint and intense market competition induces a desirable restructuring of SOEs.

The benefits of cooperative alliance and networking: the Mondragón group in Spain and the Italian cooperatives in La Lega

Producer and worker cooperatives have existed in Western market economies since the introduction of the factory system. The attractiveness of worker cooperatives hinges not only on such ethical concerns as democratic control and quality of life, but also on their potential economic advantages. However worker cooperatives are rare in the industrial sector in the West. As summarized in Craig and Pencavel (1995), there are four economic advantages that can potentially make worker cooperatives more productive than conventional investor-owned corporate firms. First, cooperatives are able to mitigate the agency costs associated with the separation of ownership from control because worker-owners are likely to be much better informed about the actions taken by managers than are outside owners. Second, worker ownership avoids conflicts of interest between workers and owners and encourages voluntary cooperation. Third, workers in a cooperative are able to monitor each other's effort more effectively than in firms where the monitor is the owner's agent. Fourth, when workers identify their

efforts with cooperative outcomes, morale is heightened, leading to more and better work. Moreover the upward flow of information from the shop floor facilitates improvements in or innovation of production methods, and lower turnovers induce the accumulation of firm-specific human capital (Bonin *et al.*, 1993; Smith, 1994).

Why are there so few worker cooperatives in the industrial sector of Western market economies? There are three primary explanations in the literature. The first has to do with the high costs associated with collective decision making. Usually, workers are far more likely than investors to differ among themselves about the firm's policies. In important decisions there is often more room for judgement and discretion in a cooperative, because unlike the situation with investors, there are no simple objective criteria to follow and workers often have different stakes in the firm's decisions on investment and relative wages (Hansmann, 1996: 89–91). In addition, managers may lack the necessary autonomy to make contingency decisions. The second explanation is that worker cooperatives have difficulty competing with investor-owned firms for capital financing. The amount of capital that can be raised from workers is bound to be limited, and external financiers with no direct say in the firm's governance will not commit significant funds without a substantial premium to mitigate the risks involved. The third reason is that cooperatives are disadvantaged in terms of risk diversification. Workers' incomes and capital are tied to the fortunes of the cooperative (Bonin *et al.*, 1993; Craig and Pencavel, 1995).

For individual worker cooperatives, if the above disadvantages can be offset by advantages they may be able to survive and compete side-by-side with other ownership forms, as in the case of the plywood cooperatives in the north-west of the United States. For a group of worker cooperatives under a corporate alliance, the network externalities discussed by Smith in Chapters 7 and 8 enable them to employ mechanisms to overcome a large number of these disadvantages while preserving their major advantages. The Mondragón cooperatives in the Basque region of northern Spain and the Italian cooperatives associated with La Lega in general and the Emilia-Romagna region in particular are excellent examples in this regard.

Since 1956 the Mondragón group has grown from a single, 25-member cooperative into a massive enterprise with 60 200 workers and annual sales of €8.1 billion (2001 figures). Over 25 per cent of their sales are exports. It also has a financial group with €8.6 billion in assets and over 300 branch banks around the Basque region (Mondragón, 2002). The group has adopted a systems approach to cooperative development.

It has combined collective ownership with the incentives of individual ownership by establishing a system of individual internal accounts with automatic loan-back.³ The system explicitly addresses both the individual and the collective side of human motivation. While the principal of 'one worker, one vote' is institutionalized in the basic cooperatives (those with fewer than 500 members), the group adopted many mechanisms from traditional firms when it reorganized itself into the Mondragón Co-operative Corporation (MCC). These hybrid mechanisms have played a significant part in the MCC's success in the rapidly changing and highly competitive global market (Benello, 1996; Huet, 1997; Whyte, 1999; Cheney, 2000).

The success of the Italian cooperatives associated with La Lega Nazionale delle Co-operative e Mutue (the National League of Cooperatives and Mutual Aid Societies) again highlights the importance of cooperative alliances and networks. La Lega has developed a number of supporting mechanisms to promote the growth of the cooperative sector. Of these mechanisms the most significant are La Lega's financial institutions and its representative power and negotiating ability in its constant negotiations with the central and local governments (Ammirato, 1996).

