

COMPARING CONTRASTS: GOVERNMENT REGULATION OF BUSINESS IN THE UNITED STATES AND JAPAN[†]

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According to conventional wisdom, the United States and Japan could scarcely be more different. No doubt, significant cultural, economic, and political differences exist. But the reasons for government regulation of business tend not to respect national borders. When coordination, division, or defection problems inhibit private parties from transacting business, government regulations can help. If similar problems afflict economic activities in different nations, we should observe similar areas of their economies subjected to regulation and similar regulatory tools applied. From this perspective, comparing government regulation of business in the U.S. and Japan--often taken to be complete contrasts--reveals similarities.

Acknowledging differences between Japan and the United States has become commonplace. The Japanese people value community; Americans value individualism. Following Confucian beliefs, Japanese people are pessimistic about their ability to control the future but optimistic about their ability to resolve the unanticipated difficulties that inevitably

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will arise. That makes them skeptical of contracts because contracts can constrain their ability to respond to changing conditions (Noda, 1976). Following Judeo-Christian beliefs, Americans are optimistic about their ability to control the future but pessimistic about promises to resolve future difficulties. That makes them skeptical of people unwilling to commit to contracts. Japanese society relies upon hierarchy, rewards and consensus. American society relies upon law, penalties, and competition.

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However instructive these differences may be, they obscure fundamental similarities in the way business and government interact. Describing regulation in Japan, John Haley wrote:

[The] process of negotiation resulting in bureaucratic accommodation to economic interests that had access to the [legislature] or other sources of power exemplifies the predominant pattern of governance...Consensus was necessary to achieve compliance and compromise was necessary to achieve consensus. (1991: 158)

But that also describes regulation in the U.S. Legislators and bureaucrats are uncomfortable acting without something like a consensus, at least among the major players. If the regulatory processes in both nations are more similar than conventional wisdom would have it, then the regulations may be more similar as well.

To some extent, this is because Japan reorganized its government and economy under U.S. direction after World War II. For example, we should not be surprised that commercial banks in Japan cannot sell securities. Commercial banks in the U.S. have been prohibited from selling securities since before World War II. But Japan has gone its own way over the past four decades, and still, we can find striking similarities in the range of economic activities that both nations regulate and in the regulatory tools that they apply.

Understanding regulation in practice requires sensitivity to differences in culture, law, political process, and institutional arrangements. Understanding regulation in theory identifies the differences that matter. For example, unlike statutes in the United States, statutes in Japan may grant authority to a regulatory agency to enforce regulations by punishing noncompliance but fail to specify a penalty. The Japanese regulations do not necessarily fail; they rely instead on private enforcement, which can be just as effective, sometimes more so, than statutory enforcement. A theory capable of specifying the conditions under which people regulate themselves by private rather than statutory means can account for that. If the conditions vary across nations and time, the patterns of regulation will differ, but in predictable ways.

Indeed, the problems that motivate people to solicit government action are not unique to one nation, and the solutions that governments create are not crafted in isolation of other nations' experiences. Consequently, we should expect substantial crossnational similarities to arise in the means and end of programs within a given policy area (Rose, 1991). The history of relationships between government and business tells us that regulatory programs

- cope with specific problems arising in everyday life at specific times (Majone, 1991);
- employ practices and procedures with identifiable costs and benefits (Baron, 1993);
- affect business strategies and operating decisions across industries and throughout individual enterprises (Leone, 1986); and
- reflect changes in the economy, society, and technology (Hughes, 1991).

We explore this in the context of the United States and Japan. First, we describe the meaning of regulation, defining the term. Second, we outline transaction resource theory, explaining the demand for regulation (Heckathorn and Maser, 1987) and discussing examples from both nations. Third, we map regulatory practices in the United States and Japan, at least in a rudimentary way, identifying similar patterns in the activities being regulated. We focus on similarities not to deny important differences, but to cast the differences as matters of degree that might be better understood in terms of transaction resource theory.

2. The Meaning of Regulation

The traditional justification for government regulation is to pursue the "public interest." As an abstract exercise, pursuing the public interest promotes harmony. Common interests dominate the rhetoric. As a specific action, it promotes conflict. Clashing interests come into play.

Every nation defines the public interest for itself through its political system. The results typically fall into three categories: economic progress, social equity, and resource efficiency. Economic progress implies full employment, stable prices, and increasing social welfare. Social equity implies equality of opportunity or outcome, civil harmony and tolerance. Resource efficiency implies maximum productivity (accounting for

common resources such as air and water), competitive prices and levels of production, and innovation.

We focus on resource efficiency because that is where most of the regulatory activity occurs. Government efforts to pursue economic progress and social equity tend to be blunt, framing the environment of business decision-making with monetary regulations and welfare programs. In pursuing resource efficiency, government efforts tend to be sharp, targeting individual industries and specific decisions with a variety of regulatory tools.

Every regulation has three elements: a rule, a consequence, and a process. The rule specifies acceptable behavior or outcomes. The consequence defines the rewards for behaving acceptably or the punishment for behaving unacceptably. The process describes the steps for developing the rule and implementing it to produce the consequences. Each of these elements can vary. The question is, why?

3. Transaction Resource Theory

Regulations attempt to solve problems that economic actors experience in creating or sustaining productive relationships. To understand why people turn to a third party, such as government, to assist them by regulating their behavior, we first identify the problems that can inhibit private relationships, and second identify the impacts of regulations. The problems have a common source, uncertainty. The impacts have a common purpose, mitigating uncertainty.

Rational actors want information to resolve three distinct but intertwined problems of cooperation -- coordination, division, and defection. In the simplest relationship between two parties, the coordination problem arises if the parties can misconstrue the feasibility of cooperating and risk hurting themselves in the process. The division problem arises if the parties have

opposed preferences. The defection problem arises if one can gain from acting unilaterally at the expense of the other. Each of these problems corresponds to one of three conditions of rational decision-making that are necessary and sufficient to induce private cooperation (Coleman, et. al., 1989).

