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TRADE SECRET LAW, INTELLECTUAL PROPERTY, AND INNOVATION:  
THEORETICAL, EMPIRICAL, AND ASIAN PERSPECTIVES

BY

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## **ABSTRACT**

This research explores the theory and practice of trade secret law in Japan, Korea, and the United States from comparative, law and economics, and empirical perspectives. Specifically, it examines how the imported trade secret law has developed and interacted with different legal, economic, technological, and sociocultural realities in the two Asian countries. Japan and Korea adopted trade secret law in the early 1990s. However, trade secret protection did not have a considerable impact in either Japan or Korea at this early stage of implementation because of several factors, including the role of local substitutes for trade secret law and defects in procedural law supporting the substantive trade secret law. On the other hand, the protracted economic recession in Japan after the burst of the economic bubble and the Asian financial crisis in Korea in the late 1990s created a new business cycle in which trade secret law has been gaining importance in these societies. The new business cycle has encouraged governments in the two Asian countries to recognize that trade secret law is an important mechanism for dealing with corporate control of valuable information and the management of human capital in pursuing continuing economic growth and protecting the stature of their countries in the international economy. In recent years, accordingly, significant changes have occurred in the law regarding trade secrets in the two Asian countries. However, the recent expansion of trade secret law in Japan and Korea has raised another legal and policy problem, which is tension between those who demand strong trade secret protection for employers and those who demand a Constitutional right for employees. And the debates continue in Japan and Korea for optimal trade secret protection in these societies.

*To My Family*

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## CHAPTER I. INTRODUCTION

The rapid economic growth in Northeast Asian countries (China, Japan, Korea, and Taiwan) during the past several decades, often referred to as “the East Asian Miracle,” has been attributed to many factors, including the role of government, a traditional system of lifelong employment, the forms of industrial organization, and the countries’ respective educational systems.<sup>1</sup> The importation and assimilation of foreign technology has also played a significant role in the rapid economic development of Northeast Asian countries. In the early stages of industrialization in these countries, as in the United States,<sup>2</sup> the importation of technology enabled companies that lacked indigenous expertise to attain advanced technologies at a low cost.<sup>3</sup>

For East Asian countries in the early stages of rapid economic growth, the costs of intellectual property protection appeared to outweigh the benefits.<sup>4</sup> For governmental policymakers seeking to identify the optimal technology policies to achieve rapid economic development, there appeared to be little incentive to adopt strong policies for the protection of intellectual property.<sup>5</sup> These policy considerations affected the prevailing substantive laws in the

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<sup>1</sup> See THE WORLD BANK, *THE EAST ASIAN MIRACLE: ECONOMIC GROWTH AND PUBLIC POLICY* (1993).

<sup>2</sup> See DORON S. BEN-ATAR, *TRADE SECRETS: INTELLECTUAL PIRACY AND THE ORIGINS OF AMERICAN INDUSTRIAL POWER* (2004).

<sup>3</sup> Shujiro Urata, *The Impact of Imported Technologies on Japan’s Economic Development*, in *THE ECONOMIC DEVELOPMENT OF JAPAN AND KOREA: A PARALLEL WITH LESSONS* 73-86 (1990) [hereinafter *JAPAN AND KOREA*]; Kwang Doo Kim & Sang Ho Lee, *The Role of the Korean Government in Technology Import*, in *JAPAN AND KOREA* 87-95; ALICE H. AMSDEN, *ASIA’S NEXT GIANT: SOUTH KOREAN AND LATE INDUSTRIALIZATION* (1989); *TECHNOLOGICAL INDEPENDENCE: THE ASIAN EXPERIENCE* 135-65 (Saneh Chamarik & Susantha Goonatilake eds., 1994).

<sup>4</sup> See Benard M. Hoekman et al., *Transfer of Technology to Developing Countries: Unilateral and Multilateral Policy Options* (Univ. of Colo., Research Program on Political and Economic Change, Working Paper No. 2004-1003, May, 2004).

<sup>5</sup> For an overview of the relationship between law, institutions, policies, cultures, and economic development in Asia, see Tom Ginsburg, *Does Law Matter for Economic Development? Evidence from East Asia*, 34 *LAW & SOC’Y REV.*

fields of patent, trademark, copyright, and trade secret law because of the strong influence of government intervention on economic development.<sup>6</sup>

In recent years, by contrast, there has been a considerable change in the domestic intellectual property laws in many of the countries in Northeast Asia, including Korea, Japan, and China. In particular, developments in the area of trade secret law in Japan and Korea are emblematic of these broader changes.

In the absence of trade secret law, valuable information, which is often referred to as know-how rather than trade secrets, was not sufficiently protected under property laws, contracts, or torts, partly because of the relatively limited role of the courts in developing legal doctrines in the civil law tradition. Nevertheless, the Japanese and Korean governments, which have played a significant role in economic development, had not been actively involved in strengthening the legal protection of trade secrets during the period of rapid economic growth, considering the countries' technological capability and beneficial institutional factors in the rapid economic growth, such as the lifetime employment system. Trade secret law in the two Asian countries, which was modeled primarily on trade secret law in the United States, was introduced in the early 1990s as a part of the adoption of more robust protection for intellectual property essentially as a result of foreign trade pressure. Because of the lack of local needs for the legal protection of trade secrets, however, the initial adoption of substantive trade secret law in Japan and Korea had inherent limitations in that it failed to properly protect trade secret holders because of defects in procedural law supporting effective legal remedies in trade secret cases.

On the other hand, in the 1990s, the protracted economic recession in Japan after the

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829 (2000). In some circumstances, developing countries might choose to adopt strong policies for the protection of intellectual property so that they can induce foreign investment. See Eva M. Gutierrez, *Technology Policies* (2001) (unpublished Ph.D. dissertation, Boston University).

<sup>6</sup> THE WORLD BANK, *supra* note 1; INTELLECTUAL PROPERTY LAW IN ASIA 3 (Christopher Heath ed., 2003).

burst of the economic bubble and the Asian financial crisis in Korea created a new business cycle in which trade secret law has been gaining importance in these societies. In fact, this significant exogenous factor deriving from the economic downturns led to an increase in corporate restructuring and employee mobility. In addition, the increased technological capability of these countries increased the risk that former employees would provide trade secrets to their new employers, whether in East Asia or other places, and led to another problem not traditionally experienced in these societies: the misappropriation of trade secrets and industrial espionage.<sup>7</sup>

The changing technological and economic environments encouraged governments in the two Asian countries to recognize that trade secret law is an important mechanism for dealing with corporate control of valuable information and the management of human capital in pursuing continuing economic growth and protecting the stature of their countries in the international economy. In recent years, accordingly, significant changes have occurred in the law in the Asian countries regarding trade secrets.

The purpose of this research is to explore the theory and practice of trade secret law in Japan and Korea, focusing on how the imported trade secret law has developed and interacted with different legal, economic, technological, and sociocultural realities in the two Asian countries. Trade secret law protects a wide spectrum of information, and it is closely related to questions of innovation policy and human capital embodied in employees; thus, the adoption of trade secret law may have affected the behavior of interested parties in various legal areas, including contract law, tort law, intellectual property law, and employment law. In this context,

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<sup>7</sup> The experience of Korea in the area of information technology is instructive. Beginning in the 1990s, the Korean government decided that information technology should be the new growth engine to encourage Korean economic development. As a result, Korea has experienced remarkable achievements in the field of information technology, including in the areas of mobile telecommunication, semiconductors, Internet-related technologies, and the like. On the other hand, this rapid growth of the Korean economy, which had been focused on domestic R & D in these state-of-the-art technologies, led to another trade secret-related problem not traditionally experienced in Korean society.

trade secret law in Japan and Korea offers scholars the ideal lens through which to study how laws, specifically imported laws, in a given country are affected by many factors, including local institutions, economic situations, and cultural and social norms. This is one of the most significant issues in the study of the relationship between law and society. In fact, identifying these factors has theoretical and practical importance in helping us analyze the interaction between formal legal rules and other, less formalized legal supplements and substitutes, such as social norms, legal institutions, and cultural norms.

Furthermore, it has important theoretical implications for the existing theory of legal transplants, in which scholars have made distinctions regarding conditions for the viability of legal transplants.<sup>8</sup> In other words, given that most intentional legal transplants have goals that the relevant parties are attempting to achieve, determining the conditions for the success of legal transplants also has critical and practical importance for those who are attempting intentional legal transplants and those who are interested in the relationship between law and economic development, such as governments that intend to borrow foreign legal rules for certain purposes,

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<sup>8</sup> Legal transplants that refer to the transfer of laws and legal institutions across borders, jurisdictions, or cultures appear to have been a common phenomenon around the world. See ALAN WATSON, *LEGAL TRANSPLANTS: AN APPROACH TO COMPARATIVE LAW* (2d ed. 1993). As in Western Europe, where the reception of *ius commune* took place widely among countries in the Middle Ages, most Asian countries received Western notions of law as the laws were already modernizing. See MARY A. GLENDON ET AL., *COMPARATIVE LEGAL TRADITIONS: TEXT, MATERIALS, AND CASES ON THE CIVIL AND COMMON LAW TRADITIONS* 50 (2d ed. 1994). Over time, legal transplantation has taken place in a variety of forms and degrees, and on different levels of a legal system, for various reasons. Specific rules have been adopted, and entire legal systems have been transplanted. Transplantation can occur voluntarily, or it can be forced onto foreign countries under some circumstances. In the context of Northeast Asia, Japan voluntarily borrowed Western law, primarily German law and French law, after the Meiji Restoration at the end of the 19th century. For a brief explanation of the modernization of law in Japanese society, see HIROSHI ODA, *JAPANESE LAW* 21-29 (2d ed. 1999). The “naturalized” Japanese laws were later transferred to other Asian countries, such as Korea and Taiwan, as part of Japanese colonization. See KATHARINA PISTOR ET AL., *THE ROLE OF LAW AND LEGAL INSTITUTIONS IN ASIAN ECONOMIC DEVELOPMENT: 1960-1995*, at 39 (1999). Furthermore, recent economic globalization appears to facilitate legal transplants in various ways. For instance, a globalized economy generates, in fields such as intellectual property law, the need for laws to be harmonized in the framework of an international agreement. See KEITH E. MASKUS, *INTELLECTUAL PROPERTY RIGHTS IN THE GLOBAL ECONOMY* (2000); *INTERNATIONAL PUBLIC GOODS AND TRANSFER OF TECHNOLOGY* (Keith E. Maskus & Jerome H. Reichman eds., 2005); *THE DEVELOPMENT AGENDA: GLOBAL INTELLECTUAL PROPERTY AND DEVELOPING COUNTRIES* (Neil Netanel ed., 2008).

or development agencies that seek to change legal rules and institutions via transnational legal transfer.<sup>9</sup> In particular, in light of the importance of the Northeast Asian experience with economic development, trade secret law in Japan and Korea offers a profitable opportunity to conduct a detailed case study in which we can capture the role of the state, the role of substitutes (formal or informal alternatives), and the role of enforcement mechanisms, all of which have been thought to have particular importance in the context of Northeast Asian economic development.

Although some research has looked at the social context of intellectual property law in Asian countries, no studies have examined the application of imported legal texts on trade secret protection in the social context of the two Asian countries, even though almost two decades have passed since trade secret law was adopted. By focusing on the adoption of trade secret law and recent changes in the law, and their impact on the main interested parties in the field, this dissertation seeks to answer the following questions: What accounts for the recent adoption of and changes in the laws governing trade secrets in these two countries? How have these laws operated in practice? How have these laws affected corporations interested in protecting intellectual property? How have such laws affected employees interested in freedom of movement? And how have such laws affected governmental actors interested in protecting the stature of their countries in the international economy?

An effective study of the theory and practice of trade secret law in the two Asian countries requires not only a comparative approach, but also an interdisciplinary approach.

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<sup>9</sup> In fact, despite the prevalence of legal transplants, there is still no agreement among scholars with respect to many aspects of this phenomenon, including the viability of legal transplants, the meaning of successful legal transplants, and the conditions for their success. And one of the most prominent issues among them is the viability of legal transplants, and the distinctions scholars make regarding conditions for viability seem to arise from the assumptions they make about the relationship between law and society. For a comprehensive review of these discussions among scholars, see David Nelken, *Towards a Sociology of Legal Adaptation*, in ADAPTING LEGAL CULTURES 7-54 (David Nelken & Johannes Feest eds., 2001).

Although this research is focused on developments in Japan and Korea, it looks to the United States as an influential source of both legal doctrine and scholarship in the area of trade secret law. Particularly influential here is academic writing in the area of law and economics, which provides a lens through which to examine the effects of trade secret law and what the optimal trade secret law should be.<sup>10</sup> The analytical tools and concepts used in economic analysis of the law provide sophisticated methods in comparative law that presuppose identical or different laws or institutions in the target countries.<sup>11</sup> In particular, the importance and effectiveness of the law and economics perspective can be emphasized when examining the impact of legal transplants and environmental factors affecting behavior because a simple legal transplantation approach does not appear to offer satisfactory methodological tools for this purpose, especially when

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<sup>10</sup> In fact, as a behavioral theory, law and economics “has been one of the most successful innovations in the legal academy in the last century,” because it proposes a coherent theory of how people respond to incentives. Thomas S. Ulen, *Firmly Grounded: Economics in the Future of the Law*, 1997 WIS. L. REV. 433, 434-35 (1997). Regarding the development of law and economics, see James J. Heckman, *The Intellectual Roots of the Law and Economics Movement*, 15 LAW. & HIST. REV. 327 (1997). But economic analysis of law based on the assumption of rational choice theory has inherent limitations in fully explaining behavioral anomalies and puzzles, so, in some cases, it does not allow scholars seeking optimal legal policy in a given legal field to precisely understand and predict the incentive effects of a law. See Russel B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 CAL. L. REV. 1051, 1060-75 (2000) (examining the limitations of rational choice theory in legal analysis). These internal and external criticisms have led law and economics scholars to turn their attention to other influential factors, such as social norms, as a useful concept for understanding behavior, and to seek insights from other social sciences or subfields in economics, such as psychology, behavioral economics, and experiment economics. For an important contribution, see ROBERT C. ELLICKSON, *ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES* (1991). See also Robert C. Ellickson, *Law and Economics Discovers Social Norms*, 27 J. L. STUD. 537 (1998); Symposium, *Social Norms, Social Meaning, and the Economic Analysis of Law*, 27 J. LEGAL STUD. 537 (1998); Symposium, *The Legal Construction of Norms*, 86 VA. L. REV. 1577 (2000); Symposium, *Norms and Corporate Law*, 149 U. PA. L. REV. 1735 (2001); BEHAVIORAL LAW AND ECONOMICS (Cass R. Sunstein ed., 2000); CHOICES, VALUES, AND FRAMES (Daniel Kahneman & Amos Tversky eds., 2000); Mark Kelman, *Law and Behavioral Science: Conceptual Overviews*, 97 NW. U. L. REV. 1347 (2002-2003); Cass R. Sunstein, *What’s Available—Social Influences and Behavioral Economics*, 97 NW. U. L. REV. 1295 (2002-2003); Symposium, *The Legal Implications of Psychology: Human Behavior, Behavioral Economics, and the Law*, 51 VAND. L. REV. 1499 (1998); Symposium, *Research Conference on Behavioral Law and Economics in the Workplace*, 77 N.Y.U. L. REV. 1 (2002). See also Thomas S. Ulen, *The Importance and Promise of Empirical Studies of Law*, in NEW FRONTIERS OF LAW AND ECONOMICS 29 (Peter Nobel & Marina Gets eds., 2006). For an overview of empirical studies of law, see ROBERT M. LAWLESS, JENNIFER K. ROBBENOLT, AND THOMAS S. ULEN, *EMPIRICAL METHODS IN LAW* 1-32 (2010).

<sup>11</sup> Edmund W. Kitch, *The Intellectual Foundations of Law and Economics*, 33 J. LEGAL EDUC. 184, 191 (1983) (“Law and economics provides an analytic framework that can provide unifying direction to comparative and historical work.”). See also Ron Harris, *The Uses of History in Law and Economics*, 4 THEORETICAL INQUIRIES IN LAW 659, 688-92 (2003) (introducing “preliminary comparative law and economics studies.”).

different political, social, and cultural factors matter.<sup>12</sup>

In recent years, the law and economics approach has emerged in a comparative vein.<sup>13</sup> The literature provides us with invaluable methodological insights for the purpose of this project.<sup>14</sup> For example, Ugo Mattei provides an informative explanation of the causes of legal transplants and legal evolution from a law and economics perspective, which seems to be inspired by a new institutional economics perspective. He suggests that legal transplants, especially selective borrowing from foreign legal systems, can best be explained “as a movement toward efficiency,” and argues that a legal transplant happens to supply law in the competitive market of legal culture, where “the most efficient legal doctrine” survives.<sup>15</sup> More closely related to this project, he further argues that this competitive process happens among different sources of law in a given country.<sup>16</sup> In addition to the concept of efficiency, the criterion of “fit”

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<sup>12</sup> See Ralf Michaels, *The Functional Method of Comparative Law*, in THE OXFORD HANDBOOK OF COMPARATIVE LAW 339 (Reinhard Zimmermann & Mathias Reimann eds., 2006).

<sup>13</sup> For an edited collection of these papers, see COMPARATIVE LAW AND ECONOMICS (Gerrit De Geest & Roger Van de Bergh eds., 2004); see also Nuno Garoupa & Tom Ginsburg, *Economic Analysis and Comparative Law* (Univ. Illinois C. L., Illinois L & Econ. Res. Paper Series, Research Paper No. LE09-034, 2009) (providing a literature review of the main works in comparative law and economics); Raffaele Caterina, *Comparative Law and Economics*, in ELGAR ENCYCLOPEDIA OF COMPARATIVE LAW 161-171 (Jan M. Smits ed., 2006) (offering a brief overview of comparative law and economics).

<sup>14</sup> For example, Buscaglia and Ratliff claim that law and economics enables us “to better understand the impact of laws and legal procedures on economic behavior in developing countries.” EDGARDO BUSCAGLIA & WILLIAM E. RATLIFF, *LAW AND ECONOMICS IN DEVELOPING COUNTRIES* (2000). Kirchner suggests that a new institutional economics perspective in comparative law, as a methodological innovation, is needed to better understand the impact of analysis of a legal transplant. Christian Kirchner, *Comparative Law and Institutional Economics—Legal Transplants in Corporate Governance*, in NEW FRONTIERS OF LAW AND ECONOMICS 201-06 (Peter Nobel & Marina Gets eds., 2006).

<sup>15</sup> Ugo Mattei, *Efficiency in Legal Transplants: An Essay in Comparative Law and Economics*, 14 INT’L REV. L. ECON. 3, 8 (1994). Although Mattei explains convergences in different legal systems by using both legal transplants and efficiency, he attributes divergences in different legal systems to indigenous legal cultures, such as legal parochialism and ideology. *Id.* at 10-16.

<sup>16</sup> He also points out that this competition may be distorted because of exogenous factors, such as “traditional or cultural factors,” which “may be construed as real-world transaction costs and/or patterns of path dependency that resist the evolution toward efficiency.” UGO MATTEI, *COMPARATIVE LAW AND ECONOMICS* 120-21 (1997) (“Evolution and competition are a process of selection; the winning legal rule will be one that has proved more powerful and useful than those supplied by other components of the law or by other legal systems. Law is not the product of the will of a lawmaker, be it a legislator, a court, or whomever. Applied law is the outcome of a competitive process between legal formants. More generally, law is the synthesis both of exogenous factors—



with the environment of the receiving societies can be useful for identifying specific factors affecting the behavior of the relevant parties.<sup>17</sup> This criterion seems more plausible in the context of Northeast Asia, where governments have played a significant role in the rapid economic growth of their countries for the past several decades; thus, legal transplants have often occurred and have been evaluated based on their ability to advance a specific purpose, such as economic development. This research attempts to identify such factors in Korea and Japan as they relate to the adoption and use of trade secret law.

This dissertation is divided into three main parts. Chapters II, III, and IV analyze the relevant legal regimes under which trade secrets are protected in the United States, Japan, and Korea, focusing not only on the substantive law in these nations, but also on the three main interested parties in the field of trade secrets: states, entrepreneurs, and employees. Chapter II explores trade secret law in the United States, which has been an important foreign legal resource that has affected the adoption and recent changes in trade secret law in Japan and Korea. The discussion focuses on the proactive role of courts in developing legal doctrines of trade secret protection through the process of seeking the legal justifications of trade secret protection, and the use of contractual solutions in protecting valuable information in the active external labor market, which maintains a general employment-at-will rule.

Chapters III and IV begin with a discussion of legal regimes, including property law, contract law, and tort law, relevant to trade secret protection in Japan and Korea before the adoption of the law, which reflects the limitations of private law in the civil law tradition. After

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determined by [the] culture, economic structure, and political system—and of endogenous elements.”). *See also* ERIN A. O’HARA & LARRY E. RIBSTEIN, *THE LAW MARKET* (2009) (exploring jurisdictional competition that enables law markets, which are “ways that governing laws can be chosen by people and firms rather than mandated by states, to function efficiently.”).

<sup>17</sup> *See* Hideki Kanda & Curtis J. Milhaupt, *Re-examining Legal Transplants: The Director’s Fiduciary Duty in Japanese Corporate Law*, 51 AM. J. COMP. L. 887 (2003) (evaluating the success of the transplanted legal rule by adopting the criteria of macro-fit and micro-fit).

examining the lack of legal protection of trade secrets before adoption of the law, Chapters III and IV look to how Japan and Korea adopted the law, and how the governments in these countries have adapted the law to changing domestic and international situations to achieve larger goals, such as economic development through further legal transplants of foreign law—primarily the U.S. law. The chapters also examine in detail current law governing trade secrets, including the subject matter, misappropriation, and legal remedies from a comparative perspective. Chapters III and IV further explore how the statutory law of trade secrets affected the approach of Japanese and Korean courts toward the theory of postemployment contracts in protecting valuable information.

Chapter V addresses the existing economic theory of trade secret law and relevant empirical works that support the theory in the United States, focusing on incentive theory, fencing costs, reverse engineering, and postemployment covenants not to compete, which enable us to identify local institutions or social norms as a substitute for the imported trade secret law in Japan and Korea.

Chapter VI examines the practical impact of adopting trade secret protection in Korea and Japan, based on empirical works conducted and published in these two Asian countries. The first two sections focus specifically on substitutes for trade secret law arising from different intellectual property policies and the business culture related to human capital before trade secret law was adopted in these countries. The chapter then discusses how the role of these alternative solutions in addressing the legal problems associated with trade secrets have been eroding in recent years. The third section begins by revealing some features of actions taken by Japanese and Korean firms after incidents related to the loss of proprietary information. It then examines relevant factors affecting these distinguishing features, with a focus on defects in Japanese and

Korean procedural law.

Chapter VII offers a brief conclusion with implications for the theory of legal transplants.

## **CHAPTER II. TRADE SECRET LAW IN THE UNITED STATES**

Today's trade secret law in the United States is a result of the courts' response to the growing importance of corporate control of valuable information and the increased mobility of labor in modern economies. Since the nineteenth century, which was a period of transition from a preindustrial to a modern industrial economy, trade secret law in the United States has expanded continuously, and currently, it plays a significant role in the U.S. economy. However, the development of trade secret law was not an easy process. On the one hand, scholars and courts have disagreed over the justification for trade secret protection, including its grounding in common law doctrines, including property law, contract law, and torts, which is important in determining the scope of trade secret protection. On the other hand, because labor mobility has been considered a way of spreading information in recent years, the recent enactment of the Economic Espionage Act (EEA) has been criticized because of its potentially negative impact on innovation.

This chapter explores trade secret law in the United States. In the first section, it examines the historical development of and different theoretical justifications for trade secret law, which show the active role of courts in forming the law governing trade secrets in the common law tradition. The second section explores the current law governing trade secrets, focusing on the subject matter, misappropriation of trade secrets, and legal remedies, which have been important foreign legal resources that have affected the adoption and development of trade secret law in Japan and Korea. The third section further examines a common and important contractual means of protecting trade secrets by preventing employees from competing against former employers in the active external labor market in the United States, by maintaining a general employment-at-will rule.