In Chapters 7 and 8 Smith presents a theoretical framework and empirical evidence to show that there are network externalities in cooperative formation and survival. This means that even if other barriers to entry are overcome and a cooperative is established it may not survive, not because of intrinsic inefficiencies but simply because of the lack of other cooperative entry, and to some extent because of a lack of coordination among the cooperatives that do enter the market. In Chapter 7 he shows how cooperative leagues can help to internalize these externalities. In Chapter 8 he shows how this internalization has been accomplished in practice in Mondragón and La Lega. One of the key findings is that among the many adaptive innovations introduced in Mondragón and La Lega, the creation of the cooperative alliances and networks was the most important because virtually all of their other innovations required the existence of the networks as a necessary precondition.

Searching for new paradigms: complementary theoretical perspectives

The above discussion indicates that the nature of the firm is changing and a diverse pattern of enterprise ownership and governance is emerging.

As a result the boundaries of the firm are often in flux. To understand the formation and evolution of ownership and governance forms in different technological and institutional environments, it is necessary to refer to the underlying theory of the firm and examine the interaction between the nature of the firm and corporate governance issues under various circumstances. Although we are still in the process of searching for new foundations to explain the changing nature of firms (Hansmann, 1996; Zingales, 2000) several promising perspectives have emerged: the growth option perspective, the contract cost perspective, the competition perspective, the market intermediation perspective and the institutional change perspective. In this section we interpret these in a manner that is understandable to non-economists. We hope that when received in a complementary rather than antagonistic way, they will be of great assistance in helping us to understand the fundamental trade-offs that underly the evolving diversity of ownership and governance structures in the real world, and to search for adaptively efficient models for reforming enterprises in transitional economies.

The growth option perspective: the firm as a collection of growth options

Myers (1977) defines the firm as a collection of assets and growth opportunities. He used this definition to establish a theory on the capital structure of corporations but did not pay attention to the glue that keeps growth opportunities attached to the assets. Zingales (2000) attempts to explore this question and argues that what distinguishes the firm from the market is the web of specific investments in and around one or more of the crucial resources that are most closely tied to the best growth opportunities.⁴ He suggests that the role of a corporate governance system is to ensure that the power to make decisions is allocated to the people with the best opportunities.

Following this perspective, we can say that in a traditional, capital-intensive, vertically integrated firm, highly specialized inanimate assets, ranging from plant and machinery to world famous brand names, are the most crucial resource for future growth. The firm's human capital (employees) is largely tied to these assets and the employment opportunity outside the firm for this highly specialized human capital is rare. The boundaries of this type of firm are clearcut and defined by the ownership of its unique assets.

In modern human-capital-intensive firms such as those in Silicon Valley, as discussed earlier, the crucial resources for future growth are the entrepreneur's professional human capital, the firm's inanimate

assets and a web of information generation and sharing arrangements. Consequently the property rights arrangements are a complex mixture of joint-ownership between the entrepreneur and a cluster of venture capitalists, with the provision of bilateral option rights. The control rights shift between these major actors, depending on the firm's performance.

For reforming SOEs and TVEs in a transitional economy such as China, the crucial resources for future growth include not only their existing assets and the human capital of entrepreneurs, but also a web of interorganizational relationships (*Guanxi*). This web is the firm's organizational and social capital. It is capable of mobilizing scarce resources from more than one channel and supplying an elastic contract mechanism to facilitate continuity and efficient adaptation, thus reducing uncertainty. In the early stage of China's reforms this web was fully embedded in the old government system, which is why joint ownership in China has involved local government as a key partner. The crucial question here is: can this web be used to facilitate market development in general and provide the basis for nurturing new market institutions? In Chapter 6 Sun provides new evidence to show that on balance the answer is yes (Naughton, 1995; D. D. Li, 1996, 1998; D. Li, 1997; Qian, 2000).