First, the expected outcome must satisfy what may be termed joint rationality. Alternative outcomes must be feasible. No one can expect another person to cooperate unless each perceives an opportunity for mutual gain. That is the coordination problem.

Second, the expected outcome must satisfy what might be termed concession rationality. Selecting an outcome requires settling on a distribution of mutual gains, which simply means that the parties negotiate concessions. That is the division problem.

Third, the expected outcome must satisfy what might be termed individual rationality. No participant will permit cooperation to leave himself or herself worse off than the status quo, or disagreement. Each party requires assurance that the other party will comply. That is the defection problem.

With complete information, individuals can determine whether the three rationality conditions are satisfied and so decide whether to cooperate. The demand for information arises from incomplete information about one or more of these conditions. Satisfying the demand for information requires expending transaction resources.

Every group has within it a finite stock of resources that facilitate cooperation. Called *endogenous transaction resources*, these are the prerequisites for coordinating, negotiating, and enforcing transactions. The prerequisite resources for coordinating include knowledge about established

Figure 1

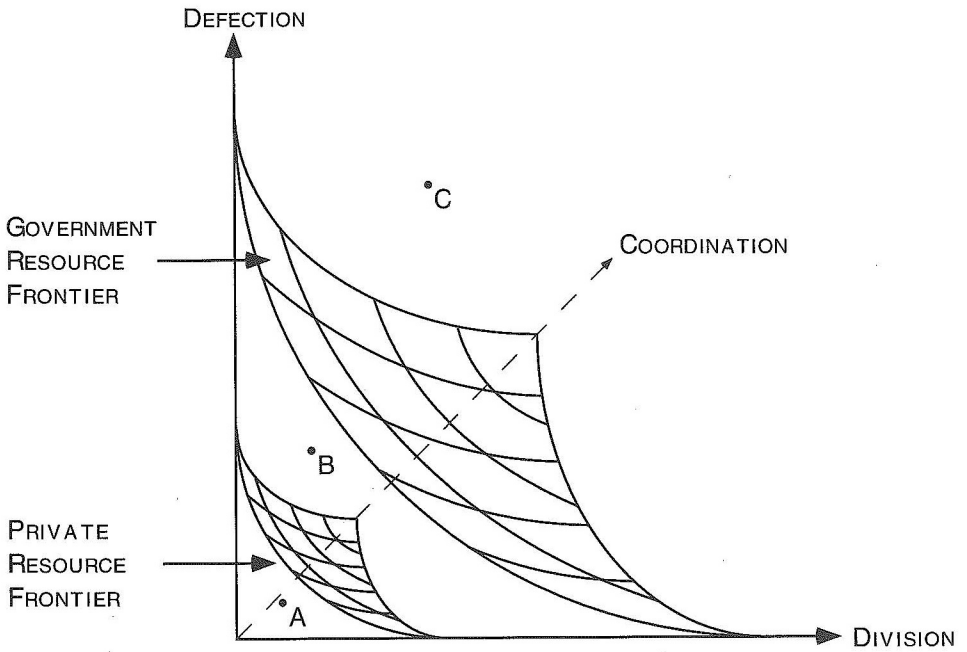


FIGURE 1

TRANSACTION SPACE DIAGRAM

norms, communication channels, and signaling mechanisms. The prerequisite resources for negotiating include information processing capacities and independent sources of pertinent information with which to assess competing claims. The prerequisites for enforcing transactions include the ability to monitor compliance and to sanction noncompliance.

People expend these resources to overcome uncertainties that impede cooperation. They incur search costs when they do not know which alternatives are feasible, bargaining and decision costs when they do not know which alternatives are inequitable, and monitoring costs when they do not know whether one of the parties will default. Combinations of these circumstances arise, creating more complicated problems.

We can think of these problems as locating economic relationships in a *transaction resource space* (Heckathorn and Maser, 1990). In Figure 1, axis 1 represents the magnitude of the coordination problem, axis 2 represents the magnitude of the defection problem, and axis 3 represents the magnitude of the division problem. In relationships close to the origin, point A, people have sufficient resources among themselves to secure cooperation.

In relationships at increasing distances from the origin, indicating that the problems of coordination, negotiation, and defection are more major, the capacity of these resources to sustain cooperation becomes problematic. All else equal, the farther any relationship lies from the origin, the greater the transaction resources required to sustain it. Cooperating eventually fails owing to insufficient or excessively costly transaction resources. The points in transaction space where private relationships fail define the *private transaction resources frontier*. It is convex to the origin because combinations of the three problems draw upon endogenous transaction resources more than any one problem alone.

What places a relationship at point B, beyond the frontier? The greater the spatial dispersion of the parties and the more unstable their

environment, the more costly it is to coordinate behavior. The more difficult it is to monetize the costs and benefits in a relationship and the more disparate the time streams of costs and benefits, the more costly it is to divide them. The more heterogeneous the population and the lower the risk of failure that people will tolerate, the more costly it is to assure compliance. In sum, complexity places bounds on private cooperation.

As private cooperation tends toward failure, interested parties have reason to seek third-party intervention, to regulate. By adding transaction resources, government moves relationships within the frontier. The nature of the problem and the abilities of private parties to sustain relationships on their own determines the form of government intervention. When the primary problem is the cost of searching for feasible solutions, government can conduct research and facilitate communication. When the problem is the cost of negotiating, government can arbitrate. When the problem is the cost of enforcing, government can police.

Of course, adding another party to the relationship introduces a risk that the solution can be worse than the problem. For example, to reduce inflation the United States government attempted nationwide price controls, generating shortages and surpluses. To reduce pollution, it mandated design standards, such as catalytic converters on automobiles, when alternative technologies achieved better performance at lower cost. It also created a commission in the 1950s to promote the peaceful uses of nuclear energy, only to focus on nuclear hazards in the 1980s. Similarly, Japan's Ministry of International Trade and Industry (MITI) spent vast quantities of money to develop a Japanese steel industry that it later decided to shrink. MITI's Fifth Generation Computer Project has produced no fundamental technical advances or marketable products since it commenced in 1981.