## 1. Development and Theoretical Justifications

### 1.1. Development

It is commonly held that American trade secret law did not develop until the middle of the nineteenth century.<sup>1</sup> In preindustrial economies, craft knowledge was transferred under the artisanal system in which “the mutual obligations [between master and apprentice] to instruct and to guard the secrets of the craft” existed during the term of employment, and there were few ways to legally regulate the dissemination of employees’ knowledge after the employment relationship was terminated.<sup>2</sup> Under these circumstances, to some extent, the artisanal system served as a substitute for modern trade secret law and for enforceable covenants not to compete because it played a role in enabling masters to enjoin revelation of secret information by apprentices in the absence of these legal devices. However, the Industrial Revolution had a direct effect on the development of the common law of trade secrets in the mid-nineteenth century, based on the courts’ response to the growing importance of corporate control of intellectual property and the increased mobility of labor.<sup>3</sup> The case of *Peabody v. Norfolk*,<sup>4</sup>

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<sup>1</sup> Currently, in most trade secret cases, defendants are former employees or competitors. Except for apprentices and a few exceptional categories of workers (household servants and agents under certain circumstances) who had the duty of confidence, most employees could freely use their skills and the knowledge they acquired during the course of their employment in subsequent employment into the second half of the nineteenth century. Catherine L. Fisk, *Working Knowledge: Trade Secrets, Restrictive Covenants in Employment, and the Rise of Corporate Intellectual Property, 1800-1920*, 52 HASTINGS L.J. 441, 468-83 (2001). Indeed, for example, Du Pont in the nineteenth century relied primarily on “secrecy and reputational sanctions to make it difficult for employees to take company secrets to competitors,” and they resorted to “the law of criminal theft and an action for enticement” on the rare occasion in practice. *Id.* at 468-83. For the nature of U.S. efforts to import technology from European countries during the time of national formation, see DORON S. BEN-ATAR, *TRADE SECRETS: INTELLECTUAL PIRACY AND THE ORIGINS OF AMERICAN INDUSTRIAL POWER* (2004).

<sup>2</sup> Fisk, *supra* note 1, at 450.

<sup>3</sup> *Vickery v. Welch*, 36 Mass. 523 (1837) and *Taylor v. Blanchard*, 95 Mass. 370 (1866) were, respectively, the first American judicial decisions that “recognized a cause of action for damages for misappropriation of trade secrets” and for “injunctive relief against actual or threatened misappropriation.” ROBERT P. MERGES ET AL., *INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE* 35 (4th ed. 2006). See Fisk, *supra* note 1, at 494 (“Today’s practices and doctrines developed in the context of radical changes in the American law and workplace culture, which were

which is said to be the seminal case that crystallized the doctrine of trade secrets in the United States, reflects how the courts considered workplace knowledge or valuable information for a specific policy purpose.<sup>5</sup> In that case, the plaintiff sought enforcement of a written contract against a former employee who left his former employment and helped a competitor build a factory by using knowledge of the machinery and manufacturing process invented by the plaintiff. The plaintiff sued in equity for an injunction against the former employee and a competitor who received the information. The Massachusetts Supreme Court enjoined the former employee from revealing the secrets acquired during the course of his employment. In the opinion, Justice Gray stated the policy aspect of the case: “[i]t is the policy of the law, for the advantage of the public, to encourage and protect invention and commercial enterprise.”<sup>6</sup> The court further opined, relying on the formalistic conception of property,<sup>7</sup>

If a man establishes a business and makes it valuable by his skill and attention, the good will of that business is recognized by the law as property. . . . If [a person] invents or discovers, and keeps secret, a process of manufacture, whether a proper subject for a patent or not, he has not indeed an exclusive right to it as against the public, or against those who in good faith acquire knowledge of it; but he has a property in it, which a court of chancery will protect against one who in violation of contract and breach of confidence undertakes to apply it to his own use, or to disclose it to third persons.<sup>8</sup>

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brought about by the nineteenth-century industrial revolutions. The conflict between employee freedom and corporate control of intellectual property sharpened as courts realized the importance of knowledge to economic development and began to recognize workplace knowledge as an asset of the firm rather than an attribute of the employee.”); *see also* MELVIN F. JAGER, *TRADE SECRET LAW*, § 1:4 (West 2009) (arguing that “from the beginning of the development of the common law, the public policy underlying trade secret protection has been analogous to the policy supporting the patent laws,” observed in the opinion in *Fowle v. Park*, 131 U.S. 88 (1889)).

<sup>4</sup> 98 Mass. 452 (1868).

<sup>5</sup> *See* Robert G. Bone, *A New Look at Trade Secret Law: Doctrine in Search of Justification*, 86 CAL. L. REV. 243, 252 (1998) [hereinafter Bone, *Trade Secret Law*].

<sup>6</sup> 98 Mass. 452, 457 (1868).

<sup>7</sup> *See* Bone, *Trade Secret Law*, *supra* note 5, at 252 (explaining the advantages and drawbacks of the conception of property conceptions for justifying of trade secret law).

<sup>8</sup> 98 Mass. 452, 458 (1868).

However, throughout the nineteenth century, trade secret law was limited.<sup>9</sup> The doctrine of trade secrets expanded and changed significantly between 1890 and 1920. One of the reasons for the expansion of the doctrine of trade secrets seemed to be a change in the underpinnings of the doctrine of trust to property-based theory.<sup>10</sup> However, despite many advantages of property-based theory as the rationale for trade secret protection, it had difficulties in “identifying all the impermissible modes of acquisition, use, or disclosure.”<sup>11</sup> This drawback of property theory led courts and legal scholars to find an alternative basis of liability for trade secret misappropriation.<sup>12</sup> For example, in *E.I. du Pont de Nemours Powder Co. v. Masland*,<sup>13</sup> Justice

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<sup>9</sup> In fact, Fisk explains employees’ duty to protect trade secrets in the mid-nineteenth century as follows:

Although the employee’s duty to guard trade secrets received its first recognition in 1868, the duty remained quite limited even by the last decade of the century. The duty was grounded in express contract or in a traditionally confidential relationship like that of attorney and client; it did not arise simply from the fact of employment. The information that the duty protected was mainly discrete, tangible things like recipes or drawings. The use of contract to expand the duty beyond the limits of *Peabody* appeared nonexistent.

Fisk, *supra* note 1, at 492-93.

<sup>10</sup> Fisk summarizes the changes as follows:

First, the rhetorical underpinnings of the doctrine changed perceptibly. The early focus on breach of trust shifted to an increased emphasis on misappropriation of property. Second, the earlier reliance on express contracts as the basis of a duty to protect trade secrets shifted to an assertion that the duty was an implied term in all employment. Contracts ceased being a description of the actual understanding of the parties and instead became prescriptive of the proper content of every employment relationship. Third, the types of knowledge that courts regarded as trade secrets expanded from discrete items to more inchoate know-how, and from the employer’s own discoveries to improvements that had originated in the employee. Fourth, and finally, the available remedies for the loss of trade secrets grew more effective with the invention of the inevitable disclosure doctrine.

*Id.* at 494.

<sup>11</sup> Bone, *Trade Secret Law*, *supra* note 5, at 258.

<sup>12</sup> See RESTATEMENT (FIRST) OF TORTS § 757 cmt. a (1939); Bone, *Trade Secret Law*, *supra* note 5, at 259 (“[T]he general theory that supported common law property rights in secret information began to lose its grip, first with the rise of sociological jurisprudence, and then with the advent of legal realism in the early twentieth century. A new positivism and commitment to instrumental reasoning replaced the natural law formalism of the late nineteenth century. This change undermined the logic of the common law property theory—in particular, its claim that exclusivity through secrecy implied property and that property implied legal rights which protect the owner’s exclusivity.”); Adam Mossoff, *What Is Property? Putting the Pieces Back Together*, 45 ARIZ. L. REV. 371, 416 (2003) (“It makes sense that the authors of the First Restatement would focus on exclusion because they were writing in the early twentieth century, during the heyday of the new social-relations view of rights, which focused property scholars on the only formal, social right of property: exclusion.”).

Holmes expressed this opinion about the formalistic conception of property that had been adopted in cases dealing with secret information:

[t]he word “property” as applied to trademarks and trade secrets is an unanalyzed expression of certain secondary consequences of the primary fact that the law makes some rudimentary requirements of good faith. Whether the plaintiffs have any valuable secret or not the defendant knows the facts, whatever they are, through a special confidence that he accepted. The property may be denied, but the confidence cannot be. Therefore the starting point for the present matter is not property or due process of law, but that the defendant stood in confidential relations with the plaintiffs, or one of them.<sup>14</sup>

The trade secret doctrines defined in many state cases were later refined in sections 757 and 758 of the First Restatement of Torts in 1939, in part because of disagreement about the basis of the liability for trade secret misappropriations.<sup>15</sup> The rule stated in the Restatement was that a person was liable for trade secret misappropriation if he or she disclosed or used another’s trade secrets in situations in which he or she was “restrained by a duty based on his confidential and contract relation with another,” or discovered trade secrets by improper means, or learned of secrets with notice of any impropriety in its communication to him or her.<sup>16</sup> However, the Restatement did not directly define a “trade secret” under sections 757 and 758; instead, the Restatement stated the definition of a trade secret under comment b as follows:

[a] trade secret may consist of any formula, pattern, device or compilation of information which is used in one’s business, and which gives [one] an opportunity to obtain an advantage over competitors who do not know or use it. . . . A trade

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<sup>13</sup> 244 U.S. 100, 102 (1917).

<sup>14</sup> *Id.*

<sup>15</sup> The Restatement provided the following rationale for trade secret liability:

There is considerable discussion in judicial opinions as to the basis of liability for the disclosure or use of another’s trade secrets. . . . The suggestion that one has a right to exclude others from the use of his trade secret because he has a right of property in the idea has been frequently advanced and rejected. The theory that has prevailed is that the protection is afforded only by a general duty of good faith and that the liability rests upon breach of this duty; that is, breach of contract, abuse of confidence or impropriety in the method of ascertaining the secret.

RESTATEMENT (FIRST) OF TORTS § 757 cmt. a (1939).

<sup>16</sup> *Id.* § 757.



secret is a process or device for continuous use in the operation of the business. . . . The subject matter of a trade secret must be secret.<sup>17</sup>

The definition of a trade secret adopted in the Restatement provided relatively limited protection because it required a trade secret to be information “for continuous use in the operation of the business.”<sup>18</sup> Recognizing the difficulty of defining an “exact definition of a trade secret,” the drafters provided six additional factors to determine what information qualified as a trade secret.<sup>19</sup> Although the Restatement explained that the theoretical foundation of liability for a trade secret misappropriation rested on a breach of “a general duty of good faith,” the definition of a trade secret included secrecy and its value to owners, “which underlie the property rationale” as essential elements to qualify trade secrets for protection.<sup>20</sup>

The widely accepted rules of trade secret law under sections 757 and 758 in the First Restatement of Torts could not be included when the Restatement (Second) of Torts was published in 1979 on the grounds that “the fields of Unfair Competition and Trade Regulation were rapidly developing into independent bodies of law with diminishing reliance upon the traditional principles of Tort law.”<sup>21</sup> On the other hand, U.S. companies’ reliance on trade secret

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<sup>17</sup> *Id.*

<sup>18</sup> Thus, “single or ephemeral events in the conduct of business, as, for example, the amount or other terms of a secret bid for a contract or the salary of certain employees, or the security investments made or contemplated, or the date fixed for the announcement of a new policy or for bringing out a new model or the like” cannot be protected as trade secrets under the definition of the First Restatement of Torts in 1939. *Id.* cmt. b.

<sup>19</sup> Such factors are

(1) the extent to which the information is known outside of his business; (2) the extent to which it is known by employees and others involved in his business; (3) the extent of measures taken by him to guard the secrecy of the information; (4) the value of the information to him and to his competitors; (5) the amount of effort or money expended by him in developing the information; (6) the ease or difficulty with which the information could be properly acquired or duplicated by others.

*Id.*

<sup>20</sup> RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 39 cmt. b (1995).

<sup>21</sup> RESTATEMENT (SECOND) OF TORTS, Division 9, Interference with Advantageous Economic Relations, Introductory Note (1979). The rules of trade secrets in the First Restatement of Torts were covered under Part One of Division

protection increased despite the lack of a coherent doctrine for trade secret law in the 1970s.<sup>22</sup> Thus, in 1979, the Uniform Trade Secrets Act (UTSA) was drafted by the Uniform Law Commissioners to help each state adopt a uniform state statute for the legal protection of trade secrets by adopting the model act.<sup>23</sup> The UTSA provides unitary statutory definitions (of terms such as “trade secret,” “improper means,” and “misappropriation”) and remedies from “the results of the better reasoned cases concerning the remedies for trade secret misappropriation.”<sup>24</sup> For example, the UTSA provides a broader definition of a trade secret compared with that under the First Restatement of Torts. In practice, the UTSA also contributed to providing “a single statute of limitation” for the various theories adopted in common law, such as “property, quasi-contractual, and violation of fiduciary relationship theories of noncontractual liability utilized at common law.”<sup>25</sup> As of 2005, 46 states and the District of Columbia have adopted the UTSA.<sup>26</sup> However, there are many variations from state to state with respect to judicial interpretations of the uniform act.<sup>27</sup> In 1995, the Restatement (Third) of Unfair Competition, which adopted an expanded meaning of a trade secret under the UTSA, replaced the trade secret provisions of the

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Nine, entitled “Interference with Business Relations.”

<sup>22</sup> UNIF. TRADE SECRETS ACT, Refs & Annos (2005) (“Notwithstanding the commercial importance of state trade secret law to interstate business, this law has not developed satisfactorily.”); Comment, *Theft of Trade Secrets: The Need for a Statutory Solution*, 120 U. PA. L. REV. 378, 380-81 (1971) (“Under technological and economic pressures, industry continues to rely on trade secret protection despite the doubtful and confused status of both common law and statutory remedies.”).

<sup>23</sup> See UNIF. TRADE SECRETS ACT § 8 (Uniformity of Application and Construction), 14 U.L.A. 656 (2005). In 1985, four sections (2(b), 3(a), 7, and 11) were amended to clarify the 1979 official text. *Id.*, Prefatory Note.

<sup>24</sup> *Id.*, Prefatory Note. However, commentators pointed out the insufficient contribution of the UTSA for the uniformity of trade secret protection. See, e.g., Gerald J. Mossinghoff et al., *The Economic Espionage Act: A New Federal Regime of Trade Secret Protection*, 79 J. PAT. & TRADEMARK OFF. SOC’Y 191, 194 (1997) (“[T]rade secret protection granted in each state is far from uniform relative to the other states. This often leads to the result that the ability to recover for theft of a trade secret becomes a choice of law or a contract interpretation question.”).

<sup>25</sup> UNIF. TRADE SECRETS ACT, Prefatory Note (2005) (“The contribution of the Uniform Act is substitution of unitary definitions of trade secret and trade secret misappropriation, and a single statute of limitation for the various property, quasi-contractual, and violation of fiduciary relationship theories of noncontractual liability utilized at common law.”).

<sup>26</sup> *Id.*

<sup>27</sup> *Id.*

Restatement of Torts, and the rules described under the Restatement “are applicable to actions under the Uniform Trade Secrets Act as well as to actions at common law.” And they are also compatible with the requirements of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) of the General Agreement on Tariffs and Trade (GATT), with which the United States claimed to be in compliance.<sup>28</sup>

In the middle of the 1990s, the role of federal prosecution of trade secret theft began to be considered more important, in part because of a growing number of industrial espionage cases and the associated losses,<sup>29</sup> and in part because misappropriators began to use the Internet or computer networks to obtain trade secrets, which could fall under federal jurisdiction.<sup>30</sup> But federal laws, including the Interstate Transportation of Stolen Property Act (ITSP)<sup>31</sup> and the Wire Fraud and Mail Fraud Statutes,<sup>32</sup> and state trade secret laws were not considered adequate for the federal prosecution of trade secret misappropriation in a systematic manner.<sup>33</sup> In response to

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<sup>28</sup> RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 39 cmt. b (1995); see Edmund Kitch, *The Expansion of Trade Secrecy Protection and the Mobility of Management Employees: A New Problem for the Law*, 47 S.C. L. REV. 659, 659-60 (1996) (pointing out that “[t]he trade secret protections of the Restatement [(Third) of Unfair Competition] provide timely evidence that the United States is in compliance with Article 39 of the Agreement on [TRIPs]” [hereinafter Kitch, *Expansion of Trade Secrecy Protection*]). See also Agreement on Trade-Related Aspects of Intellectual Property Rights, April 15, 1994, 33 I.L.M. 1197.

<sup>29</sup> For example, in February 1996, FBI Director Louis Freeh testified before joint hearings of the Senate Select Committee on Intelligence and the Senate Committee on the Judiciary, Subcommittee on Terrorism, Technology and Government Information in support of the EEA’s passage. He noted that “in [1995], the number of cases of economic espionage that the FBI [was] investigating doubled from 400 to 800. Twenty-three countries [were] involved in those cases.” S. Rep. 104-359, at 7 (1996). See also Spencer Simon, *The Economic Espionage Act of 1996*, 13 BERKELEY TECH. L.J. 305, 306 (1998).

<sup>30</sup> See *United States v. Riggs*, 739 F. Supp. 414 (N.D. Ill. 1990).

<sup>31</sup> See 18 U.S.C.A. §§ 2314-2315 (West 2009).

<sup>32</sup> See *id.* §§ 1341 & 1343.

<sup>33</sup> The ITSP was enacted to prevent “criminals from moving stolen property across state lines in attempts to evade the jurisdiction of state and local law enforcement officials.” Therefore, for the protection of proprietary information, the act was not adequate. The Wire Fraud and Mail Fraud Statutes also had limitations because they require the use of mail or wire, radio, or television, despite the fact that “many trade secret thefts involve merely the copying of vital information and not a permanent loss of the information itself.” Simon, *supra* note 29, at 306-07; see also H.R. Rep. No. 104-788, at 6-7 (1996); S. Rep. 104-359, at 10-11 (1996); James H.A. Pooley et al., *Understanding the Economic Espionage Act of 1996*, 5 TEX. INTELL. PROP. L.J. 177, 179-87 (1997) [hereinafter Pooley, *EEA*]. In addition, civil remedies offered by state trade secret law were said to be insufficient because of

these problems, the U.S. Congress enacted a federal statute, the EEA,<sup>34</sup> which created new federal criminal offenses involving trade secret misappropriations. The definition of trade secrets under the EEA<sup>35</sup> is broader than that under the UTSA because it clearly includes “all forms and types of financial, business, scientific, technical, economic, or engineering information.”<sup>36</sup> The EEA defines trade secret misappropriation in a new way and criminalizes “economic espionage” and “theft of trade secrets,” providing for punishments consisting of a fine, imprisonment, or both.<sup>37</sup> The EEA also applies to trade secret misappropriations occurring both inside and outside the United States.<sup>38</sup>

Finally, with the advent of information-intensive industries, which were becoming more and more critical to the modern U.S. economy, trade secret protection was strengthened through restrictions on reverse engineering. In the late 1970s and early 1980s, semiconductor firms sought legislation to protect chip layouts (or chip topographies) developed by original chip

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practical difficulties as well as a lack of resources to pursue civil cases. S. Rep. 104-359, at 11 (1996).

<sup>34</sup> Economic Espionage Act of 1996, Pub. L. No. 104-294, 110 Stat. 3488 (codified in 18 U.S.C. §§ 1831-1839).

<sup>35</sup> 18 U.S.C.A. § 1839 (3) (West 2009). Under the EEA, the term “trade secret” is defined as follows:

[A]ll forms and types of financial, business, scientific, technical, economic, or engineering information, including patterns, plans, compilations, program devices, formulas, designs, prototypes, methods, techniques, processes, procedures, programs, or codes, whether tangible or intangible, and whether or how stored, compiled, or memorialized physically, electronically, graphically, photographically, or in writing if—

- (A) the owner thereof has taken reasonable measures to keep such information secret; and
- (B) the information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, the public.

<sup>36</sup> Some commentators who are favorable to the expansion of federal protection of valuable economic information against economic espionage and trade secret theft point out the limitations of the EEA: First, “the EEA does not protect trade secrets related to services (as opposed to goods), negative know-how, or reverse engineering”; second, “U.S. corporations with offices abroad are not protected under the EEA”; third, the Act does not give civil remedies for victims of trade secret misappropriations. Simon, *supra* note 29, at 315-16. See also Pooley, *EEA, supra* note 33, at 200; Rochelle Cooper Dreyfuss, *Trade Secrets: How Well Should We Be Allowed To Hide Them? The Economic Espionage Act of 1996*, 9 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 1 (1998); Geraldine Szott Moohr, *The Problematic Role of Criminal Law in Regulating Use of Information: The Case of the Economic Espionage Act*, 80 N.C. L. REV. 853, 877-82 (2002).

<sup>37</sup> 18 U.S.C.A. §§ 1831 & 1832 (West 2009). See Moohr, *supra* note 36.

<sup>38</sup> 18 U.S.C.A. § 1837 (West 2009).

makers from reverse engineering to make market-destructive cloning chips because the competitive reverse engineering and copying of semiconductor chip designs became easier and faster, which did not enable the original chip makers to recoup their investments.<sup>39</sup> In response to voices and pressure from the industry, the Semiconductor Chip Protection Act of 1984 (SCPA) was enacted to protect chip layouts developed by the original chip makers from reverse engineering to make market-destructive cloning chips.<sup>40</sup>

Reverse engineering has also been a controversial topic in the computer programing industry, in which developers of computer programs relied on trade secrecy to protect the internal aspects of the programs (e.g., source codes [human-readable language]) by providing object code (machine-readable language) forms of programs in the market.<sup>41</sup> In 1976, Congress established the National Commission on New Technological Uses of Copyrighted Works to examine whether computer and information technologies should be incorporated into copyright law and was advised to amend the Copyright Act.<sup>42</sup> In light of the fact that the object codes of computer programs were protected under the Copyright Act, trade secret law was said to be

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<sup>39</sup> Pamela Samuelson & Suzanne Scotchmer, *The Law and Economics of Reverse Engineering*, 111 YALE L.J. 1575, 1597 (2002).

<sup>40</sup> 17 U.S.C. §§ 901-914 (2006). For the feature of reverse engineering under the SCPA, see Lee Hsu, *Reverse Engineering Under the Semiconductor Chip Protection Act: Complications for Standard of Infringement*, 5 ALB. L.J. SCI. & TECH. 249 (1996). But the Act does not prohibit reverse engineering for purposes of studying, copying circuit design, or using the information acquired in the course of reverse engineering for designing a new chip. See 17 U.S.C. § 906 (2006).

<sup>41</sup> Julie E. Cohen & Mark A. Lemley, *Patent Scope and Innovation in the Software Industry*, 89 CAL. L. REV. 1, 16 (2001) (explaining that courts' and scholars' discussion about reverse engineering of computer programs "has primarily taken place under the aegis of trade secret and copyright laws because historically it was those laws that protected computer programs."). See also ROBERT P. MERGES & JOHN FITZGERALD DUFFY, PATENT LAW AND POLICY: CASES AND MATERIALS 962 (2002). *Sega Enterprises Ltd. v. Accolade, Inc.*, 977 F.2d 1510, 1519-20 (9th Cir. 1993) (holding that computer programs are covered under Section of 102 (a) of the Copyright Act). Section 102 (a) of the Copyright Act provides that "copyright protection subsists . . . in original works of authorship . . . which . . . can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device." 17 U.S.C. § 102(a) (2006).

<sup>42</sup> For the justifications of applying Section 101 of the 1980 Copyright Act to computer program, see THE FINAL REPORT OF THE NATIONAL COMMISSION ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS (CONTU) 9-13, available at <http://digital-law-online.info/CONTU/PDF/index.html> (last visited Oct. 24, 2010).

strengthened because decompilation or disassembly of the object code of a computer program, a common form of reverse engineering, would violate the copyright owner's exclusive rights to copy, reproduce, and prepare derivative works. With the paradigm shift in the mass market for copyrighted works "from the sale of physical products, such as books and videocassettes" to "mass-marketng of technically protected digital content," such as music, movies, software, or other works, the U.S. Congress enacted the Digital Millennium Copyright Act (DMCA) to promote the U.S. electronic commerce industry. The DMCA also strengthened trade secret protection for unpatented products that had been subjected to reverse engineering in most areas by prohibiting circumvention of technical measures for the protection of copyrighted works.<sup>43</sup> However, courts in recent cases interpreted the DMCA narrowly so as not to restrict reverse engineering, considering that the DMCA must be interpreted within the public purpose of copyright law.<sup>44</sup>

## 1.2. Theoretical Justifications

Patent law draws on relatively straightforward incentive theory and is regulated by a federal statute designating the proper economic incentive scheme by policymakers.<sup>45</sup> In contrast

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<sup>43</sup> See Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998) (Codified in sections of 5, 17, 28, and 35 U.S.C.).

<sup>44</sup> See, e.g., *Chamberlain Group, Inc. v. Skylink Technologies, Inc.*, 381 F.3d 1178 (Fed. Cir. 2004); *Lexmark Int'l v. Static Control Components*, 387 F.3d 522 (6th Cir. 2004). On the other hand, while reverse engineering may be prohibited by the use of shrink wrap and click wrap software "licences" to prevent reverse engineering, this issue is still controversial. See Craig Zieminski, *Game for Reverse Engineering?: How the DMCA and Contracts Have Affected Innovation*, 13 J. TECH. L. POL'Y 289 (2008).

