How to Keep a Secret – The Decisive Advantage of Corporations

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Chapter 7
How to Keep a Secret – Corporations

In the 1950s socialists around the world built gigantic steel plants like Nowa Huta in Poland. By the 1980s they were losing vast amounts of money and they seemed destined to die a slow death by rust. Lakshmi Mittal, who led the international operation of an Indian steel business built by his father, believed that these industrial dinosaurs could flourish in the age of mammals. He had novel ideas to reorganize them, and he thought that the Asian construction boom would lift world steel prices. He proved right on both counts. In the late 1980s he used family money to buy ailing steel companies in Indonesia, Mexico and Kazakhstan that nobody else wanted. He was the only one who could see how to turn them around. Acquiring Nowa Huta in 2003 was a large step to becoming the third richest person in the world as reckoned by Forbes in 2005.

What do entrepreneurs like Mittal know that others don't know? First, they know how to organize a business. Reorganizing gigantic steel mills to make them smaller and more profitable requires massive changes in offices, roles, and the people who fill them. Second, entrepreneurs like Mittal know better than others what prices the future will bring, so they know which lines of business to expand and which to contract. Knowledge of organization and future prices convey a decisive advantage over competitors.

The last chapter concerned financing new ideas through credits, bonds, and stocks. The corporation is usually the best form of organization to protect entrepreneurs from losing their ideas and to protect investors from losing their money. Given effective law, the parties can structure the corporation so that investors make more money by keeping the firm's secrets than by sharing them with others, and entrepreneurs make more by developing the business than by appropriating the investors' money. Effective organization and law release creativity to make wealth, whereas ineffective organization and law channel energy into taking wealth from others.

Chapter 1 described the life cycle of innovation: In the beginning, a new idea is developed by combining it with capital, which yields a competitive advantage. Entrepreneurs like Mittal use private information to form companies that earn extraordinary profits. The firm prolongs extraordinary profits by slowing the diffusion of private information. When a firm succeeds, however, competitors smell money and pursue the innovator. Eventually the competitors catch up, the innovative ideas diffuse, private information becomes public, average productivity rises, and the innovating firm's profits return to the ordinary level. Thus the social justification for corporations is the same as for patents: Effective corporate law enables innovators to earn monopoly profits temporarily. Temporary monopoly profits drive innovation and sustain economic growth. Over the life cycle, society gains more from growth than it loses from an innovating firm's temporary monopoly.

Since the corporation usually provides the best solution to the double trust dilemma, corporations have grown faster than other forms of economic organization and they dominate the modern economy. This chapter explains how corporations solve the double trust dilemma, and how weak law retards its solution in poor countries.

Corporations as Organization

Organizations generally have a structure of offices created by contract and law, such as Chairman, Treasurer, or Ombudsman. While some members of organizations have offices, all members have roles to play. Standardization in the division of labor creates roles like bookkeeper, mechanic, or purchasing agent. By supplying a structure of offices and roles, organizations coordinate the behavior of its members. When coordination is very tight, members act together for the same ends. Chapter 4 defined an organization as a structure of offices and roles capable of corporate action.

In these circumstances, observers speak as if the group has goals, purposes, intentions, strategies, interests, wishes, and acts. These are the mental attributes of a person. An organization can also be defined as a *personified* group of individuals. As organization tightens and the members pursue common goals, personification becomes more appropriate, as with a corporation, partnership, army, religious sect, football team, or symphony orchestra. Conversely, as organization loosens and the members pursue different goals, personification becomes inappropriate, as with a market, nation, religious denomination, football league, Congress, or music competition.

Economic life mostly occurs in organizations and markets. Markets surround economic organizations, supplying their inputs and buying their outputs. Markets are organized, but they are not organizations.[1] Goals, purposes, intentions, interests, wishes, or acts are not attributed to markets, except metaphorically. Markets have causes and effects, notably the creation of prices, but not intentions and acts. Unlike many organizations, a market is not a legal person. It cannot own assets, sue, or be punished. The participants in a market are people, but the market itself is not a natural or legal person.

Chapter 4 explained that most organizations own property and some organizations *are* property. Partnerships, corporations, and other kinds of firms can be bought and sold. A buyer acquires rights to the firm's profits and power over its organization. In contrast, no one owns clubs, churches, cooperatives, trusts, charities, or the state. Being unowned, no one can buy or sell these organizations. Such an organization can sell its property -- land, buildings, machinery, etc., -- but not itself.

All markets, including markets for organizations, tend to move property from people who value it less to people who value it more. Owners mostly value

[1] Theorists who want to efface the difference between markets and firms stress that firms are a nexus of contracts. A firm is a nexus of contracts, but this is not a defining characteristic. Almost any large organizations is a nexus of contracts, even if it is not a firm (e.g. a university, a symphony orchestra, or the department of highways). Also, some non-organizations form a nexus of contracts such as a stock market, a middle eastern bazaar, or the bar. For the firm as a nexus of contracts, see Jensen, Meckling, Easterbrook & Fischel.