The points in Figure 1 beyond which government intervention fails define the *government transaction resources frontier*. Not surprisingly, private interests prefer to rely on their own resources when they can

(Ostrom, 1990). When private cooperation becomes problematic, people prefer to grant government only the authority it needs to resolve the problems at hand (Heckathorn and Maser 1990). If the problems combine elements of coordination, division, and defection in varying degrees, then government regulations will combine elements of searching for solutions, negotiating among affected parties, and enforcing transactions in varying degrees.¹ Using that insight identifies similarities between regulatory programs in the U.S. and Japan.

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3.1 Government Coordinates

The purest examples of coordination concern the rules of the road. Everyone should drive on the same side and stop at intersections. It does not matter what rule applies, so long as someone establishes a rule. Americans drive on the right, Japanese on the left. Green means go; red means stop. The differences between the two are inconsequential (unless a driver or automobile manufacturer from one nation attempts to operate in the other). There is nothing to negotiate; the rules are largely self-enforcing. With communication costs high because there are so many people, government becomes a coordinator, reducing the cost of searching for and establishing a feasible solution.

More sophisticated solutions to coordination problems appear in government-business relationships, albeit not in statutory form. Recruited after graduating college, Japanese officials follow bureaucratic and political pathways to the tops of their ministries, then move into business. The U.S. government recruits top officials from private enterprises to which they return. Despite waiting periods before officials moving to business can deal with their former government agencies, both practices facilitate communication and coordination. Both governments also assemble interested parties, invest in research, and share information formally and informally with private enterprise.

3.2 Government Divides

Fairness matters. Firms may know of feasible ways to improve production safety, environmental quality, and marketing practices. Often the costs can be measured readily, while the benefits cannot, and the costs of achieving uniform improvement differ across firms. That creates a division problem, which requires more information than resolving the coordination problem. In addition to identifying feasible outcomes, parties also want to identify the range of acceptable concessions for distributing the costs among themselves. Consequently, firms may not follow the industry leader or compromise in an agreement brokered by a trade association. To reduce the risk of disagreement and the costs of negotiation, government becomes an arbitrator, or coalition builder.²

In this role, regulators are political actors. Their decisions create winners and losers: enterprises that can comply with regulations at lower cost can gain a competitive advantage. New opportunities for profits arise: regulations that reduce pollution create demand for pollution control technologies. Aggrieved or opportunistic firms can provoke legislators to intervene on their behalf, a consequence most regulatory agencies strive to avoid by negotiating early with parties representing economic and political interests. Since no regulation succeeds without substantial voluntary

compliance, and voluntary compliance is more likely when parties subject to the regulation perceive it to be fair as well as feasible, the process for formulating regulations invariably involves negotiation to produce the information necessary for avoiding unfair results.

Negotiation pervades the process in the U.S. Officials at regulatory agencies, aware that private parties can bring a lawsuit against an agency for acting arbitrarily, have incentives to solicit input from interested parties. Advisory committees abound. On issues that divide industries, like assuring copyright protection for materials produced with digital audio technology, the government may mediate but will not act until the firms agree by negotiating within their trade associations. On issues such as environmental regulation, where regulators must appear to be impartial lest they alienate one of their political constituencies, officials negotiate by soliciting proposals from others and pressing parties for agreements that the government can accept. On issues such as marketing practices, the Federal Trade Commission negotiates consent decrees in which enterprises agree to alter their behavior without admitting to violating a law.

The tendency for Japanese ministries to direct economic activity after substantial prior negotiation, generally with well-organized industry trade associations, is better known. Members of the Diet have organized themselves along ministerial and subministerial lines within their political parties, notably the Liberal Democratic Party, into groups (*zoku*) that serve affected economic interests. Operating through administrative guidance (*gyōsei shidō*), ministries strive to secure consensus on standards and consequences. The viability of this system depends in part on the perceived impartiality of the ministry (Murakami and Rholen, 1992), as in the U.S.

3.3 Government Enforces

The costs of reducing occupational hazards or pollution can be high. Competitive pressure undermines the incentives for each firm to bear these costs. Firms may have the expertise to identify an acceptable standard of behavior and to negotiate the cost burdens, but they do not have the legitimate authority to enforce the standard. Through reputation effects and interlocking relationships, firms, consumers, and employees can discourage noncompliance. However, resolving defection problems is even more costly than resolving division problems. It requires information about each party's incentives to defect. To increase the likelihood of everyone complying with a standard, government specializes in enforcement, reducing the cost of detecting and punishing noncompliance.

In the U.S., regulatory agencies have and use the power to levy fines. Of course, some people claim these fines are inadequate to influence behavior. A primary means of enforcing regulations is to resort to the courts, where an enterprise can be held in contempt even for failing to provide records requested by an agency. U.S. regulatory agencies also have the authority to deny benefits. Under the Community Reinvestment Act, banks seeking to merge or open branches can be denied permission if they have discriminated illegally in approving residential loans. Despite a wide variety of formal sanctions though, the majority of enforcement in the U.S. is informal. The threat of formal sanction induces compliance without actually initiating the enforcement mechanism.

Contrary to conventional wisdom, agencies in Japan also enforce. Administrative guidance, typically described as informal enforcement, is illustrative (Haley, 1991). It works not because a ministry can impose penalties on enterprises that violate the directives it negotiates, but because the ministry controls significant benefits that it can deny to potential violators. If households and enterprises consider the opportunity costs of their decisions, that is, if they are economic actors, then the difference

between incurring a penalty and forgoing a benefit is a distinction without merit, at least for explaining behavior.