<sup>45</sup> See U.S. CONST., art. I, § 8, cl. 8. ("To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."); *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 146 (1989) ("[T]he federal patent laws have embodied a careful balance between the need to promote innovation and the recognition that imitation and refinement through imitation are both necessary to invention itself and the very lifeblood of a competitive economy."); Mark A. Lemley, *The*

to patent law, as suggested above, trade secret law depends on many different theoretical bases, developed mainly by state courts.<sup>46</sup> Indeed, because of this disagreement over the justification for trade secret protection, courts, scholars, and commentators have offered various theories in an attempt to justify and unify trade secret law.<sup>47</sup> These theoretical approaches can be divided into three groups, which seek the theoretical foundation of trade secret law in common law doctrines and track the sources of common law. The first theory is that trade secrets are property rights.<sup>48</sup> As mentioned earlier, this property-based approach was articulated in the seminal case *Peabody v. Norfolk*.<sup>49</sup> In addition, in a recent case, *Ruckelshaus v. Monsanto Co.*,<sup>50</sup> Monsanto, inventor and seller of a chemical pesticide, sought injunctive relief from provisions of the Federal Insecticide, Fungicide, and Rodenticide Act, which required Monsanto to submit data to the U.S. Environmental Protection Agency (EPA) to register the product and to disclose the data publicly. Monsanto alleged that the data submitted to the EPA was a property protected by the Fifth

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*Surprising Virtues of Treating Trade Secrets as IP Rights*, 61 STAN. L. REV. 311, 329 (2008) [hereinafter Lemley, *Trade Secrets as IP Rights*] (“Patents and copyrights are generally acknowledged to serve a utilitarian purpose.”). Of course, there are other theories explaining the basis of patent law. See, e.g., A. Samuel Oddi, *Un-Unified Economic Theories of Patents—The Not-Quite-Holy Grail*, 71 NOTRE DAME L. REV. 267, 273-77 (1996) (reviewing the classical theories of the patent system); Adam Mossoff, *Rethinking the Development of Patents: An Intellectual History, 1550-1800*, 52 HASTINGS L.J. 1255, 1257 (2001) (challenging “the prevailing view that the ideas of the natural rights philosophers did not influence the early development of patent law”).

<sup>46</sup> See Charles Tait Craves, *Trade Secrets As Property: Theory and Consequences*, 15 J. INTELL. PROP. 39, 63 (2007) (“there are fifty-one different versions of trade secret law in the United States, and, thus, what a court in Washington says does not control what a court in Washington, D.C. might do.”).

<sup>47</sup> See, e.g., Bone, *Trade Secret Law*, *supra* note 5; Michael Risch, *Why Do We Have Trade Secrets?*, 11 MARQUETTE INTELL. PROP. L. REV. 1 (2007); Lemley, *Trade Secrets as IP Rights*, *supra* note 45; Graves, *supra* note 46.

<sup>48</sup> See, e.g., Miguel Deutch, *The Property Concept of Trade Secrets in Anglo-American Law: An Ongoing Debate*, 31 U.RICH. L. REV. 313, 361 (1997) (“it can be concluded that in American law the features of the right in trade secrets are rather close, yet not identical to those characterizing in rem rights.”); Mossoff, *supra* note 12, at 418 (“If one conceives of ‘property’ as arising from and constituting the rights to acquire, use and dispose of things, then it is logical to recognize as ‘property’ certain information and business practices created and kept secret by its possessor.”); Graves, *supra* note 46, at 41 (“a property conception best serves the interests of promoting employee mobility and the freedom to use information in the public domain.”); see also JAGER, *supra* note 3, § 4-3; *Chicago Lock Co. v. Fanberg*, 676 F.2d 400, 404 (9th Cir. 1982) (“Trade secrets are protected . . . in a manner akin to private property, but only when they are disclosed or used through improper means.”).

<sup>49</sup> 98 Mass. 452 (1868).

<sup>50</sup> 467 U.S. 986 (1984). See also *Phillip Morris Inc. v. Reilly*, 312 F.3d 24 (1st Cir. 2002).

Amendment's Taking Clause. Analogizing trade secrets to physical property, the U.S. Supreme Court held that "to the extent that Monsanto has an interest in its health, safety, and environmental data cognizable as a trade-secret property right under Missouri law, that property right is protected by the Taking Clause of the Fifth Amendment."<sup>51</sup> The second theory underlying trade secret law is contractual.<sup>52</sup> This theory is often presented because of the existence of an express contract or quasi-contract (implied-in-law contract), for example, from a confidential relationship, including the employer-employee relationship implicated in many trade secret litigations.<sup>53</sup> The third theory is that the primary basis of trade secret law should be tort theory, deriving from a breach of confidence or other wrongful conduct.<sup>54</sup> Tort theory, often be labeled "duty-based theory" or "unfair competition theory," is said to be the most popular and predominant theory.<sup>55</sup> It is closely related to an approach seeking the primary justifications for trade secret law in the "maintenance of commercial morality." The commercial morality approach, in which trade secret law exists to enforce morality in business, has been expressed by many courts and commentators.<sup>56</sup> For example, in *E.I. du Pont de Nemours & Co. v.*

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<sup>51</sup> *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1002-04 (1984) ("Trade secrets have many of the characteristics of more tangible forms of property. A trade secret is assignable. . . . A trade secret can form the res of a trust . . . .").

<sup>52</sup> *See, e.g.,* Thornton Robison, *The Confidence Game: An Approach to the Law About Trade Secrets*, 25 ARIZ. L. REV. 347 (1983).

<sup>53</sup> For a discussion of the contract theory of trade secret law, see JAGER, *supra* note 3, § 4-1. *See Eastman Co. v. Reichenbach*, 20 N.Y.S. 110, 115-16 (1892) ("By a careful reading of the various decisions upon this subject, it will be seen that some are made to depend upon a breach of an express contract between the parties, while others proceed upon the theory that, where a confidential relation exists between two or more parties engaged in a business venture, the law raises an implied contract between them that the employee will not divulge any trade secrets imparted to him or discovered by him in the course of his employment, and that a disclosure of such secrets, thus acquired, is a breach of trust and a violation of good morals, to prevent which a court of equity should intervene.").

<sup>54</sup> *See Lynn Sharp Paine, Trade Secrets and the Justification of Intellectual Property: A Comment on Hettinger*, 20 PHIL. & PUB. AFF. 247, 249 (1991); James W. Hill, *Trade Secrets, Unjust Enrichment, and the Classification of Obligations*, 4 VA. J.L. & TECH. 2 (1999), 4 VA. J.L. & TECH. 2 (Spring 1999) <http://vjolt.student.virginia.edu> (arguing that "a body of trade-secret law, distinct from contract and other tort law, is justified by the principles of unjust enrichment").

<sup>55</sup> Lemley, *Trade Secrets as IP Rights*, *supra* note 45, at 324-26.

<sup>56</sup> *See* RESTATEMENT OF (FIRST) TORTS § 757 cmt. f (1939) (stating that improper means of obtaining trade secrets



*Christopher*,<sup>57</sup> an industrial espionage case, the court held that “aerial photography of plant construction is an improper means of obtaining another’s trade secret”; it addressed the policy grounds behind the decision, quoting from a Texas Supreme Court case that “the undoubted tendency of the law has been to recognize and enforce higher standards of commercial morality in the business world.”<sup>58</sup> This theory has been expressed in the Restatement (First) of Torts, the Restatement (Third) of Unfair Competition, and by many state courts.

In addition to these common law-based approaches, several instrumental or policy-based approaches exist. One popular view of courts and scholars focuses on the nature of trade secrets as a form of intellectual property rights.<sup>59</sup> These commentators argue that trade secret law encourages research and innovation by securing the fruits of these endeavors to inventors and innovators.<sup>60</sup> In the case of *Kewanee Oil Co. v. Bicron Corp.*,<sup>61</sup> in which a plaintiff sought injunctive relief against a former employee from disclosing or using certain claimed trade secrets associated with a process for producing crystal, the court granted a permanent injunction, observing the importance of trade secret protection to “the subsidization of research and development.”<sup>62</sup> The court further noted that

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are generally “means which fall below the generally accepted standards of commercial morality and reasonable conduct”); JAGER, *supra* note 3, § 1:3; JAMES POOLEY, TRADE SECRETS, § 1.02 [2] (West 2009).

<sup>57</sup> See, e.g., *E.I. du Pont de Nemours & Co. v. Christopher*, 431 F.2d 1012 (5th Cir. 1970), *cert. denied* 400 U.S. 1024, *rehearing denied* 401 U.S. 967 (1971); *Hyde Corp. v. Huffines*, 158 Tex. 566, 581-582, 314 S.W.2d 763, 773 (Tex. 1958) (“the undoubted tendency of [trade secret] law has been to recognize and enforce higher standards of commercial morality in the business world.”).

<sup>58</sup> *Du Pont*, 431 F.2d at 1015.

<sup>59</sup> See, e.g., Lemley, *Trade Secrets as IP Rights*, *supra* note 45, at 329 (“Trade secrets are best understood not as applications or extensions of existing common law principles (warranted or unwarranted), but as IP rights.”).

<sup>60</sup> *Burten v. Milton Bradley Co.*, 763 F.2d 461, 467 (1st Cir. 1985) (“The underlying goal of the law which protects trade secrets, like that which protects copyrights and patents, is to encourage the formulation and promulgation of ideas by ensuring that creators of ideas benefit from their creations.”). See JAGER, *supra* note 3, § 1:4; Lemley, *Trade Secrets as IP Rights*, *supra* note 45, at 330 (contending that trade secret laws “provide sufficient advantage in terms of lead time or relative costs to minimize or eliminate the public goods problem”).

<sup>61</sup> *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470 (1974).

<sup>62</sup> *Id.* at 482.

certainly the patent policy of encouraging invention is not disturbed by the existence of another form of incentive to invention. In this respect the two systems are not and never would be in conflict. Similarly, the policy that matter once in the public domain must remain in the public domain is not incompatible with the existence of trade secret protection.<sup>63</sup>

Commentators further argue that the law, by giving certain legal rights to the trade secret owner, allows the owner to disclose trade secrets for licensing to the third parties because, in the absence of trade secret law, the owner would not reliably license them to others; thus, trade secret protection plays a similar role in making society exploit useful information in a more efficient way.<sup>64</sup> Furthermore, other policy concerns, such as the encouragement of labor mobility<sup>65</sup> and the protection of the fundamental right of privacy,<sup>66</sup> can be found in judicial decisions or the

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<sup>63</sup> *Id.* at 484.

<sup>64</sup> Lemley, *Trade Secrets as IP Rights*, *supra* note 45, at 336-37; POOLEY, *supra* note 56, § 1.02 [4]; RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 39 cmt. a (1996). In the *Kewanee* case, the court also pointed out the following view:

Even if trade secret protection against the faithless employee were abolished, inventive and exploitive effort in the area of patentable subject matter that did not meet the standards of patentability would continue, although at a reduced level. Alternatively with the effort that remained, however, would come an increase in the amount of self-help that innovative companies would employ. Knowledge would be widely dispersed among the employees of those still active in research. Security precautions necessarily would be increased, and salaries and fringe benefits of those few officers or employees who had to know the whole of the secret invention would be fixed in an amount thought sufficient to assure their loyalty. Smaller companies would be placed at a distinct economic disadvantage, since the costs of this kind of self-help could be great, and the cost to the public of the use of this invention would be increased. The innovative entrepreneur with limited resources would tend to confine his research efforts to himself and those few he felt he could trust without the ultimate assurance of legal protection against breaches of confidence. As a result, organized scientific and technological research could become fragmented, and society, as a whole, would suffer.

*Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 485-86 (1974) (footnote omitted).

<sup>65</sup> See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 42 cmt. b (1995) (“Application of the rules protecting trade secrets in cases involving competition by former employees requires a careful balancing of interests. There is a strong public interest in preserving the freedom of employees to market their talents and experience in order to earn a livelihood.”).

<sup>66</sup> See *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 155 (1989) (“certain aspects of trade secret law operated to protect non-economic interests outside the sphere of congressional concern in the patent laws. As the Court noted, ‘[A] most fundamental human right, that of privacy, is threatened when industrial espionage is condoned or is made profitable.’”) (citing *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 487 (1974)).

opinions of commentators.

## 2. Current Trade Secret Law

### 2.1. Subject Matter

Under the UTSA, virtually any information can be protected as a trade secret. The act defines a “trade secret” as

information, including a formula, pattern, compilation, program, device, method, technique, or process, that:

- (i) derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and
- (ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.<sup>67</sup>

From the very definition of a trade secret under the UTSA, trade secret law protects a wide spectrum of information; both technical and nontechnical information can be protected as a trade secret so long as it meets certain legal requirements.<sup>68</sup> In fact, most information, including

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<sup>67</sup> UNIF. TRADE SECRETS ACT § 1(4), 14 U.L.A. 537 (2005).

<sup>68</sup> *See* *Revere Transducers, Inc. v. Deere & Co.*, 595 N.W.2d 751, 776 (Iowa 1999) (“Business information may also fall within the definition of a trade secret, including such matters as maintenance of data on customer lists and needs, source of supplies, confidential costs, price data and figures. Trade secrets can range from customer information, to financial information, to information about manufacturing processes, to the composition of products.”); *Avery Dennison Corp. v. Kitsonas*, 118 F. Supp. 2d 848, 854 (S.D. Ohio 2000) (“customer lists, pricing information, sales strategies and the business philosophy” can be entitled to trade secret protection). Even if virtually any information can be entitled to trade secret protection, some information cannot be protected under trade secret law. *See* *Daktronics, Inc. v. MaAfee*, 599 N.W.2d 358, 361, 1999 SD 113, 14 (S.D. 1999) (“the commonly accepted definition of a trade secret does not include a marketing concept or new product idea submitted by one party to another. . . . Therefore, simply possessing a non-novel idea or concept without more is generally, as a matter of law, insufficient to establish a trade secret.”).

recipes,<sup>69</sup> manufacturing processes<sup>70</sup> or product innovations,<sup>71</sup> plans or designs,<sup>72</sup> and customer lists,<sup>73</sup> can be potential trade secrets under the nonexclusive list of the categories identified in the act.

There are slight differences between the Restatement of Torts, the UTSA, and the EEA, but they share common aspects. First, the information in question must have “economic value.”<sup>74</sup> To satisfy this requirement, a claimed trade secret must be sufficient to provide an “economic advantage over others who do not possess the information.”<sup>75</sup> However, the value does not have to be enormous; rather, it must provide “an advantage that is more than trivial.”<sup>76</sup>

The UTSA, unlike the Restatement of Torts, does not require information to be

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<sup>69</sup> Christopher M’s Hand Poured Fudge v. Hennon, 699 A.2d 1272 (1997) (secret fudge recipe); Buffets, Inc. v. Klinke, 73 F.3d 965, 37 U.S.P.Q.2d 1449 (9th Cir. 1996) (restaurant recipes).

<sup>70</sup> Lamont, Corliss & Co. v. Bonnie Blend Chocolate Corp., 135 Misc. 537 (1929) (process to manufacture chocolate powder); C&F Packing Co. v. IBP, Inc., 224 F.3d 1296 (Fed. Cir. 2000) (process “for making and freezing precooked sausage for pizza toppings”); Organic Chem., Inc. v. Carroll Prod., Inc., 211 U.S.P.Q. 628 (1981) (process “which could be used in the commercial manufacturing of Dimethylamino Ethyl Chloride Hydrochloride and Diethylamino Chloride Hydrochloride”).

<sup>71</sup> Gen. Elec. Co. v. Chien-Min Sung, 843 F. Supp. 776 (D. Mass. 1994) (“equipment for manufacturing Saw Grade Diamond product”); USM Corp. v. Marson Fastener Corp., 379 Mass. 90 (Mass. 1979) (“blind rivet assembly machine”). See also ROGER M. MILGRIM, MILGRIM ON TRADE SECRETS § 1.09 [5] [a] (“Numerous cases found, despite sale or equivalent commercialization, that secrets in the product itself remain trade secrets. Among these are a heavy-duty magnetic industrial ‘fishing device,’ hybrid seed corn, ozone systems, oxygen regulators used as medical devices, an air conditioning duct enclosure, a complex slotted array radar antenna, a computer peripheral high speed acquisition module, an electronic speedometer for heavy duty trucks, . . . a special composition rubber rifle recoil pad and a toy gun mechanism.”) (footnotes omitted).

<sup>72</sup> Anaconda Co. v. Metric Tool & Die Co., 485 F. Supp. 410, 413 (E.D. Pa. 1980) (protecting design of a sophisticated profile and winding machine used to make telephone cord armor).

<sup>73</sup> Courtesy Temporary Serv., Inc. v. Camacho, 222 Cal. App. 3d 1278 (1990); see Revere Transducers, Inc. v. Deere & Co., 595 N.W.2d 751, 776 (Iowa 1999) (“Business information may also fall within the definition of a trade secret, including such matters as maintenance of data on customer lists and needs, source of supplies, confidential costs, price data and figures. Trade secrets can range from customer information, to financial information, to information about manufacturing processes, to the composition of products.”); Avery Dennison Corp. v. Kitsonas, 118 F. Supp. 2d 848, 854 (S.D. Ohio 2000) (“customer lists, pricing information, sales strategies and the business philosophy” can be entitled to trade secret protection).<sup>74</sup> RESTATEMENT (FIRST) OF TORTS § 757 cmt. b (1939); UNIF. TRADE SECRETS ACT § 1(4), 14 U.L.A. 537 (2005); 18 U.S.C.A. § 1839(3) (West 2009).

<sup>74</sup> RESTATEMENT (FIRST) OF TORTS § 757 cmt. b (1939); UNIF. TRADE SECRETS ACT § 1(4), 14 U.L.A. 537 (2005); 18 U.S.C.A. § 1839(3) (West 2009).

<sup>75</sup> RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 39 cmt. e (1995).

<sup>76</sup> *Id.* See, e.g., Telerate Sys., Inc. v. Caro, 689 F. Supp. 221, 232 (S.D.N.Y. 1988) (“Even a slight competitive edge will satisfy this requirement of trade secret protection.”).

continuously “used in one’s business.”<sup>77</sup> Therefore, under the provision of the UTSA, the potential value or negative value of information can qualify as a trade secret.<sup>78</sup> In practice, courts in the United States consider several factors, including the value to owners or competitors, the costs for owners or others to develop the information, and licensing by others, to determine whether information meets the economic value requirement.<sup>79</sup> Some courts look to the totality of the circumstances surrounding the information and rely on the six factors enumerated in the Restatement (First) of Torts.<sup>80</sup>

Second, the information must not “be generally known to, and readily ascertainable by,” others.<sup>81</sup> In practice, these requirements are closely related to the “economic value” requirement because the economic value of a trade secret can be derived from the fact that others cannot access the information and use it economically.<sup>82</sup> Public disclosure of trade secrets results in the loss of trade secret status. Accordingly, in the absence of public disclosure, the duration of trade secrets can be perpetual, insofar as the information meets certain legal requirements. But even if the information is not known to the public, it may not be protected as a trade secret, provided others in the same business generally know it.<sup>83</sup> On the other hand, the information does not

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<sup>77</sup> UNIF. TRADE SECRETS ACT § 1(4), 14 U.L.A. 537 (2005).

<sup>78</sup> *See, e.g., Religious Tech. Ctr. v. Netcom On-Line Commc’n Serv., Inc.*, 923 F. Supp. 1231, 1253 (N.D. Cal. 1995) (“the definition of trade secret does not require that there currently be competitors, only that there be actual or potential value from the information being secret. Thus, potential competition is sufficient.”); *Metallurgical Indus. Inc. v. Fourtek, Inc.*, 790 F.2d 1195, 1203 (5th Cir. 1986) (observing that “[k]nowing [negative information] often leads automatically to knowing what to do”); UNIF. TRADE SECRETS ACT § 1(4) cmt., 14 U.L.A. 537 (2005).

<sup>79</sup> *See, e.g., George S. May Intern. Co. v. Int’l Profit Assoc.*, 628 N.E.2d 647, 653 (1993) (“The information must be sufficiently secret to impart economic value to both its owner and its competitors because of its relative secrecy.”).

<sup>80</sup> *See, e.g., Uniroyal Goodrich Tire Co. v. Hudson*, 873 F. Supp.1037, 1045 (E.D. Mich. 1994) (“In order to establish that they are trade secrets or information, plaintiff must satisfy the six factors.”). For cases concerning this requirement, see POOLEY, *supra* note 56, § 4.05.

<sup>81</sup> UNIF. TRADE SECRETS ACT § 1(4), 14 U.L.A. 537 (2005).

<sup>82</sup> *See Pillsbury, Madison & Sutro v. Schectman*, 55 Cal. App. 4th 1279, 1288, 64 Cal. Rptr. 2d 698, 704 (Cal. App. 1 Dist. 1997) (“trade secrets derive their value as a form of intellectual property from the fact they are not disclosed to those who might be able to use them to create value properly belonging to the owner of the secret.”).

<sup>83</sup> *See Mangren Research and Dev. Corp. v. Nat’l Chem. Co., Inc.*, 87 F.3d 937, 942 (7th Cir. 1996) (“This

require absolute secrecy, but only substantial secrecy. Thus, the holder of the information is permitted to disclose the information to employees in the firm, to outsiders, or both, using the information for his or her own business to the extent that he or she allows only key employees to access it and takes reasonable measures to keep it secret.<sup>84</sup> In addition, for information to be entitled to trade secret protection, it must not be readily ascertainable by others. If the information can be reverse engineered without relevant expertise or great effort, or can be found easily in publications, it cannot be protected as a trade secret.<sup>85</sup>

Third, the act requires that, to seek legal remedies, a trade secret holder must have taken reasonable security measures to prevent the loss of the trade secret.<sup>86</sup> In practice, this requirement is one of “the most important factors in gaining trade-secret protection.”<sup>87</sup> The UTSA comment illustrates the reasonableness standard with familiar examples, such as “advising employees of the existence of a trade secret, limiting access to a trade secret on a ‘need to know

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requirement precludes trade secret protection for information generally known within an industry even if not to the public at large.”); *ILG Indus., Inc. v. Scott*, 49 Ill.2d 88, 93, 273 N.E.2d 393, 396 (Ill. 1971) (“That which is of general knowledge within an industry cannot be a trade secret; something which is fully and completely disclosed by a business through its catalogs or literature disseminated throughout an industry cannot be a trade secret.”).

<sup>84</sup> *See, e.g., Lasermaster Corp. v. Sentinel Imaging Inc.*, 931 F. Supp. 628, 635 (D. Minn. 1996) (“If, under all the circumstances, the employee knows or has reason to know that the owner intends or expects the information to be secret, confidentiality measures are sufficient.”).

<sup>85</sup> *See, e.g., Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 476 (1974) (“A trade secret law, however, does not offer protection against discovery by fair and honest means, such as by independent invention, accidental disclosure, or by so-called reverse engineering, that is by starting with the known product and working backward to divine the process which aided in its development or manufacture.”).

<sup>86</sup> UNIF. TRADE SECRETS ACT § 1(4), 14 U.L.A. 537 (2005). *See also* 18 U.S.C. § 1839 (1996). For a brief history of this requirement, see Robert G. Bone, *Trade Secrecy, Innovation, and the Requirement of Reasonable Secrecy Precautions* 5-14 (Boston U. Sch. of Law, Working Paper No. 09-40, Sept. 2009) [hereinafter Bone, *Reasonable Secrecy Precautions*].

<sup>87</sup> *See Enter. Leasing Co. v. Ehmke*, 197 Ariz. 144, 150, 3 P.3d 1064, 1070 (1999) (“Indeed, the most important factor in gaining trade-secret protection is demonstrating that the owner has taken such precautions as are reasonable under the circumstances to preserve the secrecy of the information.”) (citation omitted); Elizabeth A. Rowe, *Contributory Negligence, Technology, and Trade Secrets* 8 (University of Florida Legal Studies Research Paper No. 2008-6, 2008) [hereinafter Rowe, *Contributory Negligence*] (“[The reasonable efforts requirement] is the most important factor in determining whether the plaintiff has a protectable trade secret.”) (footnote omitted).

basis,' and controlling plant access.”<sup>88</sup> These imply that the reasonableness requirement does not require absolute secrecy for the information to have trade secret status. However, the UTSA and the Restatement of Torts do not define “reasonable efforts,” nor do they provide clear guidelines on the requirement in determining whether the information is sufficiently secret to maintain trade secret protection.<sup>89</sup> Therefore, courts have had difficulty in drawing a clear line regarding the requirement and they have relied heavily on specific relevant facts by considering the general knowledge in the industry, the level of ascertainability by proper means, and whether the purported trade secret owner implemented reasonable measures under the circumstances to maintain secrecy.<sup>90</sup> Nonetheless, as the Restatement (Third) of Unfair Competition explains, in practice, the reasonable secrecy requirement is applied based on the rationale of evidence or notice of the actual secrecy and value of a trade secret.<sup>91</sup> In fact, some courts have emphasized the evidentiary aspect of this requirement,<sup>92</sup> while others have focused on its notice aspects.<sup>93</sup>

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<sup>88</sup> UNIF. TRADE SECRETS ACT § 1(4), 14 U.L.A. 537 (2005); RESTATEMENT (FIRST) OF TORTS § 757 cmt. b (1939).