The growth option perspective also helps us to understand the corporate governance problems faced by a family firm in which agency costs and the cost of collective decision making among the owners are of minor importance. Because there is a lack of outside interest in the firm, once owner-managers fail to recognize growth opportunities, or pitfalls, there is an absence of knowledgeable outsiders' intervention. This tends to happen when there are changes in the market place or in technology. The fall of well-known firms such as Wang in the United States and Grundig in Germany can be attributed to this type of governance failure.

The contract cost perspective: market contracting versus ownership

The contract cost perspective has recently become mainstream in the ownership theory of the firm. It is now widely accepted that the firm may be considered as a nexus of explicit and implicit contracts (compare Aoki *et al.*, 1990; Hansmann, 1996; Zingales, 2000). Given that the market conditions and institutional structures are known, each of these contracts can be explicitly or implicitly specified and the corresponding cost (or relative cost) can be estimated empirically or theoretically.

It is helpful to classify these contracts into two types: 'market contracting' and 'ownership' (Hansmann, 1996). Market contracting is closely linked to the daily business operations of the firm. For example the firm may have signed contracts with the suppliers of components or services that the firm uses as inputs. It may have contracts with individuals who provide labour to the firm. It may have loan agreements with banks, bondholders and other suppliers of capital. It may also have sales contracts with purchasers of the firm's products. On the other hand, by virtue of ownership an owner, or a group of owners, exercises discretion and the other residual control rights over the firm that remain after the exercise of market contracting.

The persons or parties linked to the firm by market contracting can control the firm's behaviour only by seeking enforcement of their contract with the firm or by threatening to cease contracting with the firm, whereas the persons or parties holding ownership rights have the additional option of seeking to control the behaviour of the firm through internal governance mechanisms.

If the market is perfect and there is complete information, a firm may be fully specified by market contracting. In other words, in an ideal market the parties involved in setting up a firm can write detailed, comprehensive, long-term contracts that govern their relationship and specify everything that matters economically. Hence it could be that nothing is left to ownership. However in reality the market is far from perfect and information problems abound. This makes ideal and complete market contracting impossible and general market contracting costly. In order to minimize the total cost of transactions between the firm and all the parties engaging in the transactions, the assignment of ownership becomes desirable. All other things being equal, transaction costs will be minimized if ownership is assigned to those persons or parties for whom the problems of market contracting, namely the costs of market imperfections, are most severe. Of course ownership itself involves costs, mainly the cost of monitoring managers, the cost of collective decision making among the owners and the cost of risk bearing. Moreover the costs of ownership can vary greatly among the various parties involved in the transaction. Therefore the least costly assignment of ownership will minimize the sum of the costs of market contracting and the costs of ownership (Putterman, 1993; Hansmann, 1996: 20–2).

Market imperfection often takes different forms and varies in extent across industries, regions, countries and over time because the formation and evolution of the formal and informal rules of the game in

a society are a concrete political process that takes time and is cultural and path dependent. These differences may mean that the costs of the same type of transaction will differ in different contexts. For example the worker cooperatives in plywood manufacturing in the north-west of the United States, have had a clear disadvantage in the capital market in comparison with private enterprises in the same industry and same location. The main reason for this is that credit institutions prefer to make loans to enterprises that are controlled by a small number of people whose behaviour can be easily monitored and directed, rather than to an enterprise whose ownership is spread among the entire work force (Gintis, 1990; Craig and Pencavel, 1995). In sharp contrast to the situation in the United States, joint-stock cooperatives in China, as worker cooperatives with a Chinese character, enjoy much greater trust by local communities and credit institutions than do private enterprises, even in the sense of economic accountability and creditability. As a consequence they enjoy a significant advantage over private enterprises in respect of acquiring capital (see Chapter 6; see also Zou and Sun, 2000). This and other differences in comparative transaction costs may be why cooperative firms are scarce in the United States but widespread in transitional China.