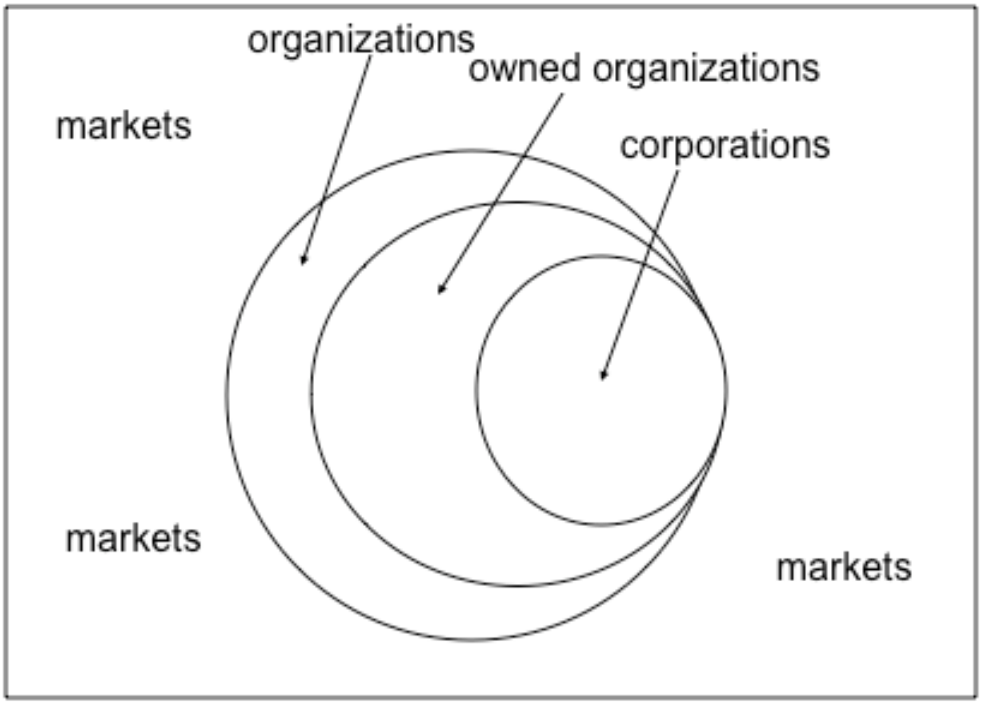
a business according to how profitable it is. If someone else can make more money from a business than its current owner, both of them can benefit from its sale. The market for organizations pressures the owner of a business to maximize its profits or sell it to someone else.[2] Owned organizations stay more focused on making money, which is why they dominate the economy.[3] Unowned organizations tend to focus on other goals, which is why they play the central role in government, religion, and social life.

Figure 6.1 depicts the forms of interaction that we have discussed: As explained, markets surround organizations, but markets are not organizations. Some organizations are owned, and one type of owned organization is the corporation.

[2] Henry Manne is especially responsible for developing the argument that the market for corporations will keep them focused on maximizing the value of the firm's stock. CITE

[3] Firms should focus on nothing but making money, according to Milton Friedman's essay, "The Social Responsibility of Business is to Increase its Profits," The New York Times Magazine, September 13, 1970. Easterbrook and Fischel agree with Friedman in their influential book, The Economic Structure of Corporate Law (Harvard University Press, 1991). From this viewpoint, corporations should advance the interest of shareholders maximally, and not concern themselves with the interests of stakeholders such as employees, the local community, or charities.

Fig 6.1. Economic Interactions



What distinguishes the corporation from other owned organizations? Some organizations like a partnership, church, club, or family have an existence apart from the state. They exist in fact, whether or not the state recognizes them in law. Other organizations like a corporation, trust, the bar, or the Department of Commerce, come into existence through law. Without going through steps prescribed in law, a corporation seldom exists in fact.[4] As the state's creation, a corporation has whatever powers and liabilities the state gives it. Different legal traditions give different legal powers to different kinds of corporations, such as the joint stock company, the public limited liability company (Aktiengesellschaft), the private limited liability company (Gesellschaft mit begrenzter Haftung), the non-profit corporation, the S corporation, the banking corporation, the co-determined corporation, and the cooperative corporation.

[4] There are some exceptions, notably informal investment schemes that look a lot like a corporation without having a legal existence. Thus a group of businessmen in San Francisco's Chinatown consulted a law professor at Berkeley about a dispute within their corporation, even though it had no legal existence. They told him that it was "Chinese corporation."

Instead of focusing on differences, we will focus on a common type of corporation: the “joint stock, limited liability” corporation. All organizations that engage primarily in economic activities are loosely called “firms,” especially owned organizations. To characterize the joint stock, limited liability corporation, we will contrast it with two other types of firms: a personal organization (“sole proprietorship”) and a partnership (“general partnership”).

A personal organization is the owner’s property like his clothes and furniture, not a distinct legal person. Its debts are his debts, its liabilities are his liabilities, and its income is his income. It cannot own property, contract, and sue or be sued. The owner has complete power to sell the organization or reorganize it.

In contrast, a legal partnership is a person in law, distinct from the partners in it. It can own property, contract, and sue or be sued. The partners form a legal organization by drafting a partnership agreement that specifies many things, including its governance. Power among partners is negotiated. In the simplest form of governance, the partners vote equally on fundamental matters affecting the partnership. The partners usually want control over who can join them. Consequently, the partnership agreement usually restricts the ability of a partner to sell his membership to another person. Partners traditionally have unlimited liability for the partnership’s debts, although the law is changing.[5] The partnership traditionally does not pay taxes directly. Instead, its profits are attributed to the partners, who pay personal taxes on their income from the partnership.

Now we contrast a personal organization and a partnership with a corporation. In the traditional form of corporation, investors have votes in proportion to their investments (one stock, one vote), so they control the organization jointly and unequally. In most companies, a small block of shareholders – the “control block” – owns enough shares with voting rights to control the company. Unlike a partnership, each investor can sell his shares in

[5] Limited liability partnerships are important in Germany.

the company to another person without obtaining the consent of other investors. Like a partnership, the corporation is liable for its debts. Unlike a partnership, the liability of investors is limited to their investment in the corporation. The corporation's creditors cannot reach into the personal property of its investors. The corporation pays taxes on the profits that it earns. When it distributes profits to its investors, the investors pay personal income taxes on these dividends.