<sup>89</sup> Richard Posner, *Trade Secret Misappropriation: A Cost-Benefit Response to the Fourth Amendment Analogy*, 106 HARV. L. REV. 461, 464 (1992) [hereinafter Posner, *Trade Secret Misappropriation*] (“Thus, left without clear guiding standards, courts must make a factual determination as to whether the owner used reasonable precautions.”).

<sup>90</sup> See Lemley, *Trade Secrets as IP Rights*, *supra* note 45, at 317; *Electro-Craft Co. v. Controlled Motion, Inc.*, 332 N.W.2d 890 (1983) (determining that reasonable efforts to maintain the secrecy element of trade secret law do not require maintenance of *absolute* secrecy); *Tele-Count Eng’r, Inc. v. Pacific Tel. & Tel. Co.*, 168 Cal. App. 3d 455 (1985) (finding that the plaintiff failed to place a logo or a confidentiality warning on its cable counting process, even though the custom of the industry was to place such notice on any item considered confidential); *In re Innovative Constr. Sys., Inc.*, 793 F.2d 875 (7th Cir. 1986) (determining that reasonable efforts to maintain the secrecy of a trade secret depends on the surrounding facts and circumstances in a specific business); *Rockwell Graphic Sys., Inc. v. DEV. Indus., Inc.* 925 F.2d 174 (1991) (determining that the assessment of a “reasonable” precaution depends on a balancing of costs and benefits that will vary from case to case and that will require estimation and measurement by persons knowledgeable in the particular field of endeavor involved).

<sup>91</sup> RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 39 cmt. g (1995) (“the owner’s precautions should be evaluated in light of the other available evidence relating to the value and secrecy of the information. . . . They can signal to employees and other recipients that a disclosure of the information by the trade secret owner is intended to be in confidence.”). Thus, it does not include the reasonable secrecy requirement under section 39. See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 39 & cmt. g (1995) (“Thus, if the value and secrecy of the information are clear, evidence of specific precautions taken by the trade secret owner may be unnecessary.”). The Restatement (First) of Torts also seems to take a view similar to that in the Restatement (Third) of Unfair Competition. See RESTATEMENT (FIRST) OF TORTS § 757 cmt. b (1939) (putting “the extent of measures taken . . . to guard the secrecy of the information” as one of six factors to be considered in determining whether the information at issue is secret).

<sup>92</sup> See, e.g., *Rockwell Graphic Sys., Inc. v. DEV Indus., Inc.* 925 F.2d 174 (1991) (focusing on the evidentiary

## 2.2. Misappropriation of Trade Secrets

The owner of a trade secret does not have an exclusive right to the use or possession of the information and can exercise the right only against those engaged in certain wrongful acts, namely “misappropriation.”<sup>94</sup> The UTSA, unlike the Restatement (First) of Torts, expanded the scope of misappropriation of trade secrets with respect to which improper acquisitions of a trade secret were independently actionable.<sup>95</sup> Thus, under the UTSA, three forms of wrongful acts exist: wrongful acquisition, use, and disclosure of trade secrets.<sup>96</sup> These acts become illegal

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significance of the requirement of reasonable security measures).

<sup>93</sup> See, e.g., *BondPro Corp. v. Siemens Power Gen., Inc.*, 463 F.3d 702, 709 (7th Cir. 2006) (focusing on the notice aspect of this requirement). See also Bone, *Reasonable Secrecy Precautions*, *supra* note 86, at 14-20 (analyzing and criticizing courts’ rationales of reasonable security measures on several grounds, including evidentiary and notice benefits in trade secret cases); Lemley, *Trade Secrets as IP Rights*, *supra* note 45, at 317 (“Courts have shown some confusion over the rationale for this requirement. Some see in it evidence that the trade secret is valuable enough to bother litigating; others argue that where reasonable precautions are taken, chances are that a defendant acquired the trade secret wrongfully.”). For an overview of courts’ approach to the reasonable efforts requirement, see Rowe, *Contributory Negligence*, *supra* note 87, at 8-14.

<sup>94</sup> UNIF. TRADE SECRETS ACT § 1 (1985). See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 43 cmt. a (1995).

<sup>95</sup> In fact, unlike the Restatement (First) of Torts § 757 in which improper acquisition of a trade secret is not independently actionable, the UTSA does not require proof of subsequent wrongful use or disclosure. See RESTATEMENT (FIRST) OF TORTS § 757 cmt. f (1939) (“[I]f one uses physical force to take a secret formula from another’s pocket, . . ., his conduct is wrongful and subjects him to liability apart from the rule stated in this Section.”).

<sup>96</sup> The definition of “misappropriation” under the UTSA is as follows:

(2) “Misappropriation” means:

- (i) acquisition of a trade secret of another by a person who knows or has reason to know that the trade secret was acquired by improper means; or
- (ii) disclosure or use of a trade secret of another without express or implied consent by a person who
  - (A) used improper means to acquire knowledge of the trade secret; or
  - (B) at the time of disclosure or use, knew or had reason to know that his knowledge of the trade secret was
    - (I) derived from or through a person who had utilized improper means to acquire it;
    - (II) acquired under circumstances giving rise to a duty to maintain its secrecy or limit its use; or
    - (III) derived from or through a person who owed a duty to the person seeking relief to maintain its secrecy or limit its use; or
  - (B) before a material change of his [or her] position, knew or had reason to know that it was a trade secret and that knowledge of it had been acquired by accident or mistake.



when trade secrets are appropriated through *improper means*, or through *use or disclosure in breach of a duty of confidence*.

The term “improper means” refers to acts that are prohibited, and this is the basis of liability under trade secret law. As the UTSA and the Restatement (Third) of Unfair Competition state, because it is not possible to include every act that constitutes improper means with respect to trade secret misappropriation, the UTSA and the Restatement provide only a partial listing.<sup>97</sup> Thus, in general, the question of whether improper means exist in a given case usually depends on “standards of commercial ethics” – one of the important policies behind trade secret law.<sup>98</sup> As a result, “improper means” include two situations: where the conduct is “itself a tortious or criminal invasion of the trade secret owner’s right,” or where it is not “independently wrongful.”<sup>99</sup> The former situation includes actions that are actionable in themselves under common law torts or relevant statutes. The UTSA provides some examples defining improper means, including “theft, bribery, misrepresentation, breach or inducement of a breach of a duty to maintain secrecy, or espionage through electronic or other means.”<sup>100</sup> In addition, in certain circumstances, acts that are otherwise legitimate or not actionable themselves can be deemed

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UNIF. TRADE SECRETS ACT § 1(2).

<sup>97</sup> RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 43 cmt. c (1995) (“It is not possible to formulate a comprehensive list of the conduct that constitutes ‘improper’ means of acquiring a trade secret.”); UNIF. TRADE SECRETS ACT § 1 cmt. (1995) (citing the Restatement (First) of Torts § 757 comment f as to the impossibility of a comprehensive list of the conduct misappropriating trade secrets); RESTATEMENT (FIRST) OF TORTS § 757 cmt. f (1939) (“A complete catalogue of improper means is not possible. In general they are means which fall below the generally accepted standards of commercial morality and reasonable conduct.”).

<sup>98</sup> See UNIF. TRADE SECRETS ACT § 1 cmt. (1995); RESTATEMENT (FIRST) OF TORTS § 757 cmt. f (1939). See also *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 481-82 (1974) (“The maintenance of standards of commercial ethics and the encouragement of invention are the broadly stated policies behind trade secret law. The necessity of good faith and honest, fair dealing is the very life and spirit of the commercial world.”) (citation omitted).

<sup>99</sup> RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 43 cmt. c (1995).

<sup>100</sup> UNIF. TRADE SECRETS ACT § 1(1), 14 U.L.A. 529-35 (2005). See also RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 43 (1995) (“‘Improper’ means of acquiring another’s trade secret under the rule stated in § 40 include theft, fraud, unauthorized interception of communications, inducement of or knowing participation in a breach of confidence, and other means either wrongful in themselves or wrongful under the circumstances of the case.”).

improper means under trade secret law.<sup>101</sup> The case most frequently cited on their point is *E.I. du Pont de Nemours & Co. v. Christopher*.<sup>102</sup> In *Christopher*, the defendant took aerial photographs of a plant under construction that was designed to produce a claimed trade secret (an unpatented process for producing methanol). The issue in that case was whether taking aerial photographs of plant construction fell within the scope of improper means under trade secret law.<sup>103</sup> Concerning this question, the court held that “[r]egardless of whether the flight was legal or illegal in that sense, the espionage was an improper means of discovering Du Pont’s trade secret.”<sup>104</sup> On the other hand, a defendant is not liable for misappropriation of trade secrets if it exploits “proper means” to obtain trade secrets, such as independent invention<sup>105</sup> and reverse engineering<sup>106</sup> of publicly available items.<sup>107</sup>

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<sup>101</sup> RESTATEMENT (FIRST) OF TORTS § 757 cmt. f (1939); RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 43 cmt. c (1995); UNIF. TRADE SECRETS ACT § 1 cmt. (1995).

<sup>102</sup> 431 F.2d 1012 (5th Cir. 1970).

<sup>103</sup> The plaintiff contended the defendants’ actions constituted wrongful acquisition prohibited by Texas trade secret law, whereas the defendant argued that the defendants “committed no ‘actionable wrong’ in photographing the Du Pont facility and passing these photographs on to their client because they conducted all of their activities in public airspace, violated no government aviation standard, did not breach any confidential relation, and did not engage in any fraudulent or illegal conduct.” *E.I. Du Pont de Nemours & Co. v. Christopher*, 431 F.2d 1012, 1014-15 (5th Cir. 1970).

<sup>104</sup> 431 F.2d 1012, 1017 (5th Cir. 1970). See David D. Friedman, William M. Landes, & Richard A. Posner, *Some Economics of Trade Secret Law*, 5 J. ECON. PERSP. 61, 62 (1991) [hereinafter Friedman et al., *Economics of Trade Secret Law*] (“Although the court found no trespass by the overflying aircraft, it held that the competitor had violated Du Pont’s common law rights. Given the court’s finding that there was no trespass, the ‘rights’ invaded could only have been rights to the trade secrets themselves, rather than the right to prevent trespass, conversion, breach of contract, or other conventional common law wrongs.”).

<sup>105</sup> See *American Can Co. v. Mansukhani*, 742 F.2d 314, 329 (7th Cir. 1984) (“The owner of a trade secret is not entitled to prevent others from using public information to replicate his product, nor may the owner prevent others from making similar products which are not derived from the trade secret.”) (citation omitted).

<sup>106</sup> See *Angell Elevator Lock Co. v. Manning*, 348 Mass. 623, 626, 205 N.E.2d 245, 248 (Mass. 1965) (“Our cases establish that the mere copying and sale of an unpatented product does not furnish to its original manufacturer any basis for injunctive relief or damages.”); *Chicago Lock Co. v. Fanberg*, 676 F.2d 400, 405 (9th Cir. 1982) (“A lock purchaser’s own reverse-engineering of his own lock, and subsequent publication of the serial number-key code correlation, is an example of the independent invention and reverse engineering expressly allowed by trade secret doctrine.”).

<sup>107</sup> See *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 476 (U.S. 1974) (stating that “trade secret law, however, does not offer protection against discovery by fair and honest means, such as by independent invention, accidental disclosure, or by so-called reverse engineering”); *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141 (1989). The comment to Section 1 of the UTSA illustrates a partial listing including “independent invention” and

Despite the fact that a defendant may acquire trade secrets by proper means, trade secret misappropriations can occur in many cases in which the use or disclosure of the secrets by the defendant breaches a duty of confidence.<sup>108</sup> Clearly, an express contract – for example, through a nondisclosure agreement by the recipient of a trade secret – creates a duty of confidence to a contracting party.<sup>109</sup> The duty of confidence may also be inferred from the nature of the relationship between the parties, such as the employer-employee relationship.<sup>110</sup> In addition, the duty of confidence can be inferred from the circumstances surrounding the disclosure.<sup>111</sup> However, in most cases in which a duty of confidence arises by operation of law or implied-in-fact contract, “the circumstances must indicate that the recipient knew or had reason to know that the disclosure was intended as confidential” or “the circumstances must justify the other party’s belief that the recipient has consented to the duty of confidence.”<sup>112</sup> Finally, the use or disclosure recognized in this context generally means “any exploitation of [a] trade secret that is likely to result in injury to [a] trade secret owner or enrichment to [a] defendant,” and a typical type of improper use or disclosure may be commercial exploitation of the secret.<sup>113</sup>

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“reverse engineering” of publicly available items. UNIF. TRADE SECRETS ACT § 1 cmt. (1995) (“Proper means include: 1. Discovery by independent invention; 2. Discovery by ‘reverse engineering’ . . . ; 3. Discovery under a license from the owner of the trade secret; 4. Observation of the item in public use or on public display; 5. Obtaining the trade secret from published literature.”).

<sup>108</sup> RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 41 (1995). *See* UNIF. TRADE SECRETS ACT § 1(2); RESTATEMENT OF (FIRST) TORTS § 757(b) (1939).

<sup>109</sup> *See* *Aerospace America, Inc. v. Abatement Tech., Inc.*, 38 F. Supp. 1061, 1071 (E.D. Mich. 1990) (“Confidential relationships may be found to exist either by virtue of an express confidentiality non-use/non-disclosure agreement (wherein the discloser warns the disclosee that information received by the disclosee is to be held in confidence, or, in appropriate circumstances, may be implied by law.”) (citation omitted).

<sup>110</sup> RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 41 (1995). *But see* *Seatrac, Inc. v. Sonbeck Int’l, Inc.*, 200 F.3d 358, 366 (5th Cir. 2000) (denying the confidential relationship between a licensor and licensee in the absence of an express agreement of confidentiality); *Entm’t Research Group v. Genesis Creative Group*, 122 F.3d 1211 (9th Cir. 1997) (finding no confidential relationship between a manufacturer and a distributing firm).

<sup>111</sup> *See, e.g.*, *Smith v. Dravo Corp.*, 203 F.2d 369 (7th Cir. 1953) (prospective customer for a product design).

<sup>112</sup> RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 41 cmt. b (1995).

<sup>113</sup> *Id.*

## 2.3. Legal Remedies

### 2.3.1. Civil Remedies

Trade secret law provides a variety of legal remedies for the misappropriation of a trade secret. Remedies for trade secret misappropriation include, primarily, civil remedies, including injunctive relief and damages.<sup>114</sup> In some circumstances, criminal prosecution is also available. These rules for legal remedies vary from state to state, even though the states have adopted the UTSA.

Under the UTSA, a plaintiff is entitled to injunctive relief as an equitable remedy for actual or threatened misappropriation.<sup>115</sup> Given the nature of trade secrets, which may lose their status as valuable information to the owner, and the difficulty of proving a loss from trade secret misappropriation, the injunctive relief remedy is a vital legal remedy that allows the plaintiff to be put in the position he or she would have obtained if the defendant had not misappropriated the trade secret; injunctive relief prevents “additional harm” from further use or disclosure by a misappropriator, or deprives him or her of “additional benefit,” such as a “head start or other unfair advantage” from the misappropriation.<sup>116</sup>

Courts have determined the appropriateness or scope of injunctive relief in given cases by considering not only both parties’ interests, but also the interests of the public. Subsection (2) of section 44 of the Restatement (Third) of Unfair Competition provides the primary factors to

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<sup>114</sup> See UNIF. TRADE SECRETS ACT §§ 2-3, 14 U.L.A. 619-42 (2005). The statute of limitations of an action for trade secret misappropriation is “3 years after the misappropriation is discovered or by the exercise of reasonable diligence should have been discovered.” *Id.* at 649 (2005). See generally Felix Prandl, *Damages for Misappropriation of Trade Secret*, 22 TORT INS. L.J. 447 (1987); William F. Johnson, *Remedies in Trade Secret Litigation*, 72 NW. U. L. REV. 1004 (1978).

<sup>115</sup> UNIF. TRADE SECRETS ACT § 2, 14 U.L.A. 619 (2005).

<sup>116</sup> RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 44 cmt. c (1995).

consider in a trade secret case.<sup>117</sup> Thus, for example, in cases in which a trade secret has generally become known and a defendant cannot obtain any advantages from misappropriating the trade secret, some courts have concluded that monetary damages would be a better remedy.<sup>118</sup> Furthermore, even in a case in which injunctive relief is more desirable, the injunction should not be unnecessarily restrictive of the use of information that is outside the scope of the trade secret.<sup>119</sup> With respect to the duration of the injunctive relief, although a perpetual injunction is possible in many cases in which the UTSA is followed, based on the “head start” theory, prohibiting the use or disclosure of trade secrets is limited in duration until the trade secret loses its secrecy or becomes available to the public, for example, through legitimate reverse engineering or independent development by third parties.<sup>120</sup> In these cases, courts consider the anticompetitive effect of a perpetual injunction and the public interest in terms of fair competition by putting the defendant in the same position he or she would have been in absent

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<sup>117</sup> The factors are as follows:

(a) the nature of the interest to be protected; (b) the nature and extent of the appropriation; (c) the relative adequacy to the plaintiff of an injunction and of other remedies; (d) the relative harm likely to result to the legitimate interests of the defendant if an injunction is granted and to the legitimate interests of the plaintiff if an injunction is denied; (e) the interests of third persons and of the public; (f) any unreasonable delay by the plaintiff in bringing suit or otherwise asserting its rights; (g) any related misconduct on the part of the plaintiff; and (h) the practicability of framing and enforcing the injunction.

*Id.* § 44(2).

<sup>118</sup> RESTATEMENT OF (THIRD) UNFAIR COMPETITION § 44 cmt. c (1995).

<sup>119</sup> *See, e.g.,* Sigma Chem. Co. v. Harris, 794 F.2d 371, 375 (8th Cir. 1986) (“We believe the part of the injunction prohibiting disclosure of trade secrets must be limited in duration.”). But in some cases where a trade secret is an essential component of a product or process, courts have enjoined beyond the use or disclosure of the trade secret. *See, e.g.,* ILG Indus., Inc. v. Scott, 273 N.E.2d 393 (1971) (not limiting the scope of an injunction to the use of a specific trade secret that can be an essential part in a manufacturing good, but extending it to the sale of the manufacturing good).

<sup>120</sup> *Compare* Valco Cincinnati, Inc. v. N & D Machining Serv., Inc., 492 N.E.2d 814 (1986) (granting a perpetual punitive injunction) *with* Winston Research Corp. v. Minn. Min. & Mfg. Co., 350 F.2d 134 (9th Cir. 1965) (enjoining defendants from using or disclosing the plaintiff’s trade secrets for two years from the date of judgment); *Keweenaw Oil Co. v. Bicron Corp.*, 416 U.S. 470, 473-74 (1974); *K-2 Ski Co. v. Head Ski Co., Inc.*, 506 F.2d 471 (9th Cir. 1974). *See also* UNIF. TRADE SECRETS ACT § 2(1), 14 U.L.A. 619 (2005).

the misappropriation.<sup>121</sup> In addition, in some exceptional cases in which awarding a prohibitory injunction against future use of a misappropriated trade secret is likely to be inequitable or inappropriate, the courts may require the defendant to pay a reasonable royalty to the trade secret owner.<sup>122</sup> Courts may also order positive injunctions for “the fruits of misappropriation to an aggrieved person,” such as the return or destruction of misappropriated information.<sup>123</sup>

Damages are available and these can be combined with a claim for injunctive relief. In a trade secret case, the general principle related to “the recovery of compensatory damages” and the remedy of restitution in tort action are applied.<sup>124</sup> To recover damages in tort cases, a plaintiff “has the burden of proving that the other has invaded a legally protected interest of his, that he has suffered the harm and that the act of the other was a legal cause of the harm.”<sup>125</sup> A trade secret holder must thus offer evidence that a given amount of earnings has been lost, or that his or her expected profit has been harmed with reasonable certainty under the circumstances.<sup>126</sup> An owner of a trade secret is entitled to recover any proven actual losses resulting from the misappropriation (e.g., the plaintiff’s lost profit) and is entitled to restitution of the defendant’s unjust enrichment caused by the misappropriation (e.g., the defendant’s profit on sales) “that is

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<sup>121</sup> *Sigma Chem. Co. v. Harris*, 794 F.2d 371, 375 (8th Cir. 1986) (“We believe the part of the injunction prohibiting disclosure of trade secrets must be limited in duration and, accordingly, reverse in part and remand the case to the district court for consideration of the time it would take a ‘legitimate competitor’ to independently reproduce the information contained in the product and vendor files.”).

<sup>122</sup> UNIF. TRADE SECRETS ACT § 2(b) & cmt., 14 U.L.A. 619 (2005); *see also* POOLEY, *supra* note 56, § 7.03.

<sup>123</sup> UNIF. TRADE SECRETS ACT § 2(c) & cmt., 14 U.L.A. 619-21 (2005).

<sup>124</sup> RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 45 cmt. a (1995). *See* RESTATEMENT (SECOND) OF TORTS §§ 902 & 903 (definition of damages and compensatory damages); § 907 (nominal damages); §§ 908 & 909 (punitive damages); § 912 (certainty); RESTATEMENT OF RESTITUTION § 136 (1937).

<sup>125</sup> RESTATEMENT (SECOND) OF TORTS § 912 cmt. a (1979).

<sup>126</sup> *Id.* § 912. *See also* POOLEY, *supra* note 56, § 7.03. (“Although a jury may ‘approximate’ damages within a reasonable range, recovery for speculative matters is not permitted. However, it is enough that plaintiff prove only the fact of damage with reasonable certainty; as in other matter of tort law, uncertainty as to the amount of damage is not a bar to recovery.”).

not taken into account in computing actual loss.”<sup>127</sup> In the event that claims for injunctive relief and damages are granted, the time period for the calculation of monetary damages may be limited to the period when the injunction is available.<sup>128</sup> In some cases, the UTSA also authorizes the court to impose a reasonable royalty liability for the use or disclosure of trade secrets by the defendant.<sup>129</sup> In addition, punitive damages up to twice the actual damages, which were not allowed in common law, may be awarded in cases of “willful and malicious” misappropriation.<sup>130</sup> In willful and malicious cases of misappropriation, Attorney’s fees may be awarded to a prevailing party “as a deterrent to specious claims of misappropriation, to specious efforts by a misappropriator to terminate injunctive relief, and to willful and malicious misappropriation.”<sup>131</sup>

### 2.3.2. Criminal Remedies

Although the traditional remedy for trade secret misappropriation has focused on civil remedies, in certain circumstances, criminal sanctions are also available. In fact, since the mid-1960s, criminal law in the United States has expanded its scope to protect trade secrets as a type

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<sup>127</sup> UNIF. TRADE SECRETS ACT § 3(a), 14 U.L.A. 633-34 (2005). For measures of monetary relief, see RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 45 cmts. d-g (1996).

<sup>128</sup> *Id.* § 3 cmt., at 634 (“the injunctive relief ordinarily will preclude a monetary award for a period in which the injunction is effective.”).

<sup>129</sup> *Id.* at 633-34. The Restatement (Third) of Unfair Competition illustrates three situations in which the reasonable royalty measure of relief to the plaintiff can be used:

First, when the defendant has made a substantial good faith investment in the trade secret prior to receiving notice of the plaintiff’s claim, . . . Second, when the plaintiff’s loss, although difficult to measure, is apparently greater than any gain acquired by the defendant, . . . Third, in cases in which the defendant’s gain from the trade secret is difficult to measure but apparently exceeds the plaintiff’s loss.

RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 45 cmts. d-g (1996).

<sup>130</sup> UNIF. TRADE SECRETS ACT § 3(b), 14 U.L.A. 634 (2005). In certain respects, trade secret protection was strengthened through the provision of punitive damages. Indeed, many states in the United States adopted the provision of punitive damages. See *id.* § 3(b) cmt., at 635-38.