The competition perspective: competition can induce ownership evolution

The close link between imitative output competition and the allocation efficiency of resources has been well established in the neoclassical economics literature. In the central model of neoclassical economics – perfect competition – each firm takes the prices given to it by the mysterious market clearing forces, and competes with others by offering output, especially by offering output through entry. The market reaches equilibrium when neither insiders nor outsiders have an interest in changing the quantity they supply to the market. Given consumer preferences, technology and institutions, and full information for all rational actors, the perfectly competitive equilibrium obtained is the Pareto optimum, meaning that resources are allocated in such a way that no one can be better off without others becoming worse off. In this ideal economy all the necessary market institutions are in place and functioning perfectly, and therefore no market-creating activity is needed. Competition is no more or less than making profitable imitative output responses to given market prices (Demsetz, 1997: 137–8).

In terms of the everyday meaning of the word, the notion of competition goes far beyond imitative output competition and has a much

broader implication than allocation efficiency. Competition is popularly viewed as rivalry behaviour and is the main driving force in Schumpeterian creative destruction. Competition causes firms and, more generally, organizations to become more efficient by sharpening their incentive to avoid sloth and slack. Competition results in efficient organizations prospering at the expense of inefficient ones, which is good for aggregate efficiency. Competition induces innovations in all areas of technology, organization and institutions, which have been the major source of gains in productive efficiency over time (Stigler, 1987; Vickers, 1995). Since the rivalry behaviour view of competition follows the tradition of Hayek and Schumpeter and pays attention to productive and dynamic efficiency, it is relevant to the study of the formation and evolution of firms' ownership structure in different technological and institutional contexts.

The significance of behavioural competition emphasized in the literature can be summarized as follows. First, competition stimulates the monitoring efforts of owners and sharpens the performance of managers. An increase in the number of players in the market enhances the possibility of performance comparisons between different organizational structures and between managers. Competition in product markets may make profits more sensitive to the efficiency of the organizational forms and the effort of managers, and this not only enables owners to relate managerial remuneration to profits in order to stimulate managerial effort, but also shows them the opportunity cost of different organizational structures. Competition by comparison also enables reputation-building efforts of managers and reduces moral hazard because the managers' efforts can be estimated with greater precision (Vickers, 1995; Hay and Liu, 1997). Second, competition can play a major part in differentiating more efficient firms from less efficient ones. When firms' costs differ, the lowest-cost firm will certainly win the competition and the highest-cost firm may have to exit due to its losses or an increase in the number of competitors. In order to win the competition or survive in a competitive environment, firms have to develop themselves by accumulating capital, improving their technology and management, and making innovations (Vickers, 1995; Liu and Li, 1998). Third, dispersed imperfect information can be aggregated in the competitive process (Hayek, 1949: 96; Grossman, 1989; Vickers, 1995). Firms and other organizations can obtain desired information through the process of competition and comparison. For example they can evaluate the opportunity costs of alternative choices of technologies, management modes and

organizational structures through performance comparison and learning from rivals.

While competition provides both incentive (carrot) and pressure (stick) to stimulate the efforts of economic agents and promote innovation, there is no universal model of property rights regime and governance structure that can be employed to win the competition in all circumstances and at all times. Different models can coexist in the same circumstance, provided that each type of firm has its own enduring advantage but none clearly dominates the others in terms of overall efficiency. Organizational or institutional innovation can bring competitive advantages to the innovator in the same way as technological innovation does (see for example Chapters 7 and 8).

The intermediation perspective: market-taking versus market-making

There are two types of firm in an economy: market-taking firms and market-making firms. Market-taking firms take price signals and other market information as given. They are guided by the ‘invisible hands’ of the market, as emphasized in neoclassical economics. In contrast market-making firms establish and operate markets by setting prices, carrying out transactions, forming and monitoring contracts, and producing and distributing information. Their ‘visible hands’ guide many markets and they are typically known as market intermediaries (Spulber, 1996). The simplest example of a market-making firm is a retail or wholesale intermediary. This firm gathers demand and supply information, sets bid and ask prices for its commodities and makes profits from the mark-up between the two, some of which is used to cover the costs of information gathering and price setting. In addition it holds stocks of goods to sell to customers and holds cash on hand to buy from suppliers. This avoids the costs of mismatch between buyers and sellers in terms of the double coincidence of needs, in which buyer and seller must have both the need and the opportunity to transact with each other at the same time.