For example, MITI provides loans to customers who purchase targeted Japanese products, and allows accelerated depreciation on their purchases; subsidizes research and development with loans and tax credits for producers and their customers; invests funds financed mainly through postal savings and allocated, according to the legislated public Investment and Financial Plan, through public corporations; and authorizes export cartels (Aoki, 1988; Baron, 1992). If MITI stops providing these benefits to an enterprise, the enterprise can do very little about it. Similarly, artificially low interest rates, designed to promote growth, have resulted not from legal enforcement but from voluntary rate regulation guided by the Ministry of Finance and the Bank of Japan (BOJ). A bank lending at a higher rate would experience difficulty when it tried to obtain licenses to open new branches or to borrow money at the BOJ's window (Murakami, 1987).

Japanese laws provide businesses with fewer procedural safeguards against capricious governmental actions than United States laws provide. Cultural and historical circumstances having to do with respect for authority might account for the difference. Two generalizations apply. First, "respect for authority" in effect minimizes the demand for safeguards because it substitutes for expending transaction resources on monitoring government. If respect for authority declines, as it might in Japan because of economic contraction and political turmoil during the 1990's, then more procedural safeguards should appear. Second, credible and enforceable threats are sufficient to induce widespread compliance, whether the mechanism is formal or informal.

4. Mapping Regulation

To the extent that economic relationships between suppliers, firms, and consumers in the U.S. and Japan experience similar problems, we should find the same economic activities subjected to regulation and similar regulatory tools applied. Diagrams 1 and 2 map the distribution of government regulations in the U.S. and Japan. The basic diagram appears in almost any introductory textbook on macroeconomics. It is a simplified picture of a closed economy. In a world of global markets, economies tend to be open. Goods, services, labor, and capital cross national borders, although not with equal ease. Still, the diagrams presented here, which are suggestive rather than comprehensive, display regulations in a manner helpful for making comparisons. Keys to the acronyms appear in the appendices.

The diagrams depict the economy as flows of products (goods and services) and factors of production (labor and capital) in exchange for money. Individual households supply labor and capital to the factor market, and, using the money they earn, demand goods and services in the product market. Private enterprises supply goods and services to the product market, and, using the money they earn, demand labor and capital in the factor market.

The boxes representing the markets depict the classic price equilibria; intersecting curves, showing the quantities supplied and demanded at various prices, identify the equilibria. The inner oval of arrows depicts the movement of labor and capital: from households through the factor market to enterprises--transformed into goods and services--returning to households through the product market. The outer oval depicts the flow of payments: from households through the product market to enterprises, returning to households through the factor market. The bottom half of the diagram, then, depicts the inputs into the economy. The top half depicts the outputs of the economy.

Government regulations either encourage or discourage households and enterprises from engaging in economic activities. Thus, regulations operate upon either the left half of the diagram, where households decide which products to consume and which resources to supply; or the right half, where enterprises decide which resources to consume and which products to supply. In particular, the four quadrants of the diagram, labelled I, II, III, and IV, focus on four decisions that are central to relationships between households and enterprises.

Quadrant I (QI) concerns the decisions by households to allocate their limited revenues (\$,¥) across goods and services (G&S) that have different features and prices. Quadrant II (QII) concerns the decisions by enterprises to allocate their limited revenues in producing goods and services (G&S) with different features and prices (\$,¥). Quadrant III (QIII) concerns the decisions by enterprises to employ labor and capital (L&C) with different prices (\$,¥). Quadrant IV (QIV) concerns the decisions by households to supply quantities of labor and capital (L&C) in exchange for revenues (\$,¥).

We assign national regulatory agencies and laws to a quadrant according to the economic actors and decisions targeted. Which actor receives a reward for complying or a sanction for not complying with a government directive? Which decision has attracted regulatory intervention? For example, on the enterprise side of the U.S. diagram, the Occupational Safety and Health Act defines acceptable behavior in using labor. Legislation authorizes the Occupational Safety and Health Administration (OSHA) to set standards, monitor compliance, and impose penalties. The penalties fall on the enterprise. OSHA affects enterprises by changing the costs and benefits associated with decisions about production processes that pose different hazards to employees. Thus, it appears in QII beside the arrow representing the flow of goods and services.³

The diagrams display federal government regulations. They do not include state/prefectural or local government regulations, nor do they