<sup>131</sup> *Id.* § 4 & cmt., at 642.

of property, primarily through the development of legislation, such as the theft of trade secret statutes, broadening the definition of a trade secret to include intangible forms.<sup>132</sup> However, because of a lack of consensus regarding the scope of subject matter protected and the conduct prohibited under the criminal statutes, these statutes vary greatly from state to state.<sup>133</sup> Furthermore, only about one-half of the states have enacted criminal statutes related to trade secrets.<sup>134</sup> In addition, in some cases, these statutes have only applied under limited circumstances, for example, by limiting the scope of subject matter to scientific and technical information or by not criminalizing incorporeal transfers (e.g., the use of a trade secret by memorization).<sup>135</sup> As a result, compared with civil remedies, criminal sanctions for trade secret misappropriations have been said to provide trade secret holders with only limited legal remedies.<sup>136</sup> The states' lack of resources seems to be another reason for state criminal law having only a limited impact on trade secret holders.<sup>137</sup>

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<sup>132</sup> Eli Lederman, *Criminal Liability for Breach of Confidential Commercial Information*, 38 EMORY L.J. 921, 930-35 (1989) (demonstrating a growing tendency in U.S. criminal law to protect confidential commercial information).

<sup>133</sup> *See id.* Merges et al. explain different effects of criminal trade secret cases on the relevant parties:

First, criminal trade secret courtrooms are the scene of constant battles over the publication of information. The real parties in interest will naturally oppose the disclosure in a public courtroom of the very secrets the defendant is accused of stealing. This concern runs headlong into the defendant's constitutional right to a public trial. Second, civil cases are generally stayed pending the outcome of a criminal prosecution. Thus a criminal prosecution may actually delay injunctive relief—the kind of remedy a civil plaintiff is often most interested in.

MERGES ET AL., *supra* note 3, at 112 (citation omitted).

<sup>134</sup> JAGER, *supra* note 3, app. L. (explaining that 26 states have criminal statutes relating to trade secrets).

<sup>135</sup> Lederman, *supra* note 132, at 965-66; Pooley, *EEA*, *supra* note 33, at 189 (noting that until recently the California criminal statute applied only to scientific or technical information). However, it should be noted that recently, some states' criminal statutes extended the scope to include business information. Examples include the amendments of California and Pennsylvania in 1996 (CAL. PENAL CODE § 499c (West 2009) and 18 PA. CONS. STAT. § 3930 (West 2009)) (inserting "customer or sales information or any other privileged or confidential information" into the definition provisions).

<sup>136</sup> Dratler identifies the following reasons for the ineffectiveness of criminal sanctions for trade secret misappropriation:

First, because they are criminal laws, they require proof of culpability on the part of the misappropriator. Second, these laws require proof of that culpability beyond a reasonable doubt. . . . Third, criminal sanctions for trade secret misappropriation can be ineffective because



At the federal level, various legal theories can be relevant in trade secret cases.<sup>138</sup> For example, the Interstate Transportation of Stolen Property Act<sup>139</sup> and the Wire Fraud and Mail Fraud Statutes<sup>140</sup> can be applied in cases involving the movement of stolen property across state lines or trade secret misappropriation by using mail, wire, radio, and the like.<sup>141</sup> Nonetheless, the most important law concerning criminal sanctions for trade secret misappropriations can be said to be the EEA of 1996.<sup>142</sup> The subject matter protected under the EEA seems to be broader than current civil law because it clearly includes “all forms and types of financial, business, scientific, technical, economic, or engineering information” if the trade secret holder takes reasonable security measures to keep it, and if the trade secret has independent value from its nature of secrecy.<sup>143</sup> The EEA further expressly protects a trade secret stored in intangible form and

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they fail to cover the elusive third party. . . . [Fourth,] criminal sanctions for trade secret misappropriation have a practical disadvantage. Criminal liability may not deter the use or disclosure of a trade secret, particularly if the secret is of great competitive value. . . . Finally, criminal prosecution often cannot stop a competitor’s use of the misappropriated secret to the rightful owner’s continuing disadvantage or provide compensation for that use. Yet that continued use may ruin the trade secret owner’s business.

Jay Dratler, Jr., *Trade Secrets in the United States and Japan: A Comparison and Prognosis*, 14 YALE J. INT’L L. 68, 87-89 (1989).

<sup>137</sup> Pooley, *EEA*, *supra* note 33, at 186.

<sup>138</sup> Mark L. Krotoski, *Economic Espionage and Trade Secrets*, 57 U.S. ATTORNEY’S BULL. 2, 18-22 (Nov. 2009) (summarizing possible alternative charges in addition to trade secret charges).

<sup>139</sup> 18 U.S.C.A. §§ 2314-2315 (West 2009).

<sup>140</sup> *Id.* §§ 1341 & 1343.

<sup>141</sup> *See* Chapter II. 1.1.

<sup>142</sup> 18 U.S.C. A. §§ 1831-1839 (West 2009).

<sup>143</sup> Under the EEA, the term “trade secret” is defined as follows:

[A]ll forms and types of financial, business, scientific, technical, economic, or engineering information, including patterns, plans, compilations, program devices, formulas, designs, prototypes, methods, techniques, processes, procedures, programs, or codes, whether tangible or intangible, and whether or how stored, compiled, or memorialized physically, electronically, graphically, photographically, or in writing if—

- (A) the owner thereof has taken reasonable measures to keep such information secret; and
- (B) the information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, the public.

18 U.S.C.A. § 1839(3) (West 2009). *See also* Moohr, *supra* note 36, at 877-79.

memorized by a misappropriator.<sup>144</sup> In addition, under the EEA, as in the UTSA, the alleged information must meet the three requirements to qualify as a trade secret: (1) independent economic value, (2) secrecy, and (3) reasonable security measures to protect it.<sup>145</sup>

The EEA criminalizes acts of misappropriation as serious crimes under sections 1831(a) and 1832(a), entitled, “Economic Espionage” and “Theft of Trade Secrets,” respectively. Conduct prohibited under these sections can be divided into three groups. The first group, provided under section 1831(a), primarily criminalizes acquisition of a trade secret by improper means. The range of improper means listed under subsection (1) of the section seems to be broader than under state civil law because it criminalizes unauthorized appropriation or taking of a secret that may not be subject to liability for trade secret misappropriation in civil cases.<sup>146</sup> The second group considers, under subsection (2), “almost any unauthorized interference” with trade secrets a crime, regardless of whether a confidential relationship or any inherent unlawfulness exists, including “unauthorized copying, duplicating, drawing, photographing, downloading, uploading, and other uses of the information.”<sup>147</sup> The third group, which is provided under subsection (3), prohibits the acquisition of a trade secret with knowledge that the trade secret has

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<sup>144</sup> See 18 U.S.C.A. § 1839(3) (West 2009); *United States v. Hsu*, 155 F.3d 189, 196 (3d Cir. 1998) (“There are, though, several critical differences which serve to broaden the EEA’s scope. First, and most importantly, the EEA protects a wider variety of technological and intangible information than current civil laws. Trade secrets are no longer restricted to formulas, patterns, and compilations, but now include programs and codes, ‘whether tangible or intangible, and whether or how stored.’”).

<sup>145</sup> Among these requirements, the secrecy requirement has been especially criticized by commentators because it requires the information not to be generally known “to the public,” unlike the UTSA, which requires it not to be generally known to “other persons who can obtain economic value from its disclosure or use,” who are interpreted as persons within a specific industry. See, e.g., *Moohr*, *supra* note 36, at 877-82. Furthermore, in criminal cases, the vagueness of the definition of trade secret has been raised as a ground for concern based on adequate motive to potential wrongdoers. See, e.g., *United States v. Hsu*, 50 U.S.P.Q.2d 1659 (1999).

<sup>146</sup> 18 U.S.C.A § 1831(a)(1) & § 1832(a)(1) (West 2009) (“steals, or without authorization appropriates, takes, carries away, or by fraud, artifice, or deception obtains a trade secret . . .”). See also *Pooley*, *EEA*, *supra* note 33, at 186 (illustrating such conduct, providing that “observing a competitor’s property from across the street”).

<sup>147</sup> *Moohr*, *supra* note 36, at 882. 18 U.S.C.A § 1831(a)(2) & 1832(a)(2) (West 2009) (“without authorization copies, duplicates, sketches, draws, photographs, downloads, uploads, alters, destroys, photocopies, replicates, transmits, delivers, sends, mails, communicates, or conveys a trade secret . . .”).

been “stolen or appropriated, obtained, or converted without authorization.”<sup>148</sup> The EEA also criminalizes the inchoate offenses of attempt and conspiracy to misappropriate a trade secret.<sup>149</sup>

Although the two sections share almost the same conduct provisions and require that a defendant knowingly committed trade secret misappropriation, they have different culpability requirements and different severities of punishments. Section 1831, which applies to economic espionage, requires only that a person intended or knew that a trade secret theft would benefit a foreign government, instrumentality, or foreign agent.<sup>150</sup> On the other hand, under Section 1832, prosecutors must prove that a defendant intended to convert a trade secret to “the economic benefit of anyone other than the owner” *and* intended or knew that the offense would injure the owner of the trade secret.<sup>151</sup> This is different from civil law in that it does not require a defendant’s knowledge or intention of potential economic loss to a plaintiff.<sup>152</sup>

With respect to penalties, compared with Section 1832, Section 1831 exacts greater penalties for foreign economic espionage, providing for a term of up to 15 years in prison and fines of up to \$500,000 for individuals, and fines of up to \$10 million for any organization violating the provision.<sup>153</sup> Under Section 1831, organizational criminal liability is set at a maximum of ten years. Although it imputes a maximum fine of \$5 million for organizations, it does not specify fines for individuals violating the provision under the EEA.<sup>154</sup> In addition to the

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<sup>148</sup> 18 U.S.C.A. § 1831(a)(3) & § 1832(a)(3) (West 2009) (“receives, buys, or possesses a trade secret, knowing the same to have been stolen or appropriated, obtained, or converted without authorization . . .”).

<sup>149</sup> *Id.* § 1831(a)(4) & (a)(5), § 1832(a)(4) & (a)(5).

<sup>150</sup> *Id.* § 1831(a).

<sup>151</sup> *Id.* § 1832(a).

<sup>152</sup> *See* RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 40 (1995).

<sup>153</sup> 18 U.S.C.A. § 1831(a) & (b) (West 2009).

<sup>154</sup> *Id.* § 1832(a) & (b). As to the unspecified fines for the individual, it is implied that “the general maximum fine for felonies (\$250,000) should apply.” Pooley, *EEA, supra* note 33, at 201. *See* 142 CONG. REC. S12213 (daily ed. Oct. 2, 1996) (“In the original Senate version of this measure, we included a provision allowing courts to impose fines of up to twice the value of the trade secret that was stolen. This specific provision was eliminated because it

above penalties, Section 1834 provides for forfeiture of a defendant's property relating to trade secret misappropriation, and these forfeitures are governed by the Comprehensive Drug Abuse Prevention and Control Act of 1970.<sup>155</sup>

The Attorney General can commence civil proceedings to enjoin further trade secret misappropriation during the criminal EEA investigation.<sup>156</sup> However, this does not mean that “other persons and entities may not also seek injunctive relief that may be available in other civil actions (using state law tort or contract claims) to prevent the further misuse of a trade secret.”<sup>157</sup> Finally, the EEA has very broad jurisdictional power that reaches not only across the United States, but also outside the United States in cases in which the offender is a U.S. citizen or permanent resident alien or an organization organized in the United States, and in which any “act in furtherance of the offense was committed in the United States.”<sup>158</sup> Thus, in certain circumstances, the EEA may expand its territorial scope to conduct that has “no other connection between the misappropriation and the United States.”<sup>159</sup>

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was unnecessary in light of 18 U.S.C. § 3571(d). We have not used the specific exemption available under 18 U.S.C. § 3571(e). We, therefore, fully expect that courts will take full advantage of the provision in 18 U.S.C. § 3571(d) allowing for fines of up to twice the gain or loss resulting from the theft of trade secrets and that courts will opt for the larger of the fines available under 18 U.S.C. § 3571(d) or the fine provisions of this statute.” *See also* 18 U.S.C.A § 3571(b)(3) & (d) (West 2009) (providing for fines for a felony up to \$250,000 for individuals, and “fines of up to twice the gain or loss resulting from the offense”).

<sup>155</sup> The court is required to order the forfeiture of “any property constituting, or derived from, any proceeds the person obtained, directly or indirectly,” from trade secret misappropriation. 18 U.S.C.A. § 1834(a)(1) (West 2009). The court, with discretion, also can order forfeiture of “any of the person’s or organization’s property used, or intended to be used, in any manner or part, to facilitate the commission of such violation.” *Id.* § 1834(a)(2). *See* 21 U.S.C.A. § 853 (West 2009).

<sup>156</sup> 18 U.S.C.A. § 1836 (a) (West 2009).

<sup>157</sup> H. Rep. No. 788, 104th Cong., 2d Sess. 14 (1996). *See* 21 U.S.C.A. § 1838 (West 2009) (“This chapter shall not be construed to preempt or displace any other remedies, whether civil or criminal, provided by United States Federal, State, commonwealth, possession, or territory law for the misappropriation of a trade secret or to affect the otherwise lawful disclosure of information by any Government employees under section 552 of title 5 (commonly known as the Freedom of Information Act).”).

<sup>158</sup> 18 U.S.C.A. § 1837 (West 2009).

<sup>159</sup> Pooley, *EEA*, *supra* note 33, at 186, 204 (1997).

### 3. Law of Postemployment Contracts

In addition to trade secret law, contractual measures to protect trade secrets are very common as a supplement for trade secret law in the United States. They include various forms of agreements, such as confidentiality agreements, nondisclosure agreements, and noncompetition agreements by employees. Among them, this section focuses on postemployment covenants not to compete because enforceable covenants not to compete have a high risk of directly restricting employees' rights, labor mobility, and free competition.<sup>160</sup>

It is very common for employers to disclose trade secrets or other sensitive information to employees for the efficient operation of a business.<sup>161</sup> As a rule, under agency law, an employee owes a duty of loyalty to the employer for the duration of an employment relationship, including a duty not to compete with the employer and a duty not to disclose confidential information to others.<sup>162</sup> A breach of the duty of loyalty subjects the employee to liability for unauthorized use or disclosure of a trade secret, regardless of the existence of a trade secret as defined under trade secret law.<sup>163</sup> However, many trade secret cases arise when employees depart to establish their own businesses in competition with former employers or when they change positions to work for other competitors.

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<sup>160</sup> In addition, in the area of the law of postemployment covenants not to compete, there is a great discrepancy in laws of covenants not to compete among states, and the effect of different laws of covenants not to compete on regional innovation has been controversial.

<sup>161</sup> See ASIS FOUNDATION, TRENDS IN PROPRIETARY INFORMATION LOSS SURVEY REPORT 26 (Sep. 2002) ("The 'insider' threat problem is perceived to be the most serious."); ASIS FOUNDATION, TRENDS IN PROPRIETARY INFORMATION LOSS SURVEY REPORT 29 (Aug. 2007) ("The deliberate actions of current and former employees continue to be a primary threat to proprietary information.").

<sup>162</sup> RESTATEMENT (THIRD) OF AGENCY § 8.04 ("Throughout the duration of an agency relationship, an agent has a duty to refrain from competing with the principal and from taking action on behalf of or otherwise assisting the principal's competitors.") & § 8.05 ("An agent has a duty (1) not to use property of the principal for the agent's own purposes or those of a third party; and (2) not to use or communicate confidential information of the principal for the agent's own purposes or those of a third party.") (2006). See Benjamin Aaron & Matthew Finkin, *The Law of Employee Loyalty in the United States*, 20 COMP. LAB. L. & POL'Y J. 321 (1999).

<sup>163</sup> See *Nucor Corp. v. Tennessee Forging Steel Serv., Inc.*, 476 F.2d 386 (8th Cir. 1973).

In cases involving the unauthorized use or disclosure of trade secrets by employees after the termination of an employment relationship, as we have seen earlier, trade secret law plays a central role in prohibiting the former employee from using or disclosing trade secrets acquired in the course of the employment in breach of confidence when the employer proves the existence and ownership of the trade secrets.<sup>164</sup> In addition to protection under trade secret law, employers can use nondisclosure agreements as a contractual tool to prohibit former employees from using or disclosing trade secrets after their employment is terminated. This form of contract is one of the core measures protecting trade secrets, along with trade secret law for employers, and is “perhaps the least controversial.”<sup>165</sup> Furthermore, such contracts may function as a way of showing reasonable efforts by trade secret owners to maintain secrecy, as required under trade secret law.<sup>166</sup> But trade secret law and nondisclosure agreements focus mainly on legally protectable trade secrets,<sup>167</sup> and difficulties exist in enforcing them “because proving disclosure against a defendant is difficult and usually entails the public revelation of the confidential information.”<sup>168</sup> These difficulties in gaining legal remedies place a burden on the employer,

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<sup>164</sup> See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 42 (1995). For an overview of allocation of ownership between employers and employees, see *id.* § 42 cmt. e; Robert P. Merges, *The Law and Economics of Employee Inventions*, 13 HARV. J. L. & TECH. 1, 4-10 (1999).

<sup>165</sup> POOLEY, *supra* note 56, § 8.02. For example, Jager notes that “[s]urvey [evidence] show[s] that a confidentiality agreement or clause is included in virtually all employment agreements used by major corporations,” citing two surveys: *Employee Patent & Secrecy Agreements*, Studies in Personnel Policy No. 199 (Nat’l Ind. Conference Bd. 1965) (86 companies surveyed); and Special Project, *Commonality in Employers’ Contract and Invention Assignment Policies* (Hartford Graduate Center 1984) (46 companies surveyed). JAGER, *supra* note 3, § 13:3 (West 2009).

<sup>166</sup> See *Liebert Corp. v. Mazur*, 827 N.E.2d 909, 923 (Ill. App. 2005) (“In all of the cases relied on by plaintiffs where the courts found the trade secrets met the ‘reasonable steps’ test, there was evidence the plaintiffs advised their employees, verbally or *in writing*, about the information’s confidentiality.”) (emphasis added).

<sup>167</sup> See POOLEY, *supra* note 56, § 8.02.

<sup>168</sup> Eric A. Posner, Alexander Triantis, & George G. Triantis, *Investing in Human Capital: The Efficiency of Covenants Not to Compete* 24-25 (U. Chi. Law & Econ., Olin Working Paper No. 137, 2004) (“[State trade secret law and contracts prohibiting disclosure of confidential information] are difficult to enforce because proving disclosure against a defendant is difficult and usually entails the public revelation of the confidential information. A CNC [covenant not to compete] may police trade secret theft more effectively. The change in a worker’s employment is easy to verify and enforcement does not require the disclosure of confidential information. Moreover,

who wants to protect as much valuable information from being disclosed to others as effectively as possible, including trade secrets, customer information, and goodwill. In some cases, even absent proof of trade secret misappropriation or enforceable postemployment covenants not to compete, courts have enjoined former employees from working for competitors when it would be difficult for the employee not to rely on or use the trade secrets he or she previously obtained from the former employer. The doctrine applied in such cases is referred to as the “doctrine of inevitable disclosure.”<sup>169</sup> However, the doctrine has been rejected by many other courts and has been criticized by legal scholars with a concern that the application of the doctrine “creates an after-the-fact covenant not to compete restricting employee mobility.”<sup>170</sup>

Thus, individually negotiated agreements between employers and employees preventing competition by former employees may supplement trade secret law by protecting an extended scope of information, including trade secrets and information not technically protectable as trade secrets.<sup>171</sup> A covenant not to compete can be referred to as an “agreement, ancillary to an employment contract, not to compete with the employer after termination of employment” and

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by preventing the worker from moving to another employer, the firm can invoke internal sanctions to discipline disclosure or sale of sensitive information. The contribution of CNCs in this context is valuable . . .”).

<sup>169</sup> See *PepsiCo, Inc. v. Redmond*, 54 F.3d 1262 (7th Cir. 1995) (enjoining the defendant’s employment for six months based on the inevitable disclosure to a new employer); *Novell Inc. v. Timpanogos Research Group*, 46 U.S.P.Q.2d 1197 (D. Utah 1998) (injunction based on the doctrine of inevitable disclosure). See generally Brandy L. Treadway, *An Overview of Individual States’ Application of Inevitable Disclosure: Concrete Doctrine or Equitable Tool?* 55 SMU L. REV. 621 (2002); Rebecca J. Berkun, *The Dangers of the Doctrine of Inevitable Disclosure in Pennsylvania*, U. PA. J. LAB. & EMP. L. 157, 161-66 (2003); Elizabeth A. Rowe, *When Trade Secrets Become Shackles: Fairness and the Inevitable Disclosure Doctrine*, 7 TUL. J. TECH. INTELL. PROP. 167, 171-80 (2005).

<sup>170</sup> See, e.g., *Whyte v. Schlage Lock Co.*, 101 Cal. App. 4th 1443, 1447 (Cal. App. 4. Dist. 2002). See also Ronald J. Gilson, *The Legal Infrastructure of High Technology Industrial Districts: Silicon Valley, Route 128, and Covenants Not to Compete*, 74 N.Y.U. L. REV. 575, 622-26 (1999) [hereinafter Gilson, *Silicon Valley*] (contending that the doctrine of inevitable disclosure in California should be adopted cautiously); Adam Gill, *The Inevitable Disclosure Doctrine: Inequitable Results Are Threatened but Not Inevitable*, 24 HASTINGS COMM. & ENT. L.J. 403, 417-22 (2003).

<sup>171</sup> Harlan M. Blake, *Employee Agreements Not to Compete*, 73 HARV. L. REV. 653 (1960) (“[P]ostemployment restraints may in some cases legitimately extend protection somewhat beyond the special circumstances [the traditional customer list and trade secret doctrines] encompass, particularly in the area of customer relations.”). See also RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 42 cmt. g (1995).

“may be found in a covenant in the actual contract of employment or in a separate contract for which the supporting consideration is at least in part the continuing employment.”<sup>172</sup> Through enforceable covenants not to compete, employers attempt to prohibit a former employee with workplace knowledge from working for other competitors in a new position or from beginning his or her own business for a certain period after the employment relationship has ended.<sup>173</sup> In fact, in employment practice in the United States, postemployment covenants not to compete that impose additional restrictions on competition by former employees have been common and seem to have been an effective way to protect valuable information employers have derived from their investment in human capital.<sup>174</sup>

However, the law of covenants not to compete has been debated because of conflicting interests between employers and employees.<sup>175</sup> On the one hand, enforceable covenants not to compete may protect the proprietary information of employers. On the other hand, the enforcement of covenants not to compete may result in enjoining former employees from pursuing their livelihood, and may have an anticompetitive effect.<sup>176</sup> Thus, in principle, state

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<sup>172</sup> Blake, *supra* note 171, at 625 & n.1.

<sup>173</sup> *Id.* at 626.

<sup>174</sup> See Mark J. Garmaise, *Ties That Truly Bind: Noncompetition Agreements, Executive Compensation, and Firm Investment*, J. LAW ECON. ORGAN. 1, 3 (Nov. 2009) (noting that “recent empirical research shows that “70.2% of firms use [covenants not to compete] with their top executives.”), available at <http://jleo.oxfordjournals.org/cgi/content/full/ewp033v1?maxtoshow=&HITS=10&hits=10&RESULTFORMAT=&fulltext=ties+that+truly+bind&searchid=1&FIRSTINDEX=0&resourcetype=HWCIT>; Norman D. Bishara, *Covenants Not to Compete in a Knowledge Economy: Balancing Innovation from Employee Mobility Against Legal Protection for Human Capital Investment*, 27 BERKELEY J. EMP. & LAB. L. 287, 289 (2006) (“While there is little empirical research on the use of noncompetes, there are indications that such agreements are increasingly common and as a result this sort of post-employment restriction will influence the decisions of employers and employees.”) (footnote omitted); Peter J. Whitmore, *A Statistical Analysis of Noncompetition Clauses in Employment Contracts*, 15 J. CORP. L. 483, 489 (“noncompetition covenants continue to be used with ever-increasing frequency.”).

<sup>175</sup> See POOLEY, *supra* note 56, § 8.04 (“The field is alive with controversy.”); Blake, *supra* note 171.