More generally, different types of market-making activities by market intermediaries correspond to different types of information imperfection in market places. As summarized in Spulber (1996), when there are random elements in demand or supply, intermediaries provide liquidity or ‘immediacy’ by being ready to buy and sell. Given uncertainty about trading partners’ willingness to pay or opportunity costs, intermediaries coordinate transactions by matchmaking and brokering. When the characteristics of buyers or sellers are unobservable, intermediaries

generate and supply market information and guarantee product quality. When the actions of buyers or sellers are costly to observe or monitor, intermediaries provide monitoring and contracting services. In these ways market intermediaries reduce or eliminate the uncertainty associated with making a satisfactory match between customer and supplier. In addition, intermediaries add to the number of potential trading partners, which increases the likelihood of encountering a trading partner and reduces the search costs for all market participants. Consolidating transactions through intermediaries can generate returns to scale in producing and distributing market information (Spulber, 1996; Che, 2000).

An understanding of the functions of market intermediaries helps us to understand the way in which the market mechanism normally functions. For example the existence of an equilibrium bid-ask spread, which separates a buyer's willingness to pay and a supplier's costs, is a consequence of transaction costs, asymmetric information between buyers and sellers and the returns to intermediating activities, rather than evidence of market failure. Just as the production of goods and services consumes resources, the establishment and operation of markets to allocate those goods and services also incurs costs.

The establishment and evolution of markets driven by market intermediaries are path dependent and technology dependent. For example the emergence of e-commerce has greatly enhanced the market-making activities of producers. It significantly lowers the cost and increases the speed of collecting data, expedites billing and invoicing, and facilitates the exchange of data on sales, inventory and marketing. It reduces economies of scale from vertical integration, and thus allows firms to eliminate the many layers of middlemen who were necessary in the past but symbolize inefficiency in the present.⁵ Finally, it makes cross-border purchasing much easier and induces tax competition between countries (particularly in the EU), and thus puts pressure on governments to reduce taxes. More generally, the impressive technological advances in information and communication have enabled much more reliable and efficient clearing and settlements systems for securities and payments, and created new financial instruments for risk management purposes. This has made it possible for wealthy and sophisticated individual investors to reduce their firm-specific risk, by means of fund pooling and portfolio diversification without causing a significant rise in the agency costs they bear as owners of corporate equity. It has also contributed to the rapid rise in the number of institutional investors in the developed world (see above and Chapter 2).

The institutional change perspective: market institutions and adaptive efficiency

The establishment, operation and evolution of the market are governed by market institutions, or as North (1990, 1997) puts it, institutions are the 'rules of the game' in a society.⁶ They are the rules that society establishes for shaping human interaction. Institutions reduce the uncertainty involved in human interaction by providing patterns of behaviour. Because of the set of institutions we have, most daily interactions are routine, so the implicit importance of institutions is often ignored. In a static sense institutions, together with the technology they employ, define the costs of transacting and the options that organizations in society have when capturing the gains from specialization and the division of labour. In a dynamic sense, institutions define the incentive structure under which organizations operate and determine the ability of organizations to evolve and advance technology.

The institutional framework includes three components: formal rules, informal rules and enforcement mechanisms. Formal rules are the written rules of society and include political and judicial rules, economic rules and contracts. Informal rules are the unwritten rules of society and include consensual conventions that evolve as solutions to coordination problems, norms of behaviour that are recognized standards of conduct, and self-imposed codes of conduct. Informal rules allow people to engage in everyday exchanges without needing to work out the terms of exchange. Informal rules can be so ingrained that people are not even aware of them. Rules are often ineffective if they are not enforced. For the enforcement of formal rules, an effective and impartial legal system of laws and courts is usually needed. For informal rules, societal sanctions help to enforce norms of behaviour, and strong normative personal standards of honesty and integrity undergird self-imposed standards of behaviour.