Figure 6.2 summarizes these broad generalizations about the three fundamental types of firms.

Figure 6.2. Three Fundamental Types of Firms

	Personal	Partnership	Corporation
Legal person?	No	Yes	Yes
Power	Individual owner	Partners negotiate	Controlling shareholders
Liability	Unlimited	Unlimited	Limited
Taxation	Individual owner	Partners	Corporation and stockholders

The Corporation's Decisive Advantage

All three types of organizations in Figure 6.2 have a place in modern economies, but corporations dominate by growing faster than the others. According to the theory of this book, the organization that best solves the double trust dilemma grows fastest. Why does the corporation solve it best? To answer this question, we briefly describe a decisive legal development in the history of the joint-stock corporation.

The modern corporation has many antecedents. One of the most important developments for modern business occurred in the 17th century in England and Holland. In London or another port, a bold ship's captain would propose that investors finance a voyage to Asia to buy spices. Such a voyage required a large ship outfitted for 2 to 5 years of travel, so the captain needed capital from investors. The ship's captain had many secrets about where to go in Asia and how to get there. The voyages were highly risky because the English preyed on Dutch ships, the Dutch preyed on English ships, and other pirates preyed on both of them. Also the captain might steal the cargo and the ship.[6]

Like start-ups in modern Silicon Valley, these voyages involved up-front investment, private information, high risk, and high return. The solution to joining capital and ideas was much the same in the 17th and 20th centuries. The parties made an agreement in which the investors had an incentive to keep the captain's secrets because they stood to gain so much from the success of the voyage. Similarly, the captain had an incentive to use the funds as planned for the voyage because the expected profits for him were higher than stealing the cargo and ship. So the self-interest of the parties made their agreement largely self-enforcing.

After the formation of the East India Company in 1600, English investors received shares entitling the owner to part of the voyage's wealth.[7] When the townsmen spotted a vessel returning to the harbor after a voyage of several years, the investors rushed to the docks to monitor the cargo. At the dock a "general court was called," meaning a meeting of all shareholders. The general court divided the cargo and then dissolved the company. This process resembles the sale of a Silicon Valley startup to an established company, or the sale of its stock in an initial public offering. The investors and captain "exit" from a private venture by selling it.

This brief history reveals the decisive advantage of the corporation over other forms of organization. To develop risky innovations, greed must overcome fear. To overcome their fear of losses, investors need a share of future profits. If their share is large, as with concentrated ownership, they can be trusted to keep the firm's secrets. If the innovation succeeds, many investors will want to cash in and move on. The most efficient way for an investor to extract value and exit

[6] Harris, R. (2004). Institutional Innovations, Theories of the Firm and the Formation of the East India Company. Berkeley Law and Economics Workshop. Harris, R. (2003). "The Uses of History in Law and Economics." Boalt Working Papers in Public Law paper 21. GET CITE TO PUBLISHED PAPERS.

[7] The joint stock company has earlier origins. In the middle Ages the republic of Venice monopolized trade with Alexandria, through which flowed the products of Asia. The Venetians improved a legal form from classical Roman times (fraterna compagnia). In case of a loss of a ship, every merchant lost a share instead of one merchant loosing everything. See H.W. Sinn, …

from an organization is to sell his shares. The joint stock company is a decisive improvement in financing innovation because investors receive a *marketable share of future profits*. In contrast, partners get a share of future profits but their rights are not freely marketable. And a personal organization provides no mechanism to guarantee investors a fraction of its future profits.

Chapter 5 explained that insiders could steal from stockholders easier than from bondholders or bank creditors. Special features of the 17th century voyages from Europe to Asia made stockholders relatively easy to protect. As a matter of practical necessity, the ship usually needed to return with its cargo to the port of embarkation, where investors could see the results and divide the wealth. In contrast, a factory yields a stream of production over time, so insiders can disguise and divert profits relatively easily. After creation of the joint stock company in the 17th century, many small improvements in law and institutions were needed in the 18th and 19th centuries to extend stock financing to manufacturing. Improvements include routine incorporation (incorporation by anyone using simples laws, not by a grant of executive privilege to a political favorite), broadening the range of businesses that a corporation can enter (general incorporation instead of incorporation for a single line of business), accounting techniques, limited liability, reporting requirements, and banking regulations.

These improvements mostly have a one purpose: To separate the company's assets and liabilities from that of other legal persons. For investors and innovators to cooperate, law should prevent insiders from converting the company's assets into their personal wealth. Similarly, law should prevent the company's creditors from converting its debts into the personal debts of its investors, especially its outside investors.[8] Improvements in partitioning assets enabled the corporation to spread into manufacturing in the 19th century. These legal improvements probably contributed as much to the industrial revolution in Britain as factors usually cited like scientific progress, capital accumulation, and

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[8] Cite Hansmann and Kraakman's history.

labor mobilization.[9] Conversely, holes in the partition between corporate and personal assets retard the growth of corporations in poor countries today. Before turning to that topic, however, we must relate our account of corporations to a fundamental question about the size of firms.

How Big?

Shopper's Stop is a department store in Mumbai that sells much the same goods as the Connaught Place market in New Delhi, but in a very different way. Shopper's Stop is a one massive store with hundreds of employees selling goods in different departments. In contrast, hundreds of small, independent shops rent space in an underground structure at Connaught Place. Competition drives firms towards their most profitable size. If small firms are more profitable, why doesn't Shopper's Stop dismiss its employees, divest its departments, and rent space to many small sellers as in Connaught Place? Conversely, if large firms are more profitable, why don't the small firms in Connaught Place merge to form one or two large firms like Shopper's Stop?[10]

This is the "divest-or-merge" question. Similar questions also affect the size of firms. Thus Kia, a Korean car manufacturer, needs tires for the cars that it produces. If it makes tires in a subsidiary, then Kia becomes that much bigger. If it buys tires from another firm, then Kia remains that much smaller. This is the "make-or-buy" decision. Other such decisions include hire an employee or buy a service, rent a building or buy it, self-insure or buy insurance, acquire a firm or buy its products, and liquidate a firm or continue in business.