<sup>176</sup> See, e.g., *Kaumagraph Co. v. Stampagraph Co.*, 197 A.D. 66, 76, 188 N.Y.S. 678, 685 (N.Y.A.D. 1 Dept. 1921) (“Contracts by employees, unreasonably limiting their right to pursue their trade or occupation in the future, are held to violate public policy, because the employees’ means for procuring a livelihood for themselves and family are thereby diminished. They are deprived of the power of usefulness, and the public is deprived of the benefit of the exercise by them of their knowledge and skill.”).



courts in the United States governing the law of covenants not to compete have struggled to balance conflicting interests between an employer's legitimate interests in protecting their intellectual assets based on freedom of contract and an employee's right to free movement of labor or to compete after termination of the employment relationship.<sup>177</sup> Courts have also considered the possible anticompetitive effect of the law regarding covenants not to compete from the perspective of public policy.<sup>178</sup>

The current law regarding covenants not to compete (which have been governed under state law) varies from state to state and focuses on the facts in each case.<sup>179</sup> On the one hand, some states have expressed hostility toward such agreements. For example, Section 16600 of California's Business and Professions Code renders most covenants not to compete contained in employment agreements void.<sup>180</sup> Indeed, in a recent California Supreme Court case, the Court reaffirmed the policy consideration underlying section 16600.<sup>181</sup> On the other hand, most states in the United States that adopt statutory provisions or that follow the common law in this area currently enforce covenants not to compete on the basis of a relatively strict "reasonable

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<sup>177</sup> See Maureen B. Callahan, Comment, *Post-employment Restraint Agreements: A Reassessment*, 52 U. CHI. L. REV. 703 (1985).

<sup>178</sup> For a critical assessment of the modern judicial approach on covenants not to compete, see *id.* 712-27.

<sup>179</sup> See generally Brian M. Malsberger et al., *Covenants Not to Compete: A State-by-State Survey* (6th ed., 2008).

<sup>180</sup> CAL. BUS. & PROF. CODE § 16600 (West 2009) ("Except as provided in this chapter, every contract by which anyone is restrained from engaging in a lawful profession, trade, or business of any kind is to that extent void."). For exceptional situations, see CAL. BUS. & PROF. CODE §§ 16601-16602.5 (West 2009) (sale of goodwill of business, partnership, and a limited liability company). Because of the hostility to covenants not to compete, the effect of the law in California has been examined and compared to other states' laws by many commentators and scholars in various fields. See, e.g., ALAN HYDE, *WORKING IN SILICON VALLEY: ECONOMIC AND LEGAL ANALYSIS OF A HIGH-VELOCITY LABOR MARKET* (2003); Gilson, *Silicon Valley*, *supra* note 170, at 599 (examining different effects of the law in Massachusetts and California); ANNALEE SAXENIAN, *REGIONAL ADVANTAGE: CULTURE AND COMPETITION IN SILICON VALLEY AND ROUTE 128* (1994) (examining different effects of the corporate culture in Massachusetts and California on regional innovation).

<sup>181</sup> *Edwards v. Arthur Andersen*, 44 Cal.4th 937, 949-50, 189 P.3d 285, 291-92 (2008) (noting that "section 16600 represents a strong public policy of the state which should not be diluted by judicial fiat," quoting *Scott v. Snelling and Snelling, Inc.*, 732 F. Supp. 1034, 1042 (N.D. Cal. 1990)).

standard.”<sup>182</sup> The rule of reason under the law of covenants not to compete is rooted in and has developed under a part of common law, namely, “restraints of trades,” under English common law.<sup>183</sup> The modern law of covenants also seems to have developed along with the doctrinal development of trade secret protection in the United States.<sup>184</sup> The rapid expansion of trade secret doctrine in the late 1800s and early 1900s reflected the reality that courts, which were compelled to reconcile conflicting interests between employers and employees in the era, changed their views regarding the ownership of workplace knowledge in the course of the change in industrial structure.<sup>185</sup> This development led courts to recognize more legitimate uses of covenants not to compete in restricting employees’ use of workplace knowledge.<sup>186</sup>

In states that have adopted the reasonableness standard, covenants not to compete between an employer and an employee, in writing or verbally, can be enforceable if they are

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<sup>182</sup> Section 188 of Restatement (Second) of Contracts states the rule of reason as follows:

(1) A promise to refrain from competition that imposes a restraint that is ancillary to an otherwise valid transaction or relationship is unreasonably in restraint of trade if

- (a) the restraint is greater than is needed to protect the promisee’s legitimate interest, or
- (b) the promisee’s need is outweighed by the hardship to the promisor and the likely injury to the public.

(2) Promises imposing restraints that are ancillary to a valid transaction or relationship include the following:

. . .

- (b) a promise by an employee or other agent not to compete with his employer or other principal. . . .

RESTATEMENT (SECOND) OF CONTRACTS § 188 & cmt. g (1981).

<sup>183</sup> For a general overview of the development of common law of a restraint of trade, see Michel J. Trebilcock, *The Common Law of Restraint of Trade: A Legal and Economic Analysis* 1-53 (1986). See also Blake, *supra* note 171, at 629-46 (explaining the development of the rule of reason, quoting several cases including *Michel v. Reynolds*, (1711) 24 Eng. Rep. 347 (Q.B.) based on changing economic circumstances concerning the guilds and labor shortage in England).

<sup>184</sup> See Fisk, *supra* note 1, at 534-35 (“The invention of the trade secret doctrine in the mid-nineteenth century enabled employers to enjoin revelation of secret information by current or former employees. At the same time, courts expanded the permissible uses of post-employment covenants not to compete so as to prevent dissemination of knowledge.”).

<sup>185</sup> See *id.* at 494.

<sup>186</sup> Fisk noted that “[t]he concept of an implied contract [developed under trade secret law between 1890 and 1920] facilitated and legitimized the expansion of the trade secret doctrine, from a relatively limited obligation to guard a particular and highly confidential piece of information or to convey a secret recipe along with the sale of a business, into a general employee duty to protect all confidential employment information.” *Id.* at 498.

supported by sufficient consideration and are reasonable.<sup>187</sup> If a covenant was entered into at the outset of the employment relationship, the employment becomes the consideration for the covenant.<sup>188</sup> However, with respect to the sufficiency of continued employment as a consideration for postemployment covenants not to compete that were entered into after employment commenced, the courts are in disagreement.<sup>189</sup> In some cases, continuing employment is not a sufficient consideration to support a covenant not to compete that is entered into after the inception of employment.<sup>190</sup> In deciding on the reasonableness of a covenant between an employer and an employee, a court may consider the two parties' respective interests as well as public policy.<sup>191</sup> The duration, geographical area, and type of employment in covenants not to compete are also generally considered in deciding on the reasonableness of a given covenant.<sup>192</sup> Because of inconsistency in courts' decisions in terms of these factors, in practice, the current law on covenants not to compete does not seem to provide adequate

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<sup>187</sup> See *Freiburger v. J-U-B Eng'r., Inc.*, 141 Idaho 415, 419, 111 P.3d 100, 104 (2005) ("In order to be enforceable, a covenant not to compete must be ancillary to a lawful contract supported by adequate consideration, and consistent with public policy."); *Comprehensive Tech. Int'l v. Software Artisans*, 3 F.3d 730, 738 (4th Cir. 1993).

<sup>188</sup> See, e.g., *Modern Laundry & Dry Cleaning Co. v. Farrer*, 370 Pa. Super. 288, 536 A.2d 409 (1988); *Reddy v. Cmty. Health Found. of Man*, 171 W. Va. 368, 298 S.E.2d 906 (1982).

<sup>189</sup> See *McGough v. Nalco Co.*, 420 F. Supp.2d 556, 571-73 (2006) (examining courts' conflicting approaches regarding consideration for covenants not to compete).

<sup>190</sup> See, e.g., *Access Organics, Inc. v. Hernandez*, 175 P.3d 899 (2008); see also *JAGER*, *supra* note 3, § 13:5.

<sup>191</sup> See, e.g., *Comprehensive Tech. Int'l v. Software Artisans*, 3 F.3d 730, 738 (4th Cir. 1993).

Virginia has established a three-part test for assessing the reasonableness of restrictive employment covenants. Under the test, the court must ask the following questions:

- (1) Is the restraint, from the standpoint of the employer, reasonable in the sense that it is no greater than is necessary to protect the employer in some legitimate business interest?
- (2) From the standpoint of the employee, is the restraint reasonable in the sense that it is not unduly harsh and oppressive in curtailing his legitimate efforts to earn a livelihood?
- (3) Is the restraint reasonable from the standpoint of a sound public policy?

<sup>192</sup> See, e.g., MICH. COMP. LAWS § 445.774a ("An employer may obtain from an employee an agreement or covenant which protects an employer's reasonable competitive business interests and expressly prohibits an employee from engaging in employment or a line of business after termination of employment if the agreement or covenant is reasonable as to its duration, geographical area, and the type of employment or line of business."). See also *Harlan Blake*, *supra* note 171, at 674-81.

certainty and predictability regarding the enforceability of a given covenant to both parties and a relevant third party, such as a competitor of the employer.<sup>193</sup> In fact, the discrepancies among covenants not to compete from state to state and courts' factually based adjudication have been criticized for their "lack of uniformity" and "unpredictability."<sup>194</sup>

As we have seen, even states adopting the rule of reason through statutes or common law appear to construe the reasonableness of covenants not to compete differently, and it is extremely difficult to capture this complex decisional framework. Thus, alternatively, the following section looks briefly at the law of covenants not to compete in Massachusetts, which is said to be "generally representative of the approach taken toward postemployment covenants not to compete by the great majority of states" in the United States.<sup>195</sup> Massachusetts does not have statutory provisions directly governing postemployment covenants not to compete, but rather has followed the rule of reason developed in common law precedents to evaluate the enforceability of covenants not to compete.<sup>196</sup> Massachusetts courts closely examine the following requirements for reasonableness: if the covenant "(1) is necessary to protect the legitimate business interests of the employer, (2) is supported by consideration, (3) is reasonably limited in

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<sup>193</sup> See Mark A. Glick, Darren Bush & Jonathan Q. Hafen, *The Law and Economics of Post-employment Covenants: A Unified Framework*, 11 GEO. MASON L. REV. 357, 371 (2002) ("The courts' inconsistent analysis under this fact-specific nature of this inquiry has led to frustration for drafters and observers alike.").

<sup>194</sup> See, e.g., *Id.* at 358 n.2; Bishara, *supra* note 174, at 297. Bishara also notes that in part because of the problem, the American Law Institute seems to refine the law of covenants not to compete into the Restatement (Third) of Employment, which is an ongoing project. For the current status of the project, see the ALI webpage of the Restatement of Employment, <http://www.ali.org> (last visited Oct. 24, 2010). But see Kenneth Glenn Dau-Schmidt, *A Conference on the American Law Institute's Proposed Restatement of Employment Law*, 13 EMP. RIGHTS & EMP. POL'Y J. 1(2009) (criticizing the project of the Restatement of Employment Law).

<sup>195</sup> Gilson, *Silicon Valley*, *supra* note 170, at 603. It should be noted that a bill attempting to change the policy of noncompetition agreement was introduced in Massachusetts in 2009. See H. 1794, 186th Gen. Court of the Commonwealth of Massachusetts (Mass. 2009); Fact Sheet on Massachusetts House Bill 1794: An Act to Prohibit Restrictive Employment Covenants, <http://prohibitrestrictiveemploymentcovenants.net> (last visited Oct 24, 2010).

<sup>196</sup> See *Packaging Indus. Group v. Cheney*, 380 Mass. 609 (1980); Christine M. O'Malley, Note, *Covenants Not to Compete in the Massachusetts Hi-Tech Industry: Assessing the Need for a Legislative Solution*, 79 B.U. L. REV. 1215, 1218-27 (1999).

all circumstances, including time and space, and (4) is otherwise consonant with public policy.”<sup>197</sup> The legitimate business interests of employers include trade secrets, confidential information, and goodwill.<sup>198</sup> Thus, if employers fail to demonstrate, in a given case, that these legitimately protectable employer interests are involved, the covenants become unenforceable.<sup>199</sup> In the same context, employers may not prevent employees’ “general skill or knowledge acquired during the course of the employment” from being used by these covenants.<sup>200</sup>

As in other contracts, covenants not to compete must be supported by consideration for their enforcement.<sup>201</sup> Regarding the issue of whether continued employment after the commencement of employment is sufficient consideration for enforceable covenants against postemployment competition, Massachusetts courts have held that continued employment alone provides sufficient consideration for such covenants.<sup>202</sup> In determining whether restriction

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<sup>197</sup> *IKON Office Solutions, Inc. v. Belanger*, 59 F.Supp.2d 125, 128 (D. Mass. 1999).

<sup>198</sup> *Kroeger v. Stop & Shop Co., Inc.*, 13 Mass. App. Ct. 310, 316, 432 N.E.2d 566, 570 (1982) (“Those interests of an employer which are entitled to protection are trade secrets, confidential data and goodwill.”) (citation omitted). *See, e.g.*, *Analogic Corp. v. Data Translation, Inc.*, 371 Mass. 643, 358 N.E.2d 804 (Mass. 1976) (trade secrets); *Novelty Bias Binding Co. v. Shevrin*, 342 Mass. 714, 175 N.E.2d 374 (1961) (confidential information); *New England Canteen Serv., Inc. v. Ashley*, 372 Mass. 671, 363 N.E.2d 526 (Mass. 1977) (goodwill); *Sherman v. Pfefferkorn*, 241 Mass. 468, 135 N.E. 568 (1922) (goodwill). Goodwill is referred to “as the employer’s positive reputation in the eyes of its customers or potential customers. Goodwill is generated by repeat business with existing customers or by referrals to potential customers.” *Bowne, Inc. v. Levine*, 7 Mass. L. Rep. 685, at 7 (Mass. Super. Ct. 1997). As to customer goodwill during employment, most courts in Massachusetts appear to have held that employers have goodwill. *See, e.g.*, *Am. Stop Loss Ins. Brokerage Servs. v. Prince*, 12 Mass. L. Rep. 650, at 7 (Mass. Super. Ct. 2001).

<sup>199</sup> *See, e.g.*, *Lajoie Investigations v. Griffin*, 5 Mass. L. Rep. 246 (Mass. Super. Ct. 1996) (denying a preliminary injunction against the defendant investigator from engaging in works as a private investigator because the plaintiff failed to demonstrate legitimate business interests, including trade secrets, confidential business information, or goodwill involved).

<sup>200</sup> *Abramson v. Blackman*, 340 Mass. 714, 716, 166 N.E.2d 729, 730 (Mass.1960) (“[An employer] may not prevent the employee from using the skill and general knowledge acquired or improved through his employment.”) (citation omitted); *Junker v. Plummer*, 320 Mass. 76, 79, 67 N.E.2d 667, 669 (Mass.1946).

<sup>201</sup> *See IKON Office Solutions, Inc. v. Belanger*, 59 F. Supp.2d 125, 128 (D. Mass. 1999).

<sup>202</sup> *See, e.g.*, *Economy Grocery Stores Corp. v. McMenemy*, 290 Mass. 549, 552 (1935); *Sherman v. Pfefferkorn*, 241 Mass. 468, 473 (1922). But in recent years, with respect to this issue, a federal magistrate judge showed a contrary opinion in *IKON Office Solutions, Inc. v. Belanger*, 59 F. Supp.2d 125 (D. Mass. 1999), concluding “the courts now appear to refuse to enforce non-competition and non-solicitation agreements when the only purported consideration is the employee’s continued employment.” *Id.* at 131. Nonetheless, it appears that continued employment is sufficient consideration for the enforcement of such covenants in Massachusetts. *See EMC Corp. v.*

against postemployment competition is reasonable in an agreement, the courts in Massachusetts have considered “the nature of the plaintiff’s business and the character of the employment, the situation of the parties, the necessity of the restriction for the employer’s protection and the employee’s right to work and earn a living.”<sup>203</sup> Although one to three years appears to be the reasonable restriction period that most courts have approved,<sup>204</sup> some courts seem to have considered how the business interests will lose value, and they have held that even the one-year duration is too long when considering the nature of Internet business, in which business practices change rapidly.<sup>205</sup> With regard to geographic limitation, courts have enforced such a covenant “as long as it restricts a former employee from doing business in an area in which the company itself conducts business.”<sup>206</sup> Finally, public interest can be raised as a defense, but “[t]he precise contours of this ‘public interest’ defense are ... somewhat ill-defined.”<sup>207</sup>

#### 4. Summary

The emergence of trade secret law in the United States reflects the reality that corporate control of valuable information has grown in importance and labor mobility has increased in the nineteenth century. Over the years, trade secret protection in the United States has expanded, for

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Donatelli, 25 Mass. L. Rep. 399 (Mass. Super. Ct. 2009) (“[Cases such as IKON] do not abolish the doctrine that continued employment alone may suffice to support such covenants.”).

<sup>203</sup> *Richmond Bros., Inc. v. Westinghouse Broad. Co. Inc.*, 357 Mass. 106, 110 (1970).

<sup>204</sup> *See IKON Office Solutions, Inc. v. Belanger*, 59 F. Supp. 2d 125, 129 (D. Mass. 1999) (reviewing relevant cases in Massachusetts).

<sup>205</sup> *See, e.g., EarthWeb, Inc. v. Schlack*, 71 F. Supp. 2d 299, 313 (1999) (holding that one year is too long in the Internet business).

<sup>206</sup> *Marcam Corp. v. Orchard*, 885 F. Supp. 294, 299 (D. Mass. 1995) (covering the United States).

<sup>207</sup> Laurence H. Reece, III., *Employee Noncompetition Agreements: Recent Developments and Trends*, 88 MASS. L. R., <http://www.massbar.org/for-attorneys/publications/massachusetts-law-review/2003/v88-n1/employee-noncompetition-agreements-recent-developments> (last visited Oct. 24, 2010).

example, by broadening the meaning of the term “trade secret,” expanding the scope of the misappropriation of trade secrets, and strengthening federal criminal sanctions against trade secret misappropriations and economic espionage. Furthermore, in some industrial fields, specifically in the field of information technology, trade secret protection has been strengthened through restrictions on reverse engineering. The recent expansion of trade secret law can also be seen as a response by courts and the U.S. government to recent socioeconomic changes in which contemporary firms’ reliance on trade secret protection has increased rapidly in the information age and the number of industrial espionage cases and the losses associated with these cases have grown. However, this recent expansion of trade secret law, especially the enactment of the EEA, has been criticized based on concerns over its negative impact on labor mobility, free competition, and innovation.

Despite the continuing expansion of trade secret law, courts in the United States have made efforts to reconcile the conflicting interests of relevant parties and the public, for example, by assessing the eligibility of certain information for trade secret protection or limiting the duration of injunctive relief. Nevertheless, in part because of the slippery definition of a trade secret and in part because of a primarily state law-based approach, trade secret law in the United States has lacked uniformity among the fifty states. Likewise, state courts governing the law of restrictive covenants not to compete in employment have struggled to balance conflicts between employers’ legitimate interests and employees’ right to free movement of labor from the perspective of public policy, but the law varies from state to state.

On the other hand, trade secret protection has become increasingly important in the trade policy of the U.S. government in the global economy. Moreover, the U.S. trade policy affected the formation of the provisions of TRIPs, and as shown in Chapters III and IV, the trade policy of

the U.S. government strongly affected the initial adoption of trade secret law in Japan and Korea. In addition, recent developments in trade secret law in the United States have strongly affected recent significant changes in trade secret law in Japan and Korea, mainly through legislation supported by government policy decisions. The following two chapters explore how Japan and Korea adopted the law, and how the governments in these countries have adapted the law to changing domestic and international situations to achieve larger goals, such as economic development.



### CHAPTER III. TRADE SECRET LAW IN JAPAN

Before the adoption of trade secret law, Japanese law, including property law, contract law, and tort law, did not provide sufficient legal remedies for trade secret misappropriations, in part because of the inherent limitations of the role of courts in developing legal doctrines in the civil law tradition. Nevertheless, during the period of rapid economic growth, the legal protection of trade secrets appears to have been considered an unnecessary legal device for the Japanese economy, in which firm-level technology learning based on advanced foreign technology was needed and the preestablished practice of lifetime employment played a significant role in protecting valuable information.

As the international regime focusing on trade-related aspects of intellectual property rights emerged, however, the deficiencies in trade secret protection in Japan began to be criticized by foreign governments. This trade pressure led the Japanese government to adopt a statutory law of trade secrets in the early 1990s primarily modeled on the U.S. law. The adopted substantive law of trade secrets was extrinsically motivated to avoid foreign retaliation; thus, the law was not considered sufficient for trade secret protection in several respects, and it reflects the position of the Japanese government in dealing with information valuable to the Japanese economy at that time. However, the Japanese government changed its position regarding the legal protection of trade secrets during the economic downturns beginning in the 1990s. In fact, this exogenous economic factor led the Japanese government to strengthen trade secret protection beginning in the early 2000s. The recent legal reforms also reflect the importance of trade secret law in the new economic situation in Japan. On the other hand, the adoption and expansion of trade secret protection created another tension in the relationship between legal remedies for trade secret misappropriations and the ability of former employees to use their

knowledge and skills in Japanese society.

This chapter begins with the history and recent developments of trade secret law in Japan, exploring how the importance of the legal protection of trade secrets has changed in the Japanese economy. The second section examines how trade secret law in Japan has operated in practice. The third section looks at how the statutory law of trade secrets affected the approach of Japanese courts toward the theory of postemployment contracts in protecting valuable information.

## 1. History and Development

### 1.1. Background

Currently, trade secret law is codified as a part of the Unfair Competition Prevention Act in Japan (hereafter, “Japanese UCPA”).<sup>1</sup> The Act was originally adopted in 1934 to fulfill member states’ obligations under The Hague amendment to the Paris Convention for the Protection of Industrial Property,<sup>2</sup> in which all member states were to take measures against unfair competition.<sup>3</sup> Although the 1934 Japanese UCPA enumerated three types of acts of unfair

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<sup>1</sup> Fusei kyōsō bōshihō [Unfair Competition Prevention Act], Law No. 47 of 1993 (as amended by Law No. 55 of 2006) (Japan) [hereinafter 2006 Japanese UCPA].

<sup>2</sup> Paris Convention for the Protection of Industrial Property, March 20, 1883, 25 Stat. 1372, 161 Consol. T.S. 409, amended July 14, 1967, 21 U.S.T. 1583, 828 U.N.T.S. 306.

<sup>3</sup> See NAOKUNI CHINO, EIGYŌ HIMITSU HOGOHO [THE LAW OF TRADE SECRETS] 214-15 (2007) (Japan). Prior to the adoption of the 1934 Japanese UCPA, two bills were drafted: the 1911 bill following the 1909 German Act Against Unfair Competition (Gesetz gegen den unlauteren Wettbewerb) and the 1925 bill for implementing the Hague amendments to the Paris Convention for the Protection of Industrial Property. But these draft bills were not able to be enacted in part because of concerns about the lack of Japanese industrial competitiveness in the world economy. KEIZAI SANGYŌSHŌ CHITEKI ZAISAN SEISAKUSHITSU [MINISTRY OF ECONOMY, INDUSTRY, COMMERCE], FUSEI KYŌSŌ BŌSHIHŌ [UNFAIR COMPETITION PREVENTION ACT] 3-6 (2007) (Japan) [hereinafter METI, UNFAIR COMPETITION PREVENTION ACT] (Japan). However, Japan needed to enact a law against unfair competition to participate in the London Revision Conference of 1934. Accordingly, Japan enacted the law just before the London Conference was held. *Id.* 3-6; Christopher Heath, *Unfair Competition Law*, in HISTORY OF LAW IN JAPAN SINCE

competition that allowed plaintiffs to receive civil remedies, including damages and injunctive relief, and provided for criminal sanctions for the use of official symbols and flags of foreign countries, the Act required “any plaintiff and prosecutor to prove that the offence/infringement was deliberate.”<sup>4</sup> As a result, the Act in fact was not a sufficient legal measure against unfair competition, but rather has been said to be the enactment of a necessary law to avoid foreign trade sanctions.<sup>5</sup> Another important feature of the 1934 Japanese UCPA is that the Act did not include any provisions regarding trade secret protection, in part because of “the relatively underdeveloped nature of industry in Japan at that time.”<sup>6</sup> In addition, unlike the German law on unfair competition of 1909, which allegedly had a strong influence on the enactment of the 1934 Japanese UCPA as a model law, the Japanese UCPA of 1934 did not include a general provision governing unfair competition that would have covered trade secret misappropriations under the

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1868 487-88 (Wilhelm Röhl ed., 2005) [hereinafter Heath, *Unfair Competition Law*].

<sup>4</sup> Heath, *Unfair Competition Law*, *supra* note 3, at 488. See Fusei Kyōsō bōshiō [Unfair Competition Prevention Act], Law No. 14 of 1934 (Japan).

<sup>5</sup> See Junich Eguchi, *History of Amendments to the Unfair Competition Prevention Act of Japan—From a Developing Country to a Developed Country*, 41 OSAKA U. L. REV. 1, 1-6 (1994), available at <http://ir.library.osaka-u.ac.jp/metadb/up/LIBOULRK01/oulr041-001.pdf> (last visited Oct. 01, 2010); Heath, *Unfair Competition Law*, *supra* note 3, at 488 (“the Act was not meant to be *applied*, but was rather meant to suggest that the minimal requirements of the Paris Convention had been complied with.”) (footnote omitted).