It is easy to claim that efficient markets are a consequence of institutions that provide low-cost transactions and enforce contracts at a moment in time. However the concrete institutions operating in a society are rooted in societal structures and have developed through adaptive evolution. Therefore they cannot be directly replicated across different societies. If an economy is to be dynamically efficient the institutions in that economy must be adaptively efficient; that is, capable of providing economic and political flexibility so that organizations and people can adapt to new opportunities. They must provide incentives

for the acquisition of knowledge and learning, induce innovation and encourage risk taking and creative activities. They must also encourage trials and eliminate errors in a world of uncertainty where no one knows the correct solution to the problems they confront. Similarly, if an organizational structure is to be dynamically efficient it must be adaptively efficient. It must be able to find new and creative solutions to shortages of resources and other social/economic bottlenecks. If one method does not work, it must be willing to try new methods until successful outcomes are achieved.

The arguments in the previous paragraph are most relevant to transitional and developing economies. Today's mature market institutions and organizational forms first took root in developed economies many generations ago. A brief list of such institutions includes entry with low barriers and exit through well-established procedures of bankruptcy and liquidation; efficient financial and insurance institutions and organizations; antitrust legislation and its strict enforcement; rigorous accounting standards and their enforcement; a well-developed financial press; enforcement of contracts; sustainable social security nets; and so on. However for most economies at the beginning of transition there are no such market institutions and organizations because until recently the government controlled almost everything in the economy. In most developing economies, although there has been a base from which those institutions and organizations could evolve, the task of building up well-functioning market institutions is still very large and difficult to manage.

Market institutions and organizations cannot emerge from scratch, but the direct transplantation of market institutions rarely succeeds. Institutional and organizational innovation is not immediate replacement of the old structures by the new ones – it is a market-learning process, a process of dynamic transformation. New elements usually emerge in tandem with rearrangement of the existing institutional and organizational structures (Williamson, 1991, 1995). The process typically goes beyond the existing paradigms and evolves from sequences of progress in know-how, economizing behaviour in adaptation to changes, technological innovation and a multitude of cumulative and mutually reinforcing choices by numerous actors who have diverse interests and constantly evaluate alternatives and reconsider their previous views. In brief, transitional economies need transitional institutional arrangements that are adaptively efficient in the light of the fact that the transition process might be quite lengthy.⁷

Implications for developing and transitional economies

The theoretical emphasis of this book is on the relevance of the concrete institutional context, the technological environment and the regulatory set-up to the determination of ownership and governance structures of the firm, and on the rationality behind the emergence of unconventional ownership and governance structures of firms in the industrial sector. A major conclusion in this regard is as follows. Given the existing variations and foreseeing further changes in technology, the competition framework and the regulatory set-up, the major players of the corporate game, including owners, managers, employees and other stakeholders, have the incentive to calculate the comparative costs and benefits of feasible ownership and governance structures and to look for a desirable equilibrium in the power game. The basic features of this desirable equilibrium is that the firm's owners and employees will be able to keep managers' opportunistic behaviour in check, owners and managers will be protected from employee extortion or shirking, and managers and employees will be able to hold the opportunistic behaviour of owners in check and realize a reasonable return on their firm-specific investments. The means of achieving this equilibrium are not unique and alternatives are often possible.

Furthermore, provided that the technological and institutional contexts are kept stable and the firm has an opportunity to grow, the restructuring of the ownership and governance arrangements should focus on minimizing the organizational and transaction costs. However in more dynamic environments the key to success is to achieve the best growth opportunities possible from the firm's assets. Against such a dynamic background, an adaptively efficient form of ownership and governance would be characterized by its ability to organize a web of specific investments in and around one or more crucial resources that are inextricably linked to the best growth opportunities. More concretely, in a highly dynamic environment the aim of ownership restructuring is to ensure that the power to make strategic decisions is allocated to the people with the best growth potential.