The double trust dilemma suggests how a firm will make such decisions. A firm combines private information and capital in an organization. The longer an

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[9] Page 1 of Phyllis Deane's pioneering economic history, The First Industrial Revolution (1965, Cambridge Univeristy Press), lists seven "changes in the methods and characteristics of economic organization which, taken together, constitute a development of the kind which we would describe as an industrial revolution." The modern corporate form, or the extension of the joint stock company to manufacturing, is not among them.

[10] Connaught Place is publically owned, so mergers and acquisitions by its leasees would have political implications.

innovative firm can delay competitors from understanding or improving on what it knows, the larger it grows. Once the firm's private information stops being innovative, it loses its competitive advantage and stops growing. A firm should make strategic choices that conserve the value of its private information.

In general, information is easier to conserve for interactions inside the firm than outside it.[11] Here are some examples of such decisions. First, consider hiring an employee or buying a service. If performing a task requires understanding a firm's secrets, the firm should hire an employee to perform the task. Conversely, if performing the task does not require understanding a firm's secrets, it can buy the service from an outside contractor.[12] Second, consider selling a product or the service of the product. Suppose that a firm invents a computer program to perform an accounting task. If it owns an effective patent or copyright, it can sell the program to others to use. If it does not own an effective patent or copyright, it should sell the accounting service to others and keep the program to itself. In general, if law effectively protects ownership of an innovative product, or if the innovation is hidden in the product, then a firm can sell the product. Otherwise the firm should sell a service that it produces by using the product. Third, consider buying a product or buying the firm that makes it. Special know-how imbedded in a successful firm's organization gives it a competitive advantage, sometimes called its "core competence." Information is

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[11] We explain the boundaries of the firm by the need to protect market power by keeping innovations secret. In contrast, a celebrated analysis by Oliver Hart explains the boundaries of the firm as conserving decision-making power. He writes
"...firm coundaries are chosen to allocate power optimally among the various parties to a transaction. I argue that power is a scarce resource that should never be wasted. One implication of the theory is that a merger between firms with highly complementary assets is value-enhancing, and a merger between firms with independent assets is value-reducing. The reason is as follows. If two highly complementary firms have *different* owners, then neither owner has real power since neither can do anything without the other. It is then better to give all the power to one of the owners through a merger. On the other hand, if two firms with independent assets merge, then the acquiring firm's owner gains little useful power, since the acquired firm's assets do not enhance his activities, but the acquired firm's owner loses useful power, since she no longer has authority over the assets she works with. In this case, it is better to divide the power between the owners by keeping the firms separate." Firms, contracts, and financial structure. Oxford and New York, Clarendon Press and Oxford University Press, 1995, page 8.

[12] Joke.
Board member: "Why did you fire our accountant?"
CEO: "He called me an idiot."
Board member: "He should *be fired. Employees can't disclose company secrets."*

"imbedded" in the sense of being part of the firm's routines and culture. If one firm wants the information imbedded in another firm, it should buy the other firm. Conversely, if a firm does *not* want information imbedded in another firm, it can buy the other firm's products and services, or it can buy the other firm's patents, publications, or other explicit information.

In countries with weak state enforcement of business law, firms cannot keep information private by relying on formal contracts or trade secrets. For example, when technology firms negotiate in India, they often do not sign non-disclosure agreements (unlike in Silicon Valley) because they are unenforceable in practice.[13] Neither do they sue for disclosure of trade secrets. In these circumstances, the firm provides a framework for repeat transactions and relational contracting whose effectiveness does not rely on state law. In countries with effective law, the firm primarily uses incentive contracts to make people keep its secrets. Secondarily, the firm uses legal devices such as non-disclosure agreements, non-competition clauses, and trade secrets laws.

Now we return to this section's main theme – the size of firms in a competitive economy. Earlier we discussed Kia's choice between making or buying tires for its cars. In "The Nature of the Firm" (1936), the Nobel Prize winner Ronald Coase analyzed the make-or-buy decision by using the concept of *transaction costs*. Making tires requires KIA to contract with employees and supervise them. These are transaction costs of *making* a product. Buying tires requires KIA to contract with sellers and monitor the quality of the tires. These are transaction costs of *buying* a product. Competitive pressure, according to Coase, should cause firms to minimize transaction costs, including choosing the cheaper alternative between buying and making tires.[14]

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[13] Mitu Gulati provided this information in a personal communication, based on his research into contract practices in India. However, international technology firms operating in India apparently use non-disclosure agreements.

[14] Other types of transactions costs analyzed by economists include agency problems, risk spreading, hold-up, flexicility, and tax avoidance. The "agency problem" refers to the problem of managers controlling employees when contracts are incomplete. See Lynn Stout on team production. Risk spreading refers to such things as avoiding liability in tort. See Brooks on Exxon Valdez. Hold-up involves specific capital investment. See David Teece and Oliver Williamson. Flexibility involves the relative ease of ending a

According to Coase's theory, competition should cause firms to have the size (large or small) and form (sole proprietorships, partnerships, corporation) with the lowest transaction costs. This book emphasizes two costs of interacting: diffusion of information and appropriation of capital. The risks of these losses, which we call the double trust dilemma, are "transaction costs" in Coase's terms. Followers of Coase might say, "The corporation achieved its dominant position by reducing the transaction costs of preventing the diffusion of innovative ideas and the appropriation of investors' money."