<sup>6</sup> Holly Emrick Svez, Note, *Japan’s New Trade Secret Law: We Asked For It—Now What Have We Got?*, 26 GEO. WASH. J. INT’L L. & ECON. 413, 420 (1992). Soga also points out the Japanese economic situation in the 1930s, in which the adoption of trade secret law was not supported:

[I]t is not difficult to understand the Japanese position in the 1930s. The provision of injunctive remedies might have harmed the developing Japanese national economy. For example, such injunctive remedies prevent those who acquire a trade secret by unlawful means from developing technology and improving products on the basis of the unlawfully acquired trade secret. Due to the nature of injunctive remedies, moreover, all investment toward the development of technology by someone who unlawfully acquires a trade secret would be fruitless. On the other hand, monetary damages might result in a positive outcome. The holder of trade secrets receives money in exchange for his loss, which can be used for his next investment. The misuser of the trade secret does not lose his investment and can continue to develop the technology. As a consequence, the provision of only monetary damages worked better for the Japanese national economy at that time than the provision of both injunctive relief and monetary damages.

KAZUMASA SOGA, THE LEGAL PROTECTION OF TRADE SECRETS IN JAPAN: A COMPARATIVE STUDY OF ENGLISH AND GERMAN 26 (2003) (footnote omitted).

Act.<sup>7</sup>

Thus, companies seeking to protect valuable information, which was usually referred to as “know-how” rather than trade secrets, had access to general laws, including the nation’s laws under the Civil Code and Penal Code.<sup>8</sup> However, for civil remedies, they had to rely on laws of contracts or torts in the Japanese Civil Code because the Civil Code did not consider intangible items as property.<sup>9</sup> In fact, contract law played a role to some extent in protecting employers’ interests in preventing the loss of valuable information through the use or disclosure by a contracting party, such as former employees or licensees. *Foseco Japan Ltd.*<sup>10</sup> may be a leading case that showed the role of contract law in protecting employees’ interests in the absence of trade secret law in Japan. The case involved two former employees who had worked in the employer’s R & D division, which dealt with the firm’s technical secrets, and had signed nondisclosure agreements and noncompetition agreements that were to last for two years after the termination of employment. The employees departed the company and began working for a competing firm. The Nara District Court held in favor of the plaintiff, concluding that the restriction by the contract between the parties was reasonable, and awarded the employer provisional injunctive relief.<sup>11</sup> However, contract law had inherent limitations in protecting

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<sup>7</sup> SOGA, *supra* note 6, at 20-21 (footnote omitted).

<sup>8</sup> See CHINO, *supra* note 3, at 134-43 (explaining the use of the terms “know-how,” “proprietary information,” “corporate secrets,” and “trade secret” in Japan); Jay Dratler, Jr., *Trade Secrets in the United States and Japan: A Comparison and Prognosis*, 14 YALE J. INT’L L. 68, 99 n.127 (1989) (“in the past they have preferred the term “know-how,” especially when referring to trade secret licenses of a technological nature.”). In this dissertation, I primarily use the term “trade secret” as a general term including the meaning of “know-how.”

<sup>9</sup> See Minpō [Civil Code], Law No. 89 of 1896, art. 85 (Japan) (“The term ‘Things’ as used in this Code shall mean tangible things.”); CHINO, *supra* note 3, at 38-47 (explaining the concept of “thing” under the Japanese Civil Code). For a brief history and property law of the Japanese Civil Code, see HIROSHI ODA, JAPANESE LAW 114-35 & 164-79 (3d ed. 2009).

<sup>10</sup> Nara District Court of Japan, Judgment of Oct. 23, 1970, Case No. Shōwa 45 (Yo) 37. See also Tokyo District Court of Japan, Judgment of Mar. 10, 1987, Case No. Shōwa 57 (Wa) 11489.

<sup>11</sup> Nara District Court of Japan, Judgment of Oct. 23, 1970, Case No. Shōwa 45 (Yo) 37.

employers' valuable information, including trade secrets, where there was no underlying contractual relationship between the parties. In other words, it did not provide legal relief against a third party who had obtained the information from a contracting party, such as an employee or a licensee.<sup>12</sup>

Article 709 (damages in torts) of the Japanese Civil Code, a general provision of the law of torts, was another possible way in which the holder of trade secrets could seek legal remedies, especially against a third party.<sup>13</sup> Article 709 is an abstract and broad provision that, to some degree, can give judges discretion to resolve a new legal problem based on the article, such as legal protection of trade secrets, by stipulating that “[a] person who has intentionally or negligently infringed *any right of others* shall be liable to compensate any damages resulting in consequence.”<sup>14</sup> However, Article 709 also had limitations regarding sufficient support of the legal protection of trade secrets or know-how. First, trade secrets (or know-how) were not fully recognized as a “right” protected under tort law in Japan.<sup>15</sup> Second, although in many trade secret cases, injunctive relief would have been the most powerful and appropriate shield to prevent the use or disclosure of trade secrets by misappropriators, Japanese tort law did not provide injunctive relief because of the lack of a provision allowing injunctive relief in the Japanese Civil Code.<sup>16</sup>

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<sup>12</sup> See CHIKASHI NAGANO, TAJI SUNADA, AND YŌHEI HARIMA, *EIGYŌ HIMITSU TO KYŌGYŌ HISHI GIMU NO HŌMU [LAW AND PRACTICE OF TRADE SECRETS AND DUTY OF NONCOMPETITION]* 3 (2008) (Japan).

<sup>13</sup> For a brief explanation of the law of tort in Japan, see ODA, *supra* note 9, at 180-200.

<sup>14</sup> Minpō [Civil Code], Law No. 89 of 1896, art. 709 (emphasis added), *translated in* JAPANESE LAW TRANSLATION DATABASE SYSTEM BY MINISTRY OF JUSTICE, <http://www.japaneselawtranslation.go.jp> (last visited Oct. 24, 2010).

<sup>15</sup> See Dratler, *supra* note 8, at 104-08 (introducing scholarly arguments on whether Article 709 covers trade secrets as one of the rights protected under the provision in Japan); John Lyon & Teruo Doi, *Know-How and Trade Secrets in the United States and Japan*, in *PATENT AND KNOW-HOW LICENSING IN JAPAN AND THE UNITED STATES* 44 (Teruo Doi & Warren L. Shattuck eds., 1977) (arguing that know-how infringement should be recovered according to the “liberal theory” in which “if the injured party can prove that he has an inviolable interest and this was injured by an illegal act, he can recover.”).

<sup>16</sup> See SOGA, *supra* note 6, at 21-30.

With respect to the defects of Japanese tort law, which resulted in weak trade secret protection in Japan under the Civil Code, *Deutsche Werft A.G. v. Chūetsu-Waukesha Yūgen Kaisha*<sup>17</sup> by the High Court of Tokyo, is informative. The claimant, a German company (Werft A.G.), granted an American company (Waukesha Bearings Corp.) a know-how license for the manufacture and sale of oil-lubricated stern tube sealing for propeller shafts for ships in the United States and Canada, and the agreement required the American company to keep the know-how secret. However, the American company entered into a joint venture agreement with a Japanese company (Chūetsu Metal Works, Ltd.). Each company contributed 45% of the capital to the respondent company (Chūetsu-Waukesha Yūgen Kaisha), and the respondent company manufactured and sold the oil-lubricated stern tube sealing in Japan. The claimant filed an action for provisional injunction against the respondent. The District Court of Tokyo denied the petition, and the claimant appealed to the Tokyo High Court. In the appeal, the claimant argued that the respondent company was “an alter ego of Waukesha [Bearings Corporation] under the veil of a separate corporate personality. Since Waukesha and the respondent company jointly performed a tortious act, it must be considered that the claimant company has the right to enjoin such act against the respondent company in the same manner as against Waukesha Corporation.”<sup>18</sup> However, the Court dismissed the appeal. The court first looked at the legal status of know-how under Japanese tort law. Although it recognized the proprietary value of know-how, it did not admit it as a “legal right” under tort law. The court recognized the respondent as a third party despite the fact that the capital of the respondent company was substantially contributed by a contracting party (45% by Waukesha Bearings Corp.) to the know-how license. It further examined whether the claimant was allowed to seek injunctive relief for

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<sup>17</sup> Tokyo High Court of Japan, Decision of Sep. 5, 1966, Case No. Shōwa 41 (Ra) 381.

<sup>18</sup> *Id.*, translated in Lyon & Doi, *supra* note 15, at 43.

misappropriations of know-how against a third party under tort law in Japan. With respect to this issue, the court did not grant injunctive relief because there was no specific provision for this in the Japanese Civil Code at that time.<sup>19</sup>

Criminal sanctions for intentional misappropriation of trade secrets were also possible legal remedies for the misappropriation of trade secrets under limited circumstances. Although the adoption of criminal sanctions for leakage of corporate secrets was discussed in the 1960s and 1970s, when a bill amending the Japanese Penal Code was drafted, the provisions were not adopted because of criticism arguing that the adoption would restrict employees' freedom to choose an occupation, freedom of the press, or whistle-blowing from the inside.<sup>20</sup> Therefore, larceny,<sup>21</sup> embezzlement,<sup>22</sup> and breach of trust<sup>23</sup> under the Japanese Penal Code were the main

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<sup>19</sup> The Tokyo High Court reasoned as follows:

[n]o matter how know-how is to be considered under the law, know-how has property value and yet it has not been recognized as a legal right. Under the know-how contract (technological assistance contract), the other contracting party, the licensee (as to the know-how), owes the duty of not disclosing the know-how that it obtains under the contract outside the scope limited by the contract, and such a duty is a contractual obligation. The obligor (not the respondent in this petition) which has revealed the know-how to outsiders in violation of the contract is clearly liable to pay damages under contract law. But if a third person who is informed of the said know-how by the obligor or obtains the knowledge of it accidentally and engages in manufacturing by using the know-how, it is proper to construe that the claimant is not entitled to an injunction, since there is not a specific provision under the present statutes. Although know-how has property value, it cannot be considered, at the present moment, that the law recognizes the effect of a right (whether it is an incorporeal right or a right of obligation) which is enforceable against a third party. Protection of know-how can only be achieved by the effort of the owner to maintain it as an industrial secret and prevent disclosure to others. The respondent Chūetsu-Waukesha Yūgen Kaisha has the obligor as one of its members, and the latter is a party to the aforementioned contract (contributing 45 percent of the capital), and two of the directors were appointed by the obligor company. But the respondent is a third person in a legal sense with regard to the said contract, as admitted by the appellant. Hence, even if it is admissible that the respondent has committed an illegal act by assisting the obligor company in the nonperformance of the latter's duty, the cause for a temporary injunction in the instant petition is not clearly stated.

Tokyo High Court of Japan, Decision of Sep. 5, 1966, Case No. Shōwa 41 (Ra) 381, *translated in Lyon & Doi, supra* note 15, at 43-44.

<sup>20</sup> METI, UNFAIR COMPETITION PREVENTION ACT, *supra* note 3, at 62.

<sup>21</sup> Keihō [Penal Code], Law No. 45 of 1907, art. 235 (Japan) ("A person who steals the property of another shall be guilty of the crime of theft and be punished with penal servitude for not more than ten years."). *See, e.g.*, Tokyo District Court of Japan, Judgment of June 26, 1965, Case No. Shōwa 39 (Kei Wa) 1038 (convicting an employee of larceny for copying his company's secret information and supplying the information-bearing documents to a private investigator that was hired by a competitor); Tokyo District Court of Japan, Judgment of Feb. 14, 1980, Case No.

provisions applied to trade secret-related cases.<sup>24</sup> Nonetheless, criminal law in Japan was not considered to provide sufficient relief in cases of trade secret misappropriation, in part because the relevant provisions under the Japanese Penal Code, such as larceny or embezzlement, did not cover intangible property, the category to which trade secrets typically belong,<sup>25</sup> and in part because “[these provisions] involve sanctions against individuals, not against the firms for which they worked.”<sup>26</sup>

## 1.2. Adoption of Trade Secret Law

Even though the absence of trade secret law did not provide sufficient legal protection of Japanese companies’ interests in protecting trade secrets or know-how, it had not been stated that the Japanese economy needed to have stronger trade secret protection because of sociocultural factors surrounding the lifetime employment system in Japan, such as “individual loyalty to the

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Shōwa 54 (Kei Wa) 3598 (convicting the defendant of larceny for taking a document including secret information on members).

<sup>22</sup> See, e.g., Kobe District Court of Japan, Judgment of Mar 27, 1981, Case No. Shōwa 42 (Wa) 1573; Shōwa 42 (Wa) 1622; Shōwa (Wa) 1503; Shōwa (Wa) 1677; Shōwa 42 (Wa) 1589 (convicting a high-level engineer of embezzlement for taking confidential documents and selling them to a competitor, and convicting two brokers and the competitor’s employees of purchasing stolen property). See Keihō [Penal Code], Law No. 45 of 1907, arts. 252 (embezzlement); 253 (Embezzlement in the Pursuit of Social Activities) (Japan).

<sup>23</sup> See Keihō [Penal Code], Law No. 45 of 1907, art. 247 (Breach of Trust) (Japan) (“When a person who is in charge of the affairs of another, for the purpose of promoting his/her own interest or the interest of a third party, or inflicting damage on another, commits an act in breach of legal duty and causes financial loss to another, imprisonment with work for not more than 5 years or a fine of not more than 500,000 yen shall be imposed.”).

<sup>24</sup> For a detailed discussion of the limitations and theoretical problems with respect to the effective protection of trade secrets under criminal law in Japan, see SOGA, *supra* note 6, at 117-43.

<sup>25</sup> Kazuko Matsuo, *Recent Amendment to the Unfair Competition Prevention Law for the Protection of Trade Secrets*, 9 UCLA PAC. BASIN L.J. 78, 80 (1991).

<sup>26</sup> Dratler, *supra* note 8, at 104. Dratler also contends that “[a]s in the United States, these criminal sanctions have practical disadvantages, such as the requirement of proof of criminal culpability and dependence on the prosecutorial machinery of the state.” *Id.*



group,” disapproval of employee mobility, and “personal reputation.”<sup>27</sup> However, since the mid-1980s, the Japanese industrial structure has changed rapidly from a labor-intensive industry to industries increasingly using state-of-the-art technology; thus, Japan has become a licensor of state-of-the-art technology.<sup>28</sup> In addition, as some scholars have contended, as the tradition of lifetime employment began to disappear, employers began to recognize the importance of protecting valuable secret information from departing employees.<sup>29</sup> Nonetheless, in practice, Japanese companies did not seem to be very concerned about trade secret misappropriation or to suffer from the defects in the law protecting trade secrets. Indeed, as late as 1989, despite the defects in such laws, only 6% of Japanese companies surveyed reported problems with trade secret protection.<sup>30</sup> In addition, only a small percentage (6%) of these companies imposed “some kind of obligation on the competition for their employees.”<sup>31</sup>

By contrast, the insufficiency of trade secret protection in Japan might have made foreign companies fear that once they entered into the Japanese market, they would lose their trade secrets because of the lack of legal trade secret protection in Japan.<sup>32</sup> A report published by the U.S. government in the late 1980s is illustrative. In 1988, the United States International Trade Commission report, which was based on survey data from 431 responding U.S. companies,

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<sup>27</sup> See, e.g., *id.* at 110-12 (“much industrial and cultural forces in Japan may have combined to discourage misappropriation of trade secrets in the past.”).

<sup>28</sup> *Id.* at 115.

<sup>29</sup> See, e.g., SOGA, *supra* note 6, at 2.

<sup>30</sup> Nakoshi summarizes the results of survey research regarding trade secrets among Japanese companies conducted by the Institute of Intellectual Property between October and November in 1989 in Japan. According to the survey, only 6% of the 604 responding Japanese companies experienced “some troubles regarding trade secrets.” In addition, the survey reported that “[c]ompanies imposing some kind of obligation on the competition for their employees account for about 6%.” Hideo Nakoshi, *New Japanese Trade Secret Act*, 75 J. PAT. & TRADEMARK OFF. SOCIETY 631, 633 (1993).

<sup>31</sup> *Id.*

<sup>32</sup> Dratler, *supra* note 8, at 70 n.7 (summarizing the U.S. government’s concerns about the technology leakage from U.S. companies in Japan).

investigated the inadequate foreign protection of intellectual property and its impact on U.S. industry and trade.<sup>33</sup> The report revealed that the importance of trade secrets in intellectual property-dependent sales by U.S. companies was increasing, specifically “in the most rapidly advancing technological areas where the product lifecycles are shorter than the time necessary to obtain and enforce a patent” and in the areas where “patent protection may not be reliable,” such as for chemicals.<sup>34</sup> Regarding deficiencies in the protection of trade secrets, the report identified Japan as one of the most often reported countries, along with Mexico, Brazil, Taiwan, Korea, and China.<sup>35</sup> It further indicated that Japan did not have adequate preliminary or final injunctive remedies and criminal penalties.<sup>36</sup>

The weakness of trade secret protection in Japan seems to have affected the trade policies

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<sup>33</sup> Foreign Protection of Intellectual Property Rights and the Effect on U.S. Industry and Trade (USITC Pub. 2065, Investigation No. 332-245, Feb. 1988), *available at* 1988 ITC LEXIS 21. The report was prepared at the request of the U.S. Trade Representative pursuant to section 332 (g) of the Tariff Act of 1930 (19 U.S.C. § 1332 (g)) following the President direction. The report mainly provided the following information: (1) “various measures of the economic effects of inadequate foreign protection of intellectual property”; (2) “the relative importance of different types of rights,” including “copyrights, patents, trademarks, trade secrets, semiconductor mask works, and proprietary technical data”; (3) “the deficiencies, including those involving enforcement and remedies and the losses attributable to various countries.” “The data presented were developed through the use of a questionnaire sent to 736 U.S. companies, including all of the Fortune 500, appropriate members of the American Business Conference, and smaller firms concentrated in industries known to depend on royalties or sales of goods protected by intellectual property.” *Id.* at 4.

<sup>34</sup> *Id.* at 31-36. The following table shows “the importance of each type of intellectual property as weighted by the affected sales in 1986.”

Degree of importance	Copyright	Patent	Trademark	Trade secret	Mask work	Proprietary technical data
Very great	18	42	64	43	2	32
Great	2	2	19	26	5	19
Moderate	21	27	13	24	23	21
Slight	55	6	4	6	34	23
None	4	1		1	36	5

*Id.* at 35.

<sup>35</sup> *Id.* at 10 & tbl. G-10 at 221 This report also summarized that “[n]o protection against third parties was the most commonly cited deficiency” and that “[s]low enforcement and inadequate civil and criminal penalties were the most often reported remedy/enforcement deficiencies.” *Id.* at 3-10.

<sup>36</sup> The report indicated that the inadequacies of remedy in Japan included “no preliminary or final injunctive relief,” “lack of exclusion of imports,” “lack or compulsory process and/or discovery,” “inadequate criminal penalties,” “unreasonably slow enforcement process,” “enforcement officials discriminate against foreigners,” “court decision biased or political.” *Id.* at 50-52.

of foreign governments intending to protect their own businesses in the Japanese market, which was becoming increasingly attractive and important in the global economy, by asking for the level of trade secret protection in Japan to be strengthened. In particular, as the biggest exporter of technology, the United States was suffering from a trade deficit with Japan for U.S. goods, and it played a substantial role in requesting Japan to adopt sufficient legal protection of trade secrets under which U.S. companies could be protected.<sup>37</sup> On the one hand, through bilateral negotiations, the U.S. government directly demanded that the Japanese government take substantial measures to enhance its legal protection of trade secrets.<sup>38</sup> On the other hand, the U.S. government indirectly placed pressure on Japan by enacting the Omnibus Trade and Competitiveness Act of 1988<sup>39</sup> as a new unilateral retaliation measure against foreign countries for unfair trade practices, including intellectual property issues, that could burden or restrict U.S. commerce.<sup>40</sup> In addition, U.S. industry influenced the U.S. government's unilateral and

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<sup>37</sup> See generally Svetz, *supra* note 6, at 421-25.

<sup>38</sup> At a meeting held in Washington between March 7 and 11 in 1988, the United States asked Japan to adopt rules protecting trade secrets similar to those in the United States. In response to the request by the U.S., "the Japanese government made a guarded statement, saying that it wants to leave responsibility for protection of business rights to the private sector because such rights are too complicated for the government to handle." *U.S. Requests Trade Secrets, Business Rights Protection*, NIKKEI WKLY. (Tokyo), Mar. 26, 1988, at 14. The United States requested Japan to strengthen trade secret protection in a similar way in two subsequent talks with Japan held in August in 1988 and March in 1989. *Japan-U.S. Intellectual Property Meet Stated*, JIII PRESS TICKER SERVICE, Feb. 28, 1989.

<sup>39</sup> Omnibus Trade and Competitiveness Act of 1988, Pub. L. No. 100-418, 102 Stat. 1107 (codified as amended at several sections of 19 U.S.C.) (1988).

<sup>40</sup> Section § 1101 b (10) of the 1988 Trade Acts states that "[t]he principal negotiating objectives of the United States regarding intellectual property are (A) to seek the enactment and effective enforcement by foreign countries of laws which (i) recognize and adequately protect intellectual property, including copyrights, patents, trademarks, semiconductor chip layout designs, and trade secrets, . . ." 1988 Trade Act, Pub. L. No. 100-418, § 1101, 102 Stat. 1107, 1123 (1988) (codified at 19 U.S.C. 2901). The 1988 Trade Act authorized the United States Trade Representative (USTR) to impose various trade sanctions against foreign countries in case the U.S. rights under a trade agreement were denied or a foreign country's act, policy, or practice was unjustifiable and restricted U.S. commerce. 1988 Trade Act, Pub. L. No. 100-418, § 1301, 102 Stat. 1107, 1164 (1988) (codified at 19 U.S.C. § 2411). In addition, the Act, commonly referred as "Super 301," required the USTR to report to Congress annually, identifying and listing priority foreign countries that "have the most onerous or egregious acts, policies, or practices that (i) deny adequate and effective intellectual property rights, or (ii) deny fair and equitable market access to United States persons that rely upon intellectual property protection." 1988 Trade Act, Pub. L. No. 100-418, § 1303, 102 Stat. 1107, 1179-80 (1988) (codified at 19 U.S.C. § 2242). The "Super 301" was said to be "designed specifically as a tool to use against the Japanese trade surplus with the United States." In fact, the USTR identified

multilateral efforts to protect intellectual property as a top priority in U.S. policy toward international trade by lobbying Japanese and European industries to “gain support for the inclusion of intellectual property on the negotiating agenda in the Uruguay Round of multilateral trade negotiations.”<sup>41</sup> In part because of the efforts of U.S. industry in a multilateral way, the United States included trade secret protection in Article 31 of the draft agreement on the Trade-Related Aspects of Intellectual Property Rights (TRIPs) of the General Agreement on Tariffs and Trade (GATT),<sup>42</sup> which was under discussion at that time, even though the Japanese government did not want to do so.<sup>43</sup> The general definition of trade secrets can be found in

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Japan as one of the priority countries in 1989. Elizabeth K. King, *The Omnibus Trade Bill of 1988: “Super 301” and Its Effects on the Multilateral Trade System under GATT*, 12 U. PA. J. INT’L BUS. L. 245, 255-59 (1991).

<sup>41</sup> See Charles S. Levy, *Towards an Intellectual Property Agreement in the GATT: A Trilateral Initiative by U.S., Japanese and European Business Groups*, in UNITED STATES/JAPAN COMMERCIAL LAW & TRADE 89 (Valerie Kusuda-Smick ed. 1990). On March, 1988, three major industry groups from the United States, Japan, and Europe published their position on the GATT framework agreement on intellectual property. See Intellectual Property Committee, the Japan Federation of Economic Organizations (Keidanren), & the Union of Industrial and Employers’ Confederations of Europe (UNICE), BASIC FRAMEWORK OF GATT PROVISIONS AND UNITED STATES BUSINESS COMMUNITIES (1988).

<sup>42</sup> See Draft Agreement on the Trade-Related Aspects of Intellectual Property Rights, GATT Doc. No. MTN.GNG/NG11/W/70, art. 31, at 13 (May 11, 1990) (communication from the United States), available at [http://www.wto.org/gatt\\_docs/English/SULPDF/92100144.pdf](http://www.wto.org/gatt_docs/English/SULPDF/92100144.pdf) (last visited Oct. 24, 2010).

<sup>43</sup> Odano explains the Japanese government position regarding trade secret protection on TRIP negotiations as follows:

Although the United States is strongly demanding the protection of trade secrets, such a concept does not exist in Japan’s legal system. Moreover, this concept is not clear in the United States due, in part, to the regulation of trade secrets by state rather than federal law. Japan, however, has not included trade secrets in its proposal; however it would be erroneous to conclude that trade secrets as defined by the United States are not protected in Japan. The civil and criminal laws afford protection in many cases. . . . Consensus on the definition of a particular right must precede various countries’ agreement to its protection.