In terms of policy implication, we would like to highlight several general lessons for developing and transitional economies, based on the analyses in this book. First, hybrid forms of ownership and governance structures may have greater significance in developing and transitional economies because firms have to use institutional, social and intermediary resources from different channels, formal or informal. The hybrid structure can help them to reduce uncertainty in interorganizational

relationships involving bilateral or multilateral dependence and can supply them with an elastic contract mechanism to facilitate continuity and dynamic adaptation. The evolution of the ownership and governance structures of China's TVEs is the most striking example of this. In fact even in the developed world employee stock ownership has the hybrid advantages of both stock ownership and employee ownership. The Mondragón cooperative group has successfully combined the collective motivation of its members with the incentive of individual ownership of internal capital accumulation. The cooperatives in the Mondragón and La Lega groups all depend on their strategic alliances and networks to overcome the shortcomings of conventional cooperatives in the areas of capital financing, marketing and research and development. These innovative practices intend to take advantage of more than just one institutional and/or organizational resource. They are certainly instructive for decision makers and entrepreneurs in developing and transitional economies.

Second, the traditional dichotomy between 'nationally controlled SOEs' and 'conventional private ownership' is narrow in perception and harmful in practice because it leads to ignorance of the rich variety of ownership forms, which are typically linked to local innovations. While a national government typically has the power to allocate both fiscal and monetary resources, local governments in general and those at the lower level in particular are much less likely to enjoy such power, and even when they do it can be removed relatively easily, as shown by China's experience of fiscal decentralization and monetary centralization. In this regard the emergence of local government ownership in the SOE sector in Russia and other former Soviet countries may lead to the effective restructuring of locally controlled SOEs, provided that the urgently needed linkage between local fiscal revenues and local economic prosperity can be attained (Sun *et al.*, 1999: ch. 6; Zhuravskaya, 2000).

Community governments at the grass-root level deserve special attention in developing countries. These governments have no authority over credit decisions because they occupy the lowest rank of the government hierarchy. They have no power to regulate the market to keep out competition, simply because the community market is both small and limited. As a consequence these community governments are usually confronted with a hard budget constraint and tight competition discipline, and therefore their economic activities may be much more healthy and efficient than those conducted by governments at higher levels. The key question in many developing countries is how to mobilize

community governments and other community-based organizations to support or even initiate local enterprises. The experience of the Chinese TVEs may be instructive in this regard.

Third, a substantial number of writers have shown that privatization is not a sufficient condition to improve SOEs' performance (Kornai, 2001; Megginson and Netter, 2001; see also the references in Chapter 5). When the main problem is a soft budget constraint it is essential to find an initial mechanism to harden the budget constraint. This is of particular relevance for transitional and developing economies. The experience of Italian SOEs shows that relinquishing economic policies to a supranational institution may be an effective way of mitigating the time inconsistency problem of national governments (by limiting their power of discretion) and constraining SOEs' budgets. Supranational pressure, such as that exerted by EU economic policies on member countries, is a mechanism that works through both macroeconomic and microeconomic channels and forces the implementation of economic and institutional reforms. This mechanism is already at work in those transitional economies which have applied to join the EU and it is forcing them to accelerate the transition process. Hardening the budget constraint of all firms, not just state-owned ones, in transitional economies is a necessary step towards enabling them to face product market competition. Creating an appropriate legal and institutional environment is another necessary step. As remarked by Svejnar (2002: 26), the transition process will be over when these countries become 'partners with the relatively advanced countries in the world in general and with Western Europe in particular', in short, 'when they fully enter the European Union'. The EU is unique in many respects. Its legislative power and related law enforcement, its political institutions and its monetary authority make EU policies a particularly effective external anchor. However supranational pressure on SOEs does not need to come just from the EU. In other parts of the world it could be exercised through, for example, the conditions attached to IMF or World Bank programmes or the rules of the WTO.