Innovation and growth explain the size of firms in a market economy. A different dynamic controls the size of firms in a socialist economy. Under central planning, firms throughout the communist world like the Nowa Huta steel mill grew vastly larger than under capitalism. Socialists celebrated eliminating markets by absorbing transactions into gigantic firms. Transaction costs theory suggests why this happened. One large firm has a natural advantage in political influence compared to two smaller firms of the same aggregate size. In other words, political influence is subject to economies of scale. Under socialism, political influence determined the central plan, which allocated capital for firms to grow. Thus a politicized economy helped the larger firms to grow even larger.[15] The political explanation of gigantic firm under socialism also applies to large private firms that deal primarily with the central government in a mixed economy, such as military suppliers.

Besides employment, gigantic firms supplied roads, housing, health care, schools, electricity, and many other community services. In this respect, gigantic socialist firms resemble the "company towns" built by private firms in the early stages of the industrial revolution in the United States and elsewhere. Under socialism or capitalism, company towns have a gigantic disadvantage for workers: Failure in the core industrial enterprise endangers a worker's job and

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contract and the legal difficulties of firing an employee. Tax avoidance involves various techniques to allocate profits among associated corporations. See John Prather Brown on transfer pricing.

[15] Sajo, A. (1990). "Diffuse Rights in Search of an Agent: A Property Rights Analysis of the Firm in the Socialist Market Economy." International Review of law and Economics 10: 41-60. In general, large firms can overcome the free-rider problem of political lobbying, as explained by Mancur Olson in his classic, he Logic of Collective Action: Public Goods and the Theory of Groups (Harvard University Press, 1965).

his housing, health, schooling, etc. In contrast, failure of a small firm endangers a worker's job but not necessarily his social support system. Company towns correlate employment and lost services, which is risky in a dynamic, changing society. The same is true for worker-ownership of firms. Failure of a worker-owned firm endangers the jobs and wealth of workers, whereas failure of a capitalist firm endangers the jobs of workers and the wealth of capitalists.

The Inverse Tightness Rule

We explained in previous chapters that when state law is ineffective, firms organize on the basis of family, friends, and repeat transactions. Tight relationships in firms solve the problem of combining ideas and capital. The Rothschilds in France, Fiats in Italy, Onassis in Greece, and Birlas in India developed large, profitable family firms. Conversely, when state law is effective, strangers organize firms on the basis of offices and roles. Loose relationships and strong laws solve the problem of combining ideas and capital. *The inverse tightness rules asserts that loose state law causes tight firms, and tight state law causes loose firms*.

Applied to ownership of firms, the inverse tightness rule asserts that loose state law causes concentration and tight state law causes dispersion.[16] Empirical evidence in Figure 6.3 confirms this prediction. The figure divides large firms with publicly traded stock into three types: (i) closely held -- controlled directly or indirectly by one person, a family, or a small group; (ii) widely held -- controlled by professional managers; or (iii) state owned. Countries are arranged in descending order by the proportion of closely held companies. Thus the first row

[16] The most fundamental laws are the rules of property and contracts found in common law and civil codes. Next in importance comes business law. To illustrate, here are some examples of rules of coroporate governance that help to protect minority investors when effectively enforced:

(i) cumulative voting for the board of directors, which helps minority shareholders to elect someone who will act in their interests;
(2) requiring the board to have some directors who are outsiders;
(3) transparent rules for selection of directors to serve on key committees, such as the nomination committee, the remuneration committee and the audit committee;
(4) requiring approval by the board for certain fundamental transactions of the company;
(5) giving one vote per share for all shares, instead of allowing some shares to have more votes than others.

indicates that all Mexican companies in the sample were closely held, and none were publicly held or controlled by the state. At the other extreme, all large U.K. companies in the sample in Figure 6.3 were publicly held. According to Figure 6.3, the widely held corporation represents less than half of publicly trade firms in Mexico, Hong Kong, Argentina, Singapore, and Italy, and more than half of publicly trade corporations in South Korea, France, U.S.A., Germany, and the U.K.[17]

Figure 6.3. Control of large publicly traded corporations in Selected Countries (in percent), 1995).

	Closely held*	Widely held	State
Mexico	100	0	0
Hong Kong	70	10	5
Argentina	65	0	15
Singapore	30	15	45
South Korea	20	55	15
France	20	60	15
USA	20	80	0
Italy	15	20	40
Germany	10	50	25
UK	0	100	0

Source: La Porta/Lopes-de Silanes/Shleifer, Corporate Ownership Around the World, 1998, Table II. [18]

The underlying cause of dispersed ownership is investor protection. Outsiders require much legal protection to invest in companies controlled by others, whereas insiders who control the firm can mostly protect themselves. To illustrate, after the collapse of communism in 1989, Czechoslovakia privatized state firms and gave the stock of the privatized firms to some large mutual funds. To implement wide ownership, the state distributed vouchers to citizens entitling them to obtain cheap or free shares in the mutual funds. Weak law, however, could not stop insiders from diverting profits away from outside stockholders. Without effective legal protection, individual citizens placed little value on the

[17]Other studies confirms the general pattern of Figure 6.4. Erica Gorga cites data that 90% of the firms in a large sample from the Brazilian stock exchange have a single stockholder owning more that 50% of shares. Only a few companies are controlled by a coalition of blockholders. See Gorga, E. (2007). Analysis of the Efficiency of Corporate Law. Latin American Law and Caribbean Law and Economics Association (ALACDE). Interlegis, Brasilia, Brazil.