Diagram 1

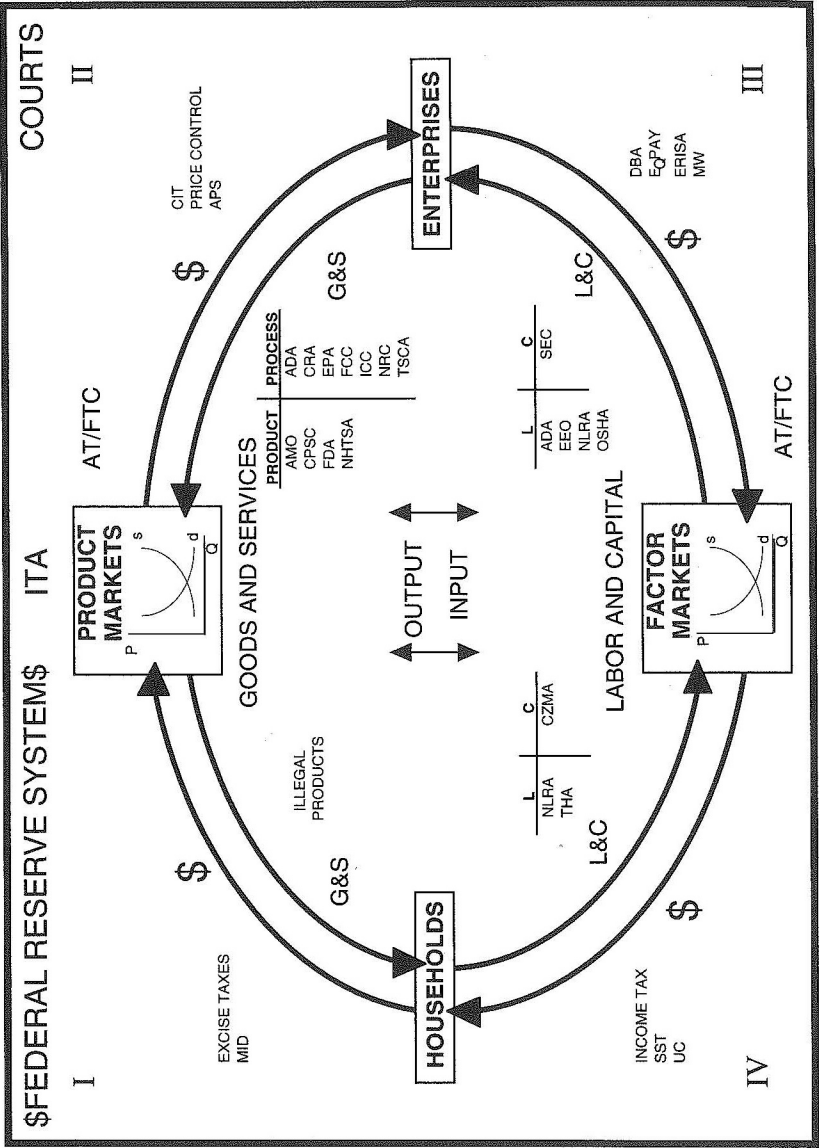


DIAGRAM 1 : GOVERNMENT REGULATIONS IN THE UNITED STATES

Diagram 2

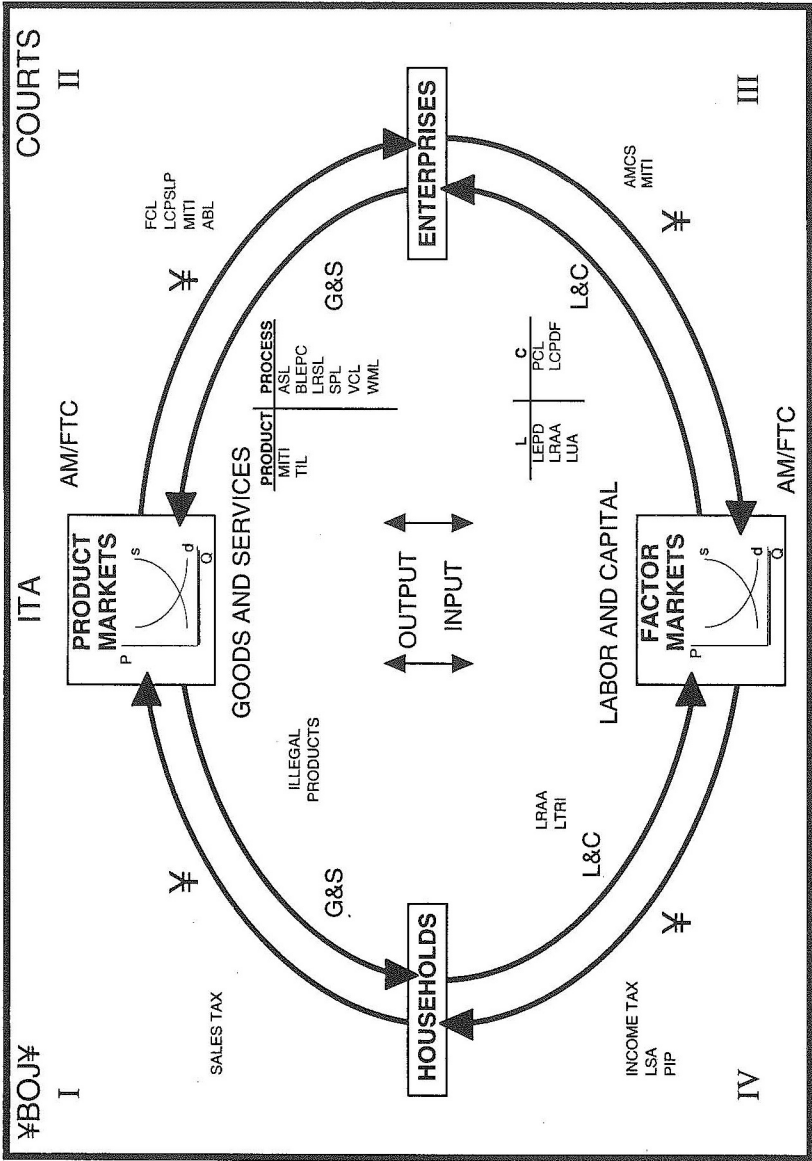


DIAGRAM 2 : GOVERNMENT REGULATIONS IN JAPAN

include government purchases of goods and services. Such purchases influence enterprise decisions by encouraging investment in targeted activities and discouraging noncompliance with government directives for fear of jeopardizing profitable business relationships. Inspecting selected regulatory programs identifies similarities in policy objectives and regulatory tools, highlighted in the following discussion.

4.1 Economy-Wide Regulation

Regulatory tools that influence economic decisions in all four quadrants are relatively blunt, although their effects are not always uniform throughout the economy. The General Agreement on Tariffs and Trade and the emerging regional economic agreements target decisions made by governments, even though the consequences ultimately fall directly on enterprises. The Federal Reserve Bank of the U.S. (FRB), like the Bank of Japan (BOJ), provides liquidity to influence the rate of economic activity, targeting no rewards or penalties directly on specific decisions. Differences exist: the FRB operates independently of the Treasury Department, at least formally; the BOJ operates formally within the Ministry of Finance. But the FRB responds to informal pressure from the Executive Branch and the BOJ asserts its positions informally within the Ministry of Finance.