Fourth, the evolution of institutional ownership in the developed world offers meaningful and instructive lessons to developing and transitional economies. The establishment of a fully funded, privately managed, defined-contribution pension scheme has been an ideal in most transitional and developing economies since the 1980s. For those countries with an unfunded pay-as-you-go (PAYG) pension scheme, the desire to shift from the PAYG scheme to the above model has determined the nature of pension reforms (Holzmann, 1997). In the future

pension funds will be a major player in institutional ownership in these countries too, as shown by the experience of Chile in the 1980s. Learning from the developed world by imitating successful innovations and avoiding the setbacks will bring advantages to less-developed countries in terms of promoting the development of financial institutions and institutional ownership and modernizing their financial markets.

Furthermore, as discussed earlier, open-end mutual stock funds possess certain features of collectivist individualism, and could play a significant role in transitional economies and some developing ones where low levels of wealth but an egalitarian distribution of wealth have been the norm. Using open-end mutual stock funds to pool capital from individual small investors and then investing this in the shares of corporations, with the help of skilled fund managers, would make a significant contribution to capital accumulation in these countries. The fact that capital placed at the disposal of an open-end mutual fund can be withdrawn by its investors without seriously compromising its commitments to others is a very desirable feature for small investors with a low level of wealth. To make this type of financial institution work in transitional and developing countries the transfer of know-how and technical assistance is essential. International financial institutions such as the World Bank and international financial investors could play an active part in this.

Fifth, scholars often depict institutions and organizational forms that are popular in the West as 'best practice institutions' and recommend that other countries adopt them as quickly and exclusively as possible, generating a degree of pessimism among scholars and the public about transition and development. We recommend a search for more effective institutions that are adaptable to the environment and responsive to changes brought about by innovation and reform. Some of these may eventually converge with the existing 'best practice institutions', some may not. Some of them may evolve into a new type at certain stages and in certain periods, but they will not stay the same forever. Some new 'best practice institutions' may emerge as hybrids of the existing ones and other less perfect institutions. Nowadays we are aware of the importance of biodiversity and genetic diversity, and there is no reason to reject a diversity of institutional and organizational forms.

Notes

- 1 Employee ownership in transitional economies has quite different features. This will be discussed below and in Chapter 6.
- 2 For critical reviews of this prediction see Bonin *et al.* (1993) and Blair (1995: 298–303).

- 3 The system of individual internal accounts is based on each cooperative in the group putting 70 per cent of its surplus into the system, and each member of the cooperative has an internal account. Each individual account has a record of the receipt of the surplus portion earmarked, and the corresponding amount is then automatically loaned back to the cooperative, with interest paid. Upon leaving a member receives 75 per cent of the accumulated funds credited to his or her internal account; the other 25 per cent is retained by the cooperative for capitalization. This system allows the cooperative to mobilize almost 100 per cent of its annual profits for capital financing (Benello, 1996).
- 4 Future investments are options that the firm can exercise at will, and as such they have to be valued. The real option approach to investments and valuation is only now spreading outside academia and becoming common, although as yet there is no standard technique. Unlike financial options, which are well-specified contracts with a clear owner and a defined payoff, real options rarely have these features, except for exploration rights. Many real-world growth options are not clearly allocated to one owner and their payoff is highly dependent on the way in which the option is exercised. In other words the payoff is endogenously determined rather than exogenously specified, as in the case of financial options.
- 5 The most famous example of vertical integration is the Japanese *keiretsu*, in which a series of suppliers and retailers are tied to a principal manufacturer, often through cross-shareholdings. This system worked very well for several decades, but is now seen as inefficient, expensive and outdated (*The Economist*, 1 April 2000: 72).
- 6 The concept of institutions adopted in the institutional change literature usually includes organizations and is more in line with the one used in daily conversation. According to North (1990, 1997), institutions are 'rules of game' and organizations are groups of individuals bound together to achieve some or other objective.
- 7 According to the perceptive remark of Abba Lerner: 'In the long run we just arrive at another short run' (Colander, 2002), while William Baumol (2000) states that 'All of history may be a tale of transitory behaviour and nothing else'.

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