[18] We thank Florencio Lopez-de-Silanes for help interpreting this table.

vouchers, so public prices plummeted, insiders snatched up shares at bargain prices, and widely held firms collapsed into closely held firms. Voucher privatization, which western economists recommended, also failed miserably in Russia during the transition from communism to capitalism after 1991.

Now we relate investor protection to stock prices more generally. The price of one share approximately equals the future dividends that people expect the firm to pay. With effective investor protection, the sum of future dividends equals the firm's future profits. Conversely, with*out* effective investor protection, the sum of future dividends is less than the firm's future profits, because insiders grab a disproportionate share. The ratio of the firm's market value to its future profitability thus reflects the effectiveness of investor protection.

To demonstrate this fact, economists must solve a statistical problem: They can measure the stock market value of all firms, which is called their "market capitalization," but they cannot easily measure the expected future profits of all firms, including the profits diverted to insiders. Fortunately, firms are the main source of a country's gross domestic product GDP), which correlates with expected future profits. A decrease in investor protection, consequently, should cause a decrease in the ratio of the total market capitalization to the nation's gross domestic product (GDP).[19]

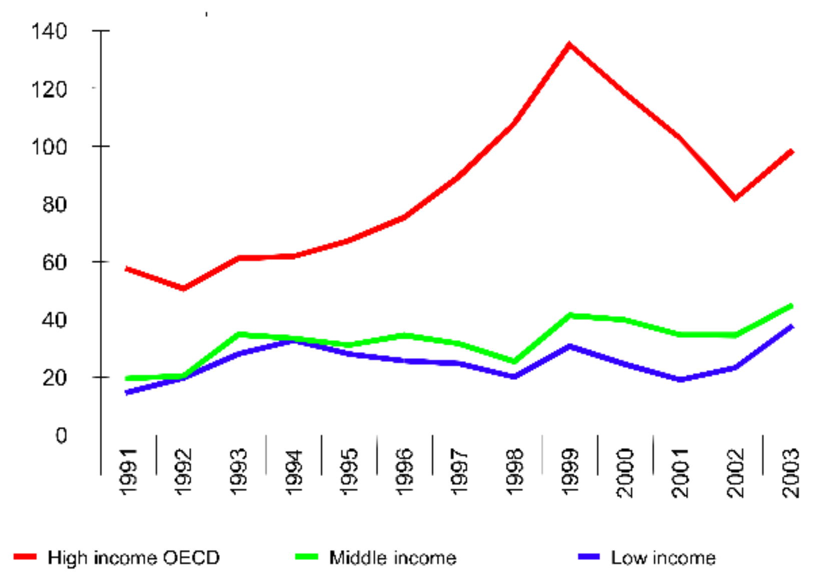
Empirical research confirms this prediction. The ratio of total market capitalization to GDP is roughly twice as large in high-income countries compared to low-income countries, as depicted in Figure 6.4. Furthermore, the ratio of total market capitalization to GDP increases with improved investor protection, as measured by an index of shareholder rights[20] or an index of public disclosure.[21]

[19] Improved investor protection caus an increase in total market capitalizatioin in two distinct ways. First, outside investors bid the stock price up. Second, some strictly private firms offer shares to the public for the fist time.

[20] Cite World Bank Development Indicators.

[21] Note that market captialization as a percentage of GDP increases with an index of public disclosure of company news, as shown by the World Bank Development Indicators 2005.

Figure 6.4. Market Capitalization of Listed Companies as % of GDP



Source: World Bank Develop Indicators 2005

Stock prices also reflect investor protection in another way. If insiders sell the controlling block of shares in a firm, as they do from time to time, the buyers become the new insiders who control the company. The price per share that people will pay for a controlling block of shares is larger than the price that they will pay for a small number of shares. The difference in the stock price between the control block and sale of individual shares is called the *control premium*. To illustrate, if insiders are willing to sell the controlling block for $1.50 per share, whereas outsiders are willing to pay $1 per share for individual shares, then the control premium is $.50 per share.

The control premium is especially large when insiders can divert profits to themselves rather than sharing them with outside investors. Conversely, the control premium is small when effective law gives outsiders their fair share of profits. Nenova calculated the control premium in different countries. In the Czech republic, a controlling block of shares commands a premium of 58% relative to the stock market price. In the Republic of Korea the premium is 47%.

In France and Italy -- countries with a strong legal system but weak minority shareholder protection -- it is 28%. In Brazil and Chile it is 23%. In Germany and the United Kingdom, it is 10%. In the Scandinavian countries, the USA, and Canada, where outside investors enjoy very strong protection, it is less than 5%. Nenova then showed the statistical connection between the control premium and the "rule of law index" that we discussed in chapter 2. As predicted, the control premium falls when the rule of law index rises.[22]

Reform

How can better law help firms to solve the double trust dilemma and increase the pace of economic growth? Having analyzed the facts, we now turn to three possible reforms

Cheap Freedom

In the 17th and18th century, British monarchs created monopolies for privileged subjects in exchange for loyalty and money. A patent or license gave the holder an exclusive right to engage in a certain line of business. Thus the Hudson's Bay Company was incorporated in 1670 with a charter from King Charles II granting a monopoly over trading with Indians in much of northern Canada. Local patents were given for many small businesses like brewing beer. Adam Smith's famous critique of mercantilism claimed that these monopolies enriched the king and his friends and impoverished the nation.