Judicial actions directly affect individual parties who have brought a dispute before the court. Courts admit people seeking redress, typically **compensation**, for a legally recognized harm that results from another person's decisions. Judicial actions then become binding on everyone, creating incentives to use resources efficiently (Posner, 1986). Of course, Japan adopted German civil law, not British common law as did the United States, so the mechanics of their judicial systems differ. And Japanese courts receive far fewer disputes to resolve than do courts in the U.S., perhaps because Japan has been able to rely more upon privately enforced norms.

Antitrust (AT) and fair trade regulations, which combine statutory and judicial actions, influence decisions primarily in two quadrants: QII and QIII. The consequences of these regulations fall directly on enterprises that engage in anticompetitive behavior in either product or factor markets. Under these laws, the government enforces practices and structural conditions associated with competitive markets because it is costly for private enterprises to enforce them independently.

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For example, fixing prices, advertising deceptively, and attempting to become the sole supplier of a product violate the regulations. In the U.S. the Department of Justice and the Federal Trade Commission (FTC) jointly enforce the regulations, using **cease and desist orders** that threaten punishment for continuing the violation, **consent decrees** to discontinue illegal practices without admitting guilt, and **guidelines** to signal acceptable mergers. In Japan, the Fair Trade Commission (JFTC) implements the Antimonopoly Law (AML) on private enterprises. Although it is believed to be weaker than the FTC, since 1977 the JFTC has imposed surcharges on unfair profiteering by cartels, issued **guidelines** on when it will challenge mergers, and prosecuted violations ranging from price-fixing to resale price maintenance agreements (Uekusa, 1987). The JFTC also issues **warnings** and **cease and desist orders**. Although private parties may not initiate lawsuits for treble damages due to anticompetitive practices, as they can in the U.S., public reports to the JFTC of illegal activity are high.

Economic activity occurs "in the shadow" of these economy-wide regulations. By supplying a uniform medium of exchange, for example, government reduces search, division, and defection costs, encouraging business transactions in general. Judicial systems and antitrust regulations provide rules that allow actors to search for and negotiate productive exchanges, mitigating their expenditures of transaction resources on costly defection problems.

4.2 Regulation in Q1

Few regulations target household decisions to consume one good or another or to pay more or less in the product market. A member of a household can be punished for consuming illegal products, for example, heroine, but relatively few products are illegal. More typically, governments encourage households to consume more or less of a product by altering the effective price of the product. In the U.S., a mortgage interest deduction (MID) is a **tax incentive** that allows a household to deduct from its taxable income the interest it pays on mortgage loans to purchase housing, effectively reducing the price of owning a home. Japan has a controversial national sales tax, and a variety of regulations on imported products, increasing their relative prices.

If organizing to resolve problems such as foreign affairs and national defense is most efficiently handled by a national government, then someone must pay for this solution. People will not contribute voluntarily. Other people will find it costly to discover and sanction nonpayment. National tax mechanisms can be relatively efficient and effective. But for many other problems, it will be less costly to target enterprises, if only because there are fewer of them.

4.3 Regulation in QII

A variety of regulations target enterprise decisions in the product market. Several, such as the U.S. corporate income tax (CIT), directly influence the flow of revenue into enterprises. **Price controls** have been rare at the national level, except in times of crisis, but influencing producer prices is clearly intended in regulations on the U.S. cable television industry. More common are **subsidies**, which redistribute wealth and production capacity toward specific industries. For example, the U.S. government through its agricultural price support programs (APS), and Japan through its Agricultural Sales Law (ASL) attempt to stabilize prices and farm incomes. Neither nation appears to be satisfied with the way in which the unregulated market divides wealth between farmers and consumers.

Regulating prices often involves government in regulating enterprise decisions about their products and their production processes as well. Federal commissions such as the Civil Aeronautics Board (now defunct), the Federal Communications Commission (FCC), and the Interstate Commerce Commission (ICC) basically enforce industry **cartels**. Created by legislation and operated under procedures that entail significant industry input, government agencies in effect divide the market and enforce the division. Their actions include restricting market entry by issuing operating licenses, setting prices, and approving products and services. In part because of the huge inefficiencies that resulted over time, deregulation beginning in the late 1970s reduced the authority of these agencies and the scope of their activities. For example, the Department of Transportation now encourages competition by **publicizing** information it collects on airline performance. It reduces the cost of information to consumers, relying on their subsequent decisions to induce airlines to improve performance.

We observe similar activities and tools in Japan. The Japanese Diet authorized MITI to create **cartels** for industries seriously depressed by

international competition. Negotiating with firms in the industry, MITI establishes guidelines for reducing production capacity and reinvesting resources while fixing prices. In this respect, it divides resources and markets. MITI's power to ensure compliance with these agreements derives from its authority to issue licenses for a wide range of business activities, importing, exporting, and entering markets. The program has worked in part because these cartels received exemptions from JFTC oversight. However, with support from the Japanese Supreme Court, the JFTC has been taking action to curb MITI's use of anticompetitive practices (Uekusa, 1987).

More firmly on the G&S side, the U.S. Environmental Protection Agency (EPA) sets **standards** for clean air and water; it issues **permits** to enterprises using production processes that generate pollutants; it monitors compliance and can fine enterprises that violate the standards. If the government errs, the cost to the interested parties can be high. The authorizing legislation relies heavily on procedural safeguards to guarantee outside parties access to EPA decision-making. The final decision rests with the Agency, acting like an arbitrator. More recently, federal agencies have begun following state agencies in implementing **negotiated rulemaking**, where the agency implements a rule negotiated by interested parties, often represented by trade associations and interest groups.

In Japan, prefectural governors implement and enforce **standards** established in the national Waste Management Law (WML). But the law creates no civil mechanism to enforce directives. Officials rely on **negotiation** to secure voluntary compliance. Citizens may complain, triggering official action, but may not initiate a lawsuit. However, rapid growth of Japan's economy and intense internal competitive pressure have left Japan with a legacy of environmental problems and a burgeoning environmental movement calling for more aggressive government enforcement.

Indeed, some of the differences we observe in the choice of regulatory tools can be explained by differences in each nation's stage of economic

development and in the relative power of affected parties in political negotiations. For example, under Japan's Victim Compensation Law (VCL), people who suffer specific sorts of health damage as a result of pollution in designated areas can seek redress through administrative channels for expenses such as medical care and lost earnings. The United States relies upon judicial remedies, an older mechanism for **compensating injured parties** (Marcus, 1986). However, in the United States during the 1960s and 1970s, pollution generated widespread public support for administrative regulation--not to compensate for harm but to prevent it. Faced with growing conflict between firms and businesses, government as arbitrator shifted more of the initial costs from citizens to enterprises.⁴

4.4. Regulation in QIII

Numerous regulations direct enterprise decisions on labor, capital, and payment flows. In some instances, the intent is to distribute resources differently than would unregulated markets. For example, the U.S. Equal Employment Opportunity Act (EEO) encourages firms to recruit, train, and reward labor on the basis of merit, without regard to employee characteristics such as ethnic background or gender. Government agencies and private individuals with complaints about discrimination can initiate legal actions against an enterprise.⁵

Similarly, Japan's Law for Employment Promotion of the Disabled (LEPD) is one of several laws that target firms to improve opportunities for people with disabilities. In 1976, the Diet made mandatory previously voluntary hiring quotas for people with disabilities. The government funneled fines instituted for noncompliance into grants to companies that met their quotas. In 1992, manufacturers as a group achieved their target, in part because the Ministry of Labor began **publicizing** the names of firms that had done nothing to hire or to accommodate hiring disabled people (Japan Economic Institute, 1992a). The capacity of citizens to sanction noncompliance proved to be sufficient.

Both nations subsidize the costs of factor inputs to their farmers. Without water supplied by government agencies at prices below cost, rice producers in the U.S. would either go out of business or charge higher prices. Japan uses more direct credit subsidies. The agricultural extension service in the U.S. conducts and disseminates research on modern technology. National and prefectural governments in Japan guide and supervise cooperatives. Under the Japanese Law Concerning the Promotion of Dairy Farming and Beef Cattle Farming (LCPDF), the government attempts to modernize beef cattle farming. It supplies training and infrastructure to improve the productivity of beef processing. In these instances, the government facilitates coordination and influences the division of resources.

4.5 Regulation in QIV1

The U.S. regulates household decisions to supply labor and other factors of production. Federal taxes on income in general and on payroll in particular (Social Security) can alter the decisions of households to supply labor but these are costs of the tax mechanism, not benefits. Federal and state programs that provide training and payments to workers who lose employment (UC) likely reflect political compromises in conflicts over the equity of unregulated market outcomes. State regulations also **license** individuals to supply labor to a variety of enterprises, such as medical, legal, and architectural services, deterring defection when it is especially costly for consumers to gain information about performance. At the federal level, the Taft-Hartley Act (THA) restricts the ability of employees to strike, and facilitates negotiation between management and labor (affecting employers in QIV as well).

Japan also regulates payment streams to households, including unemployment compensation (LSA). **Tax incentives** encourage savings over consumption, increasing the flow of capital into the factor market. The federal government restricts entry into the legal profession by means of a test for admission to the Legal Training and Research Institute

(LTRI).⁶ Finally, the Labor Relations Adjustment Act (LRAA) facilitates labor-management relations, which historically have been considerably more cooperative than in the U.S.

As in the top half of each diagram, fewer regulations fall on households than on enterprises. The reasons are probably similar. More households mean higher costs for administering the regulation. Competition among so many households in the factor market generates more information that permits individuals to resolve more problems on their own. Moreover, regulating capital tends to be more difficult and so less likely than regulating labor, especially as technology makes it easier for capital to escape the reach of domestic regulations.

5. Conclusions

Table 1 samples the regulatory tools we identified in both the U.S. and Japan. Apparent contrasts in applying these tools tend to obscure real comparisons. The U.S. and Japanese governments regulate enterprises more than households. Few regulations target household decisions to allocate their budgets or to pay particular prices. Save for tax laws and credit programs, relatively few regulations target decisions on using capital. Somewhat more direct regulation appears on the flow of labor into the market. The most extensive regulations fall on the choices enterprises make about their inputs, their production processes, and their products.

Administrative guidance in Japan and administrative rulemaking in the U.S., which appear to differ, both embody a rule, a consequence, and a process. *Nemawashi* is the Japanese term for the process of consensus decision-making. As Reed applies it to business-government relationships, it works like this:

It is in each company's interest to cooperate, if everyone else cooperates. The government can act as a mediator, seeking each company's cooperation. After collecting promises, the government announces the achievement of consensus and firms up the commitment of each company. If there is any disagreement at all, the process must start all over again (1993: 126).

This assumes, as seems plausible, that businesses have the capacity to compromise to solve a division problem or to enforce to solve a defection problem. If *nemawashi* requires government also to play the role of arbitrator or enforcer to reach an agreement, as it does at times in Japan, then this is consistent with the transaction resource model of regulation. The conditions conducive to *nemawashi* in Japan parallel the conditions under which government can move a failing economic relationship inside the transaction resource frontier.

Table 1
Regulatory Tools

Tool	U.S.	Japan
cartels	FCC	MITI
cease and desist orders	FTC	JFTC
compensation	Courts	VSL
consent decrees and warnings	FTC	JFTC
criminal penalties	DOJ	JFTC
financial penalties	EPA	LEPD
guidelines	FTC	JFTC
licensing and permit programs	EPA	MITI
negotiation	THA	WML
publicizing	DOT	LEPD
tax incentives	Housing	Savings
setting standards	OSHA	WML
subsidies	APS	LCPDF

"[T]he regulatory process in Japan resembles the process in the United States. The differences, which surely exist, are matters of degree."