Like 17th century Britain, all countries today reserve some lines of business for politically privileged groups. Some countries require a separate license for pharmaceuticals, securities, cable television, exports, restaurants, real estate, hotels, haircuts, opticians, and so forth. In some of these businesses, consumers want protection from fraud, incompetence, and manipulation,

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[22] Other empirical evidence also supports the conclusion that the control premium falls when outside investors enjoy better legal protection. Thus Nenova obtained the same negative correlation using a more specific index of minority protection of shareholders, instead of the rule of law index. Also see Dyck and Zingales as discussed in Erica Gorga.
Dyck, A. and L. Zingales (2004). "Benefits of Private Control",…

whereas in all of these businesses producers want protection from competition. In every country, shielding privileged firms from competition gives them monopoly profits, and they reciprocate with contributions and bribes to politicians.

In the 18th and 19th centuries, British law changed under the influence of thinkers like Adam Smith. Entrepreneurs gradually acquired the right to form a corporation for almost any business purpose without a special license, patent, or grant of royal privilege. Like 19th century Britain, most developing countries today have a general corporate form for entering many lines of business. This development increases liberty by allowing people to organize and exchange without special permission from the state. Economic liberty releases the energies of entrepreneurs and allows innovation to take its creative, unpredictable path. However, a heavy price for exercising economic freedom stifles what the law permits. The actual price varies from country to country. Thus World Bank survey reported in Figure 6.5 gives the number of days and procedures needed to establish a new business in various countries. According to this figure 6, the regulatory burden on new businesses varies from one country to another, and the burden is especially heavy in developing countries.[23]

The general pattern in Figure 6.5 is convincing, but the numbers contain measurement errors. Comparisons between any two countries must be treated with caution. Unfortunately, anecdotal evidence suggests that this pattern of legal barriers also applies to fees for licenses and registration, bribes paid to expedite processing or relax rules, minimum capital requirements for establishing a limited company, and separate licensing procedures for taxes, social securities and business registration.

[23] In OECD countries the number of procedures to register property was 4.7 in the average in 2004, whereas it was 6.6 in middle and low-income countries (World Bank, World Development Indicators, 2005). Also see Enterprise Directorate General of the European Commission (January 2002), "Benchmarking the Administration of Business Startups," Centre for Strategy and Evaluation Services. This study found that setting up a new company took 7 days in the UK and 35 days in Italy.

Figure 6.5. Legal Barriers to Establishing a New Business

	Time (days)	Number of Procedures
Indonesia	168	11
Brazil	152	15
Venezuela	119	14
Czech Republic	88	10
India	88	10
Argentina	68	15
Vietnam	63	11
Kenya	61	11
Mexico	51	7
China	48	12
Iran	48	9
Nigeria	44	10
Egypt	43	14
Turkey	38	12
Malaysia	31	8
Poland	31	12
Russian Federation	29	12
Chile	28	10
Pakistan	22	10
USA	4	6
Canada	3	2

Source: IFC Annual Report 2004, Stat. appendix

Investor Protection

We have explained that poor countries provide weak legal protection to investors. Even with ineffective state laws, a firm can take steps to make outside investors more secure. The firm can voluntarily introduce transparent reporting, hire reputable accountants, and offer minority shareholders seats on the board of directors. Empirical studies from East Asian countries suggest such measures taken by firms protected outsiders to some extent during the financial crisis of 1997, but protection was insufficient to avoid damaging the region's economies.[24] Effective state laws must supplement private measures for investor protection.

Chapters 4 and 5 explained that enforcing property and contract law on the books is more important in developing countries than rewriting it. In the case of corporations, however, the law on the books often needs rewriting. An

[24] CITE Johnson et al..

empirical study from India provides evidence that rewriting law to increase investor protection can increase the price of stocks. Before 1947, India was a British colony, so its rules of corporate governance were British. From independence in 1947 until roughly 1999, socialist policies made firms increasingly dependent on state finance. Nationalized banks crowded out private financing of large firms. In the 1990s, however, socialist policies were reversed and private investing recovered. In 1999, India adopted major reforms in the law of corporate governance, known as Clause 49, which protect outside investors against wrongdoing by corporate insiders. Provisions include mandatory disclosure, stricter accounting, and managerial responsibility for reporting (much like "Sarbanes-Oxley" in U.S.A.). Clause 49 reforms applied immediately to large firms and gradually to smaller firms. The difference in timing permitted Black and Khanna to estimate the effect of these laws on stock values. Regression analysis concluded that the laws caused the stock prices of affected firms to increase by four to five percent.[25]

Another econometric test of the effect of corporate legal reform on stock prices comes from Korea. In 1999 Korea enacted new laws on corporate governance that became effective in 2000. Under the new law, large firms were required to appoint independent directors, create an audit committee, and create a nomination committee. The result as shown by Black and Kim was a measurable increase in the stock value of affected firms.[26] Apparently these legal reforms made outsiders more secure about investing in Korean firms, all of which are closely held by insiders.

These two studies suggest that, given a reasonably effective legal system, rewriting law-on-the-books to improve protection of outside investors can

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[25] The faster growing, midsize firms benefited most. The increase in stock prices was especially due to an increase in investment by foreigners.Black, B. S. and V. Khanna (2007). Can Corporate Governanc Reform Increase Firms' Market Values? Evidence from India. American Law and Economics Association, Annual Meeting. Harvard Law School.