From this perspective, the regulatory process in Japan resembles the process in the United States. The differences, which surely exist, are matters of degree. Whether the government mediates, arbitrates, or enforces depends upon similar conditions, some of which occur in both economies. Japanese firms will find upon close inspection of the United States, amidst the environmental impact statements and litigation, that businesses and government interact with each other in ways that are not entirely unfamiliar. American firms will find upon close inspection of Japan, amidst the lengthy meetings and networks of reciprocity, interactions that are familiar as well.

How, then, can we explain important differences in regulatory procedures between the U.S. and Japan? First, the problems that give rise to regulation are the same but national priorities and paths of development differ. For example, Japan has been enduring environmental pollution in its quest for economic growth after World War II. Second, the resources required to resolve the problems are the same but the U.S. and Japan have different endowments. For example, the United States tends to codify into law more of the elements of regulation because its normative bases for mitigating the three problems of cooperation are not as strong.

This brings us to the question of change and to the future of regulation. Economics, politics, and technology drive regulation. As competitive

pressures induce new technology, creating new problems and reducing the costs of resolving others, governments generate new regulations. For example, government subsidies have facilitated development of the biotechnology industries in both the U.S. and Japan. Standards for safe production and distribution will not be long in coming.

"[T]he United States tends to codify into law more of the elements of regulation."

New technologies, which create new enterprises and destroy old ones, cross the traditional jurisdictions of government regulatory agencies and will force structural changes. In the U.S., the Environmental Protection Agency, the Food and Drug Administration, the Agriculture Department, the Occupational Safety and Health Administration, and the National Institutes of Health all claim that their authorizing statutes give them jurisdiction over the biotechnology industry, an enterprise that Congress could not have imagined when it enacted those statutes. In Japan, new financial instruments have triggered jurisdictional disputes between the Ministry of Finance and the Ministry of Post and Telecommunications, the world's largest savings institution.

Increasingly, global economic and political forces will push and pull domestic regulatory policies (Majone, 1991). In Japan, heightened voter awareness portends tighter pollution controls and product liability laws. Competitive pressures from overseas portend deregulation of telecommunications and transportation services. Similarly, liberalized banking regulations throughout the European Community portend reduced limitations imposed on American banks in the U.S. (Majone, 1991). Economic pressure to adopt Japan's subcontracting system portends

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American regulations to protect small subcontractors from abuses associated with the controlling power of large subcontractees, as does Japan's Subcontractor Protection Law (SPL) (Uekusa, 1987).

International regulations will become more prevalent as industries outgrow the borders of national jurisdictions. The European Airbus Consortium illustrates crossnational investment in industry by governments. The past 15 years have witnessed international regulations on whaling, seabed mining, and the production of chemicals that deplete the ozone layer in the atmosphere. Although the reach of regulation will expand, the basic interdependence of business and government, along with the lessons of history and economics, still apply.

Appendix 1
Key to Abbreviations of U.S. Government Regulations

ADA	Americans with Disabilities Act
AMO	Agricultural marketing orders
APS	Agricultural product subsidies
AT	Antitrust legislation
CIT	Corporate Income Tax
CPSC	Consumer Product Safety Commission
CRA	Community Reinvestment Act
CZMA	Coastal Zone Management Act
DBA	Davis-Bacon Act
EEO	Equal Employment Opportunity Act
EPA	Environment Protection Agency
EqPA	Equal Pay Act
ERISA	Employee Retirement Income Security Act
FCC	Federal Communications Commission
FDA	Food and Drug Administration
FTC	Federal Trade Commission
ICC	Interstate Commerce Commission
ITA	International Trade Agreements (GATT; NAFTA)
MID	Mortgage Interest Deduction from income tax
MW	Minimum Wage
NLRA	National Labor Relations Act
OSHA	Occupational Safety and Health Act
SST	Social Security Tax
THA	Taft-Hartley Act
TSCA	Toxic Substances Control Act
UC	Unemployment Compensation

Appendix 2

Key to Abbreviations of Japanese Government Regulations

AMCS	Agricultural Modernization Credit Scheme
AML	Antimonopoly Law
ASL	Agricultural Sales Law
BLEPC	Basic Law for Environmental Pollution
FCL	Foodstuff Control Law
FTC	Fair Trade Commission
ITA	International Trade Agreements
LCPD	Law Concerning Promotion of Dairy Farming and Beef Cattle Farming
LCPSLP	Law Concerning Price Stabilization of Livestock Products
LEPD	Law for Employment Promotion of the Disabled
LRSL	Large Retail Store Law
LRAA	Labor Relations Adjustment Act
LSA	Labor Standards Act
LTRI	Legal Training and Research Institute
MITI	Ministry of International Trade and Industry
PCL	Pollution Control Loans
PIP	Pension (Insurance) Programs
SPL	Subcontractors' Protection Law
TIL	Telecommunications Industry Law
VCL	Victim Compensation Law
WML	Waste Management Law

NOTES

1. The objective in regulating behavior is to minimize the sum of the costs of uncertainty and of its avoidance.
2. By arbitrator, we mean that the government is decisive with respect to resolving division problems. The structure of the arbitration scheme to manage and safeguard against bias will depend on features of the problems (Heckathorn and Maser, 1987).
3. Every action affects every other action. OSHA regulations affect production costs and, hence, the mix of labor and capital. Placing a regulation beside a particular flow in a quadrant identifies its intended operational impact, not all of its effects. Complete diagrams would display not only more effects but also more regulations in multiple quadrants.
4. This is similar to the story of Workers' Compensation Acts, where federal and state governments in the United States replaced judicial redress with an administrative system for compensating workers injured on the job. Later, organized labor secured an administrative mechanism, OSHA, to prevent injuries.
5. The U.S. government can deny benefits--contracts--to firms found not in compliance.
6. On a per capita basis, the same number of people apply to take this test as to take state bar exams to practice law in the U.S. Only 600 pass the test in Japan; thousands pass the bar exam in the U.S. (Japan Economic Institute, 1992b).

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