[26] Black, B. S. and W. Kim (2007). The Effect of Board Structure on Firm Value in an Emerging Market: IV, DiD, and Firm Fixed Effects Evience from Korea. American Law and Economics Association, Annual Meeting. Harvard Law School.

increase the funds reaching new and expanding businesses. Summarizing a decade of econometric research on economic development, Lopez de Silanes concludes, "Investor protection explains the development of financial markets." He favors laws requiring full disclose to outside shareholders of self-dealing by insiders, with effective private enforcement of this right. He stresses that private enforcement of investors' rights is more effective than public enforcement.[27]

Rent a Regulator

We have explained that firms in developing countries need finance from outsiders, but outsiders fear that the legal system will not protect them against insiders. Improving a country's courts can take years. In the mean time, a firm can reassure outside investors by bringing itself under the jurisdiction of foreign courts. Cross listing companies on more than one stock exchange makes the firm comply with foreign regulations policed by foreign regulators, thus signaling that the firm wants its shareholders protected better than its own legal system provides. In effect, firms gain access to outside investors by renting a regulator.[28]

To illustrate, the Russian gas company Gazprom resembled Exxon in its size and scope of operations, but Gazprom's market capitalization in 2001 was 10% of Exxon's. This difference in value mainly reflected the difference in the protection of minority shareholders in Russia and the USA. In 2005 Russia removed restrictions against foreign investors in Gazprom, its biggest state owned company. Gazprom promptly applied to list its stock in the New York Stock Exchanges, as well as in London. To list on the New York Stock Exchange, Gazprom must comply with its rules and also the rules of the U.S.

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[27] Lopez de Silanes, F. (2007). Legal Origins and Corporate Finance. Annual Meeting of Latin American and Carribean Law and Economics Association (ALACDE). Interlegis, Brasilia, Brazil.

[28]Reese, W. A. /Weisbach, M.S. (2000) Protection of Minority Shareholder Interests, Cross-listing in the United States and Subsequent Equity Offerings, mimeo, Tulane University of Illinois, January. Mimeo. S. Claessens, D. Klingebiel, S. Schmukler, (2002) Explaining the Migration of Stocks from Exchanges in Emerging economies to International Centers, Worldbank Discussion Paper 3301. A.Karolyi (1998) Why Do Companies List Shares Abroad? NYU Salomon Brothers Center Monograph Series, Vol7 No. 1, New York University Press p.1-60.

Securities and Exchange Commission.[29] In general, empirical evidence from various countries shows that cross listing increases the share price and opens up more financial resources.[30]

Beyond cross listing, a firm can try to remove its corporate charter and relocate in another jurisdiction. The U.S.A. allows its firms to incorporate under the laws of any one of the fifty states, without regard to the location of their operations. Thus a company whose business operates entirely in Nebraska can incorporate in Delaware, so Delaware law would control most corporate disputes involving the company. Empirical evidence from the U.S. suggests that competition for corporate charters among states probably improved the quality of corporate law.[31] Similarly, the European Court of Justice allowed firms to incorporate in any EU country, regardless of where they operate. Thus Germans established many firms under English law that will operate mostly in Germany.

As the EU shows, courts can facilitate or impede cross-listing and foreign chartering. Cross-listing and foreign chartering leads to disputes that domestic courts should decide by using foreign laws. Also, cross-listing and foreign chartering leads to damage awards by foreign courts against domestic firms that domestic courts should enforce. By enforcing enforce foreign laws and damage awards, domestic courts maintain the credibility of the firm's submission to foreign laws, which attracts more investments in domestic firm.

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[29] The rules include generally Accepted Accounting Rules (GAAP) and reporting rules. P. Didenko (2005), Compliance with the Sarbanes-Oxley Act of 2002, Challenges for Russian Corporate Governance, Discussion paper. Short of listing its stock, a foreign company can gain indirect access to the New York Stock Exchange or other American capital markets by using an "American Depository Receipt" or ADR. In effect, the company deposit stock with an American bank that then sells certifcates (ADRs) entitling the owner to most of the benefits of a stockholder. The ADRs are traded in American capital markets. The foreign firm can choose the extent to which it will conform to American securities regulation. The level of conformity determines the breadth of the markets in which American law allows the ADRs to be sold.

[30] *Stulz, Doidge and Karolyi* examined stock prices for 712 cross-listed firms and 4,078 that were not cross-listed in 1997. They found that "cross-listed stocks were worth 16.5 percent more on average than comparable firms that were not cross-listed. This cross-listing premium was even more dramatic for firms listed on NYSE, where it was 37 percent on average.". *R.M. Stulz, C. Doidge, and G.A. Karolyi, "Why Are Foreign Firms Listed in the U.S. Worth More?" NBER Working Paper No. 8538, October 2001, and Journal of Financial Economics, 71(2), 2004, pp. 205-38.*

[31] Cite Romano, then qualify by citing Bebchuk.

This chapter described the firm as a repository of private information whose dissemination increases productivity. A foreign firm that operates in a developing country transfers capital and innovative ideas to the host-country, which increases productivity and wages. Direct foreign investment is the quickest way to diffuse innovations in markets and organizations to developing countries. Obstructing foreign investment is foolish because it deprives a country of ideas, especially unpatentable ideas about organizations and markets. Consequently, the preceding discussion about cross listing also applies to the subsidiaries of foreign firms in developing country. Like cross-listing, direct foreign investment leads to disputes that domestic courts should decide by using foreign laws, and to damages awards by foreign courts that domestic courts should enforce.

Conclusion

Whereas nations can exchange goods and ideas, they must develop organizations. Nations that develop good organizations can absorb technology and innovate, whereas nations that develop bad organizations can do neither. The law of business organizations provides the framework in which good organizations develop from economic competition. The secret of growth is financing secrets. The corporation became the dominant form of economic organization by solving the double trust problem better than alternative forms. By allocating stock between investors and entrepreneurs, the corporation can align their interests sufficiently for them to cooperate with each other. By internalizing activities, the corporation can keep valuable information private.

Loose state law causes tight firms that limit the number of people with access to its ideas and capital. Conversely, tight state laws cause loose firms that increase the number of people with access to its ideas and capital. Unlike the law of property and contracts, tightening corporate law in poor countries usually requires improving corporate law on the books, as well as improving the enforcement of written law.