Nobutake Odano, *GATT Trade-Related Aspects of Intellectual Property Rights (TRIP) Negotiations and the Japanese Government Position*, in UNITED STATES/JAPAN COMMERCIAL LAW & TRADE 117-18 (V. Kusuda-Smick ed. 1990). Indeed, proposals made by Japan did not mention trade secrets as one type of intellectual property rights that are to be protected. See Suggestion by Japan for Achieving the Negotiating Objectives, GATT Doc. No. MTN.GNG/NG11/W/17 at 3 (Nov. 23, 1987), available at [http://www.wto.org/gatt\\_docs/English/SULPDF/92030131.pdf](http://www.wto.org/gatt_docs/English/SULPDF/92030131.pdf) (last visited Oct. 24, 2010) (“Patent, trademarks, designs, copyright, and semiconductor integrated circuit layout right shall be the right to be protected. Concerning objects to be protected in the new frontiers of technology, deliberate study shall be made on them with an aim to having an appropriate way of protecting each object in accordance with its nature.”); Submission by Japan (Addendum), GATT Doc. No. MTN.GNG/NG11/W/17/Add.1 (Sep. 23, 1988), available at [http://www.wto.org/gatt\\_docs/English/SULPDF/92060004.pdf](http://www.wto.org/gatt_docs/English/SULPDF/92060004.pdf) (last visited Oct. 24, 2010).

Section 7 (Protection of Undisclosed Information) of the World Trade Organization Agreement on TRIPs.<sup>44</sup> This Agreement obligates member states to protect undisclosed information that “(a) is secret in the sense that it is not generally known among or readily accessible to persons within the circles that normally deal with the kind of information in question; (b) has commercial value because it is secret; and (c) has been subject to reasonable steps under the circumstances to keep it secret.”<sup>45</sup> Under the TRIPs Agreement, the above information is protected against unauthorized disclosure, acquisition, or use by others contrary to “honest commercial practices.” In this provision, “honest commercial practices” generally include breaches of contract, breaches of confidence, and industrial espionage.<sup>46</sup> In Japan, therefore, one can say that trade secret protection began to be considered mainly because of trade pressure from foreign countries, and pressure from the United States appeared to be the primary factor influencing the Japanese government to adopt a statutory system of trade secret protection.

For these reasons, late in 1988, the Japanese government began preparing to strengthen the legal protection of trade secrets in Japan.<sup>47</sup> The government organized the Proprietary Information Committee with representatives from various fields, including scholars, legal practitioners, and industry, within the Industrial Structure Council (an advisory body) of the Ministry of International Trade and Industry (MITI) in October 1989.<sup>48</sup> The committee not only examined relevant laws in Japan and foreign countries, but also sought opinions from relevant entities, including Japanese business organizations and foreign entities such as the American

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<sup>44</sup> Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, 33 I.L.M. 1197.

<sup>45</sup> TRIPs art. 39.

<sup>46</sup> *Id.* at 13.

<sup>47</sup> To cope with the U.S. demand for the stronger protection of intellectual property rights, the Ministry of International Trade and Industry (MITI) established a division to handle intellectual property issues and asked the Japan Industrial Policy Research Institute to do preliminary research on relevant issues including trade secrets. *MITI to Address Property Rights Issues*, NIKKEI WKLY. (Tokyo), Nov. 5, 1988, at 14, available at 1988 WLNR 405473.

<sup>48</sup> Matsuo, *supra* note 25, at 79.

Chamber of Commerce in Japan.<sup>49</sup> The committee also considered the impact of the amendment on the Japanese economy and tried to develop a theory of trade secret protection in conformity with relevant laws, such as the Civil Code, copyright law, and patent law.<sup>50</sup> After completing the committee work for about five months, in March 1990, the committee published a report entitled “A Desirable Form of the Remedial System against Acts of Unfair Competition Regarding Proprietary Information,” which advised the Japanese government to amend the existing law, the Japanese UCPA.<sup>51</sup> The report pointed out that the lack of trade secret law in Japan, which provided only damage relief, was considered an insufficient legal remedy in cases of trade secret misappropriation, and the adoption of the law was strategically important for Japan, in part because Japan had to cope with the international situation, in which the Uruguay Round of multilateral trade talks under the GATT required trade secret protection, in part because the importance of valuable information was increasing in the information-intensive economy. It also noted that the increasing mobility in the labor market would result in a greater possibility that

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<sup>49</sup> MITI INDUSTRIAL STRUCTURE COUNCIL, PROPRIETARY INFORMATION COMMITTEE, ZAISANTEKIJŌHO NI KANSURU FUSEIKYŌSŌKŌI NI TSUITE NO KYŪSAISEIDO NO ARIKATA NI TSUITE [A Desirable Form of the Remedial System against Acts of Unfair Competition regarding Proprietary Information] (Mar. 16, 1990) [hereinafter MITI COUNCIL, 1990 REPORT], *in* TSŪSHO SANGYŌSHŌ CHITEKI ZAISAN SEISAKUSHITSU [MINISTRY OF INTERNATIONAL TRADE AND INDUSTRY], EIGYŌHIMITSU [TRADE SECRETS] 167-69 & 206-17 (1990) (Japan) [hereinafter MITI, 1990 TRADE SECRETS] (examining relevant laws in the U.S., the United Kingdom, West Germany, and France). 150 entities were asked to give their opinions to the committee. These included “Keidanren (the Federation of Economic Organizations), the Japan Federation of Bar Associations, the Japan Federation of Trade Unions, the Japan Patent Association, and other Japanese business organizations, as well as the American Chamber of Commerce in Japan.” Matsuo, *supra* note 25, at 79.

<sup>50</sup> MITI COUNCIL, 1990 REPORT, *supra* note 49, at 157. Matsuo, who was one of the members of the committee, explains the considerations and discussion in the committee concerning the amendment as follows:

Careful consideration was given to the need not to harm small- to-medium sized enterprises (which have not developed advanced business methods to protect valuable trade secrets), not to unreasonably hinder employees in changing jobs (which was becoming more frequent in Japan recently), and not to obstruct the sharing and trading of business information in such a high-technology society.

Matsuo, *supra* note 25, at 79-81.

<sup>51</sup> *See* MITI COUNCIL, 1990 REPORT, *supra* note 49, at 157-98.

proprietary information would be revealed when employees left for competitors.<sup>52</sup> Following the committee's suggestions, the MITI prepared a bill, and the Cabinet introduced the bill to the National Diet of Japan on May 24, 1990, during the 118th session. The Japanese Diet passed the bill after heated debate.<sup>53</sup>

The amendment of the Japanese UCPA in 1990 had three principal features. First, the amendment created the legal concept of a trade secret within the preexisting regime of unfair competition law, which is regarded as a sort of special tort law.<sup>54</sup> The Japanese UCPA required three elements for the legal protection of trade secrets: it provides that an “*eigyōhimitsu* (trade secret)” under this act is “[1] technical or business information useful for commercial activities such as manufacturing or marketing methods, [2] that is administered as a secret, and [3] that is not publicly known.”<sup>55</sup> Among these requirements, in particular, the requirement of secrecy was problematic during the preparation of the bill because of “the ambiguity of the term.”<sup>56</sup> After long discussions and comparative research on this requirement, the Japanese government appeared to focus on the evidentiary and notice aspects of this requirement, similar to some courts in the United States.<sup>57</sup> Hence, this requirement seems to have been intended to have

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<sup>52</sup> *Id.* at 162-63; *see also Panel Calls for Bolstering Law to Protect Trade Secrets*, JAPAN ECON. NEWSWIRE BY KYODO NEWS SERVICE, Mar. 16, 1990, *available at* Lexis ALLNEWS database.

<sup>53</sup> Fusei kyōsō bōshihō [Unfair Competition Prevention Act], Law No. 14 of 1934 (as amended by Law No. 66 of 1990 (promulgated on June 29, 1990)) (Japan) [hereinafter 1990 Japanese UCPA]. The bill was passed on June 14, 1990, by the House of Representatives and on June 22, 1990, by the House of Councillors. The Act became effective June 15, 1991. For a detailed discussion of both houses of the Diet, see Index Database to Japanese Laws (<http://hourei.ndl.go.jp>).

<sup>54</sup> In this context, the basis of trade secret law is tort theory, which seeks its justification from maintenance of commercial or industrial morality. *See* MITI, 1990 TRADE SECRETS, *supra* note 49, at 30-35.

<sup>55</sup> 1990 Japanese UCPA, art. 1, para. 3.

<sup>56</sup> According to Matsuo, some argued that “if the requirement were strictly interpreted, only huge American enterprises with experience in maintaining trade secrets would be able to obtain [them], and they would attack Japanese companies, many of which still have not developed a well-organized system of maintaining their valuable trade information in secrecy.” Matsuo, *supra* note 25, at 82-83.

<sup>57</sup> Matsuo further explained that “it was agreed that this requirement means that . . . a trade secret is maintained in a way which includes some means, visual or otherwise, of giving clear notice of the secret nature of the information to

similarities to the requirement of “reasonable” security measures under the Uniform Trade Secrets Act (UTSA).<sup>58</sup> Second, the amendment defined six types of trade secret misappropriations.<sup>59</sup> During the preparation of the draft bill, some argued that the Japanese UCPA should adopt a general provision defining trade secret misappropriations, following paragraph 2 of Article 10*bis* of the Paris Convention for the Protection of Industrial Property, which is a general provision for effective protection against unfair competition.<sup>60</sup> However, it seems that the drafter placed emphasis on economic stability, based on the reality of Japanese society at that time. The MITI explained that allowing injunctive relief for misappropriation that was not clearly defined might slow economic activities in Japan, in part because there had not been many cases dealing with trade secret misappropriation and in part because, unlike damages for trade secret misappropriation, injunctive relief might result in aggressive intervention in free economic activities between private parties in the market.<sup>61</sup> Third, the amended statute provided for injunctive relief as one of the civil remedies that was not available in cases of misappropriation of trade secrets before the adoption of the Act.<sup>62</sup> In connection with injunctive relief, the trade secret holder could also ask the court to compel affirmative acts by the

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persons who have access to the trade secret.” *Id.* See, e.g., *Rockwell Graphic Sys., Inc. v. DEV Indus., Inc.* 925 F.2d 174 (1991) (focusing on the evidentiary significance of the requirement of reasonable security measures); *BondPro Corp. v. Siemens Power Gen., Inc.*, 463 F.3d 702, 709 (7th cir. 2006) (focusing on the notice aspect of this requirement).

<sup>58</sup> See UNIF. TRADE SECRETS ACT §1 (4), 14 U.L.A. 537 (2005).

<sup>59</sup> 1990 Japanese UCPA, art. 1, para. 3 (i)-(vi).

<sup>60</sup> CHINO, *supra* note 3, at 173. See Paris Convention for the Protection of Industrial Property (as amended on September 28, 1979), art. 10*bis*, para. 2. (“Any act of competition contrary to honest practices in industrial or commercial matters constitutes an act of unfair competition.”), [http://www.wipo.int/treaties/en/ip/paris/trtdocs\\_wo020.html#P213\\_35515](http://www.wipo.int/treaties/en/ip/paris/trtdocs_wo020.html#P213_35515).

<sup>61</sup> MITI COUNCIL, 1990 REPORT, *supra* note 49, at 71; CHINO, *supra* note 3, at 173.

<sup>62</sup> 1990 Japanese UCPA, art. 1, para. 3. Damage remedies and others are also available under art. 1 *bis*, para. (1), (3), and (4). But “no specific provisions were prepared for calculating damages, although a lawyer’s group had requested that at least the same effect of the provision as in the Trademark Law or the Patent Law be adopted.” Matsuo, *supra* note 25, 93-94.



misappropriator, such as destruction of the fruits of the misappropriation.<sup>63</sup> However, the law did not provide for criminal sanctions for trade secret misappropriation.

The amendment of the Japanese UCPA dramatically enhanced the legal protection of trade secrets in Japan. Moreover, the amendment process allowed Japan to have an opportunity not only to carefully examine the legal status of trade secrets in Japan compared with advanced foreign countries, but also to look carefully at Japanese industry, which had more incentive to rely on trade secret protection because of its technological competitiveness in the world market compared with the previous stage of development. As a result, the trade secret law included the “trade secret” as a formal legal concept under Japanese law and provided for legal remedies for third-party liability and injunctive relief, which had been unavailable before the adoption of the law. Through this amendment, the Japanese government ostensibly satisfied the demands of the United States that it take substantial measures to strengthen trade secret protection in Japan. The amendment also enabled the Japanese government to signal to the other countries participating in the Uruguay Round that Japan, as one of the developed countries, now had an established international norm adequate for protecting trade secrets.

Nonetheless, as one Japanese commentator stated, “Japan [had] a machine for the protection of trade secrets, but [it did] not have sufficient oil to run it.”<sup>64</sup> Indeed, the amended Japanese UCPA did not appear to provide sufficient civil remedies for the legal protection of trade secrets. Unlike civil procedural law in the United States, the amended Japanese UCPA has been criticized by Japanese commentators and scholars as well as by foreign commentators for its lack of sufficient procedural measures for preserving trade secrets during litigation, such as *in*

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<sup>63</sup> 1990 Japanese UCPA, art. 1, para. 4.

<sup>64</sup> Matsuo, *supra* note 25, at 94.

*camera* hearings and sealing the records of the action, which are available in the United States.<sup>65</sup> Furthermore, the lack of measures under the Japanese Code of Civil Procedure to preserve trade secrets in litigation appears to have affected the formation of Article 42 of the TRIPs and to be justified under the Article.<sup>66</sup> *Miyakoshi Kikou Ltd. v. Guurudo Inc.*<sup>67</sup> is illustrative of the limited rights of a trade secret holder under the Japanese Code of Civil Procedure. In this case, the plaintiff, a Japanese company, brought a lawsuit against the defendant, a U.S. company, asking the court to confirm that no liability existed for trade secret misappropriation. One issue in the case was whether the proceedings for a case involving alleged trade secrets could be conducted in such a way as to preserve the secrecy of the trade secrets, because despite a request by the court, the U.S. company had not specified the alleged trade secrets in the proceedings. Because of the failure to specify and prove the alleged trade secrets, the court ruled in favor of the Japanese company.<sup>68</sup> This case clearly showed how the amended Japanese UCPA was incomplete in protecting the interests of trade secret holders.

### 1.3. Development

In 1990, the Japanese UCPA adopted mainly a substantive trade secret law. However,

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<sup>65</sup> See, e.g., SOGA, *supra* note 6, at 172-99; Svetz, *supra* note 6, at 445-47. In fact, according to Matsuo, the Japanese government may have expected the result of the lack of sufficient measures in preserving the secrecy of trade secrets in litigation. Matsuo, *supra* note 25, at 94-95 (“Careful deliberation and discussion have been focused on measures to protect trade secrets during the course of litigation. It would be practically impossible to even impinge on the fundamental principal that trials be public.”).

<sup>66</sup> Article 42 states that “[civil judicial procedure] shall provide a means to identify and protect confidential information, unless this would be contrary to existing constitutional requirements.” TRIPs, art. 42. See CHRISTOPHER HEATH, THE SYSTEM OF UNFAIR COMPETITION PREVENTION IN JAPAN 234 (2001) (noting that Article 42 as “a concession made particularly with Japan in mind,” citing T. Sibuya, *Eigyōhimitsu no hogo [Protection of Trade Secrets]*, 45-2 HŌSŌ JIHŌ 353 (1993)) [hereinafter HEATH, UNFAIR COMPETITION PREVENTION IN JAPAN].

<sup>67</sup> Tokyo District Court of Japan, Judgment of Sep. 24, 1991, Case No. Shōwa 60 (Wa) 15593.

<sup>68</sup> *Id.* See also Osaka District Court of Japan, Judgment of July 12, 1973, Case No. Shōwa 47 (Ra) 516.

scholars criticized its lack of support from procedural law and argued that criminal sanctions should be adopted because of the inefficient civil remedy for providing sufficient trade secret protection to holders of trade secrets.<sup>69</sup> In part because of the defects of the procedural mechanism, given only the minimal number of trade secret cases reported up to 1997, it did not appear to have a significant impact on Japanese trade secret holders in the early stages of implementation.<sup>70</sup> Although some Japanese scholars had urged that the procedural defects of trade secret protection described above be improved, the Japanese government did not change them until early in 2000.<sup>71</sup>

The position of the Japanese government regarding trade secret protection began changing as the Japanese socioeconomic environment began changing during the 1990s. In particular, the experience of the “lost decade,” a term used to describe the protracted economic recession in Japan after the burst of the economic bubble, seems to have resulted in a reshaped perception of intellectual property by the Japanese government.<sup>72</sup> In fact, Japan experienced a halt in economic expansion during the period of the lost decade.<sup>73</sup> It seemed harder for Japan to

<sup>69</sup> See, e.g., SOGA, *supra* note 6, at 157-71.

<sup>70</sup> I have examined the number of cases involving “営業秘密 (Eigyōhimitsu; trade secrets)” as a keyword in the Westlaw Japan (<http://www.westlawjapan.com>) database. I have found the following number of cases:

	Year																		Total	
	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08		09
No. of cases	1	1	3	5	6	8	9	18	18	18	19	30	28	27	33	22	35	37	18	336

<sup>71</sup> Although the Japanese UCPA was completely revised in 1993, the provisions regarding trade secret protection were not changed.

<sup>72</sup> See Ruth Taplin, *Roots of the IP Drive and Economic Globalization*, in INTELLECTUAL PROPERTY AND THE NEW GLOBAL JAPANESE ECONOMY 1-16 (2009).

<sup>73</sup> For an overview of the Japanese economic situation in the 1990s, see Kazuo Sato, “From Fast to Last: The Japanese Economy in the 1990s,” 13 J. ASIAN ECON. 213, 216-29 (2002) (explaining the Japanese economy in the 1990s focusing on the GDP gap, private consumption, business fixed investments and savings, government, trade,

stay competitive with the rise in the world economy of other Asian countries, such as China, Korea, and Taiwan, with low labor costs and high-level technology in traditional industrial areas.<sup>74</sup> In addition, the Japanese (manufacturing) industry began facing unintended leakages of technology abroad: according to one scholar, “Japan has emerged as one of the most important sources of [Foreign Direct Investment] in this period as Japanese corporations were forced to move production abroad in order to stay competitive in the face of rising wages and an appreciating yen.”<sup>75</sup> This change in the economic situation led Japan to realize the limits of its traditional Japanese economic model, which can be referred to as a “catch-up model,” under which Japan experienced its miraculous economic success in the postwar period based on the importation and assimilation of foreign technology.<sup>76</sup> This recognition urged the Japanese government to find a new solution to the bad economic situation.<sup>77</sup> Learning from the example of the U.S. intellectual property policies, including the “pro-patent policy” in the 1980s, which aimed at strengthening the international competitiveness of U.S. industry, Japan began to recognize the importance of intellectual property as a new growth engine to revitalize the Japanese economy.<sup>78</sup> Beginning with Prime Minister Junichiro Koizumi’s declaration of a pro-

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and the financial system).

<sup>74</sup> See SANGYŌ KYŌSŌRYOKU TO CHITEKI ZAISAN WO KANGAERU KENKYŪKAI [STUDY GROUP ON INDUSTRIAL COMPETITIVENESS AND INTELLECTUAL PROPERTIES], SANGYŌ KYŌSŌRYOKU TO CHITEKI ZAISAN WO KANGAERU KENKYŪKAI HŌKOKUSHO [FINAL REPORT BY THE STUDY GROUP ON INDUSTRIAL COMPETITIVENESS AND INTELLECTUAL PROPERTIES] 1 (2002) (Japan) [hereinafter METI, INDUSTRIAL COMPETITIVENESS & IP REPORT], available at <http://www.meti.go.jp/report/downloadfiles/g20605ej.pdf> (last visited Sep. 14, 2010).

<sup>75</sup> NAGESH KUMAR, GLOBALIZATION, FOREIGN DIRECT INVESTMENT, AND TECHNOLOGY TRANSFERS: IMPACTS ON AND PROSPECTS FOR DEVELOPING COUNTRIES 1 (Nagesh Kumar ed., 1998).

<sup>76</sup> See METI, INDUSTRIAL COMPETITIVENESS & IP REPORT, *supra* note 74, at 1.

<sup>77</sup> See *id.* The study group, which consisted of civilian experts from various fields, such as academia, business, and law, was formed at the METI in October 2001. With the object of strengthening Japanese industrial competitiveness, it examined legal and institutional problems in promoting the creation, protection, and exploitation of intellectual property in Japan. The final report, which included specific policy recommendations, was published in June 2002. For an overview of intellectual property policy changes in Japan, see Hisamitsu Arai, *Intellectual Property Strategy in Japan*, 1 INT’L J. INTEL. PROP. L. ECON. & MGMT 5 (2005).

<sup>78</sup> See METI, INDUSTRIAL COMPETITIVENESS & IP REPORT, *supra* note 74, at 1. For a Japanese view on the U.S. Pro-

intellectual property policy in February 2002, the Japanese government established the Strategic Council on Intellectual Property under the Office of the Prime Minister in March and announced the Intellectual Property Policy Outline, which provided “basic directions” focusing on the intellectual property cycle, including creation, protection, and exploitation, and a “specific action plan” for creating an intellectual property-based nation in July of the same year.<sup>79</sup> The Intellectual Property Basic Act proposed in the Guidelines was enacted in November 2002 to implement the measures in the Guidelines.<sup>80</sup> Based on the Basic Act, in the subsequent year, the Intellectual Property Strategy Headquarters, which consisted of the Prime Minister (chair), all cabinet members, and other experts from the private sector, was established in March, and this group was in charge of developing the Intellectual Property Strategic Program on a yearly basis and supporting the implementation of the program.<sup>81</sup> Thereafter, in July, the first Strategic Program was published.<sup>82</sup>

Strengthening trade secret protection was recognized as one of the important parts of the new Japanese intellectual property policy. Indeed, “reinforcement of trade secret protection,” which aimed at reaching a level similar to that in the United States and Europe, was listed among

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Patent policy, see Institute of Intellectual Property, *U.S. Pro-Patent Policy: A Review of the Last 20 Years*, IIP BULLETIN 2000, 174-83 (2000), available at [http://www.iip.or.jp/e/e\\_summary/pdf/detail1999/e11\\_17.pdf](http://www.iip.or.jp/e/e_summary/pdf/detail1999/e11_17.pdf) (last visited Sep. 14, 2010).

<sup>79</sup> CHITEKI ZAISAN SENRYAKU KAIGI [STRATEGIC COUNCIL ON INTELLECTUAL PROPERTY], CHITEKI ZAISAN SENRYAKU TAIKOU [THE INTELLECTUAL PROPERTY POLICY OUTLINE] (July 3, 2002) (Japan) [hereinafter STRATEGIC COUNCIL, IP POLICY OUTLINE], <http://www.kantei.go.jp/jp/singi/titeki/kettei/020703taikou.html>. An English translation of the outline is available at [http://www.kantei.go.jp/foreign/policy/titeki/kettei/020703taikou\\_e.html](http://www.kantei.go.jp/foreign/policy/titeki/kettei/020703taikou_e.html).

<sup>80</sup> Chiteki Zaisan Kihonhō [Intellectual Property Basic Act], Law No. 122 of 2002. An English version of the Act is available at <http://www.cas.go.jp/jp/seisaku/hourei/data/ipba.pdf>.

<sup>81</sup> *Id.* arts. 24-33.

<sup>82</sup> CHITEKI ZAISAN SENRYAKU HONBU [INTELLECTUAL PROPERTY STRATEGY HEADQUARTERS], CHITEKI ZAISAN NO SOUZOU HOGO OYOBI KATSUYOUNI KANSURU SUISHIN KEIKAKU [PLAN ON THE CREATION, PROTECTION, AND EXPLOITATION OF INTELLECTUAL PROPERTY] (July 8, 2003) (Japan) [hereinafter IP HEADQUARTERS, IP PLAN 2003], available at <http://www.ipr.go.jp/suishin/030708suishin-j.pdf>. An English translation of the plan is available at <http://www.ipr.go.jp/suishin/030919suishin-e.pdf>.

the strategic protection measures under the basic directions.<sup>83</sup> For this, on the one hand, recognizing the increasing significance of trade secrets in the Japanese industry, the Outline pointed out that it was necessary to improve civil remedies and introduce criminal sanctions for trade secret misappropriation by amending the Japanese UCPA.<sup>84</sup> It made the Ministry of Economy, Trade and Industry (METI) carry out relevant tasks in 2003, and it asked that the possible effect of the amendment on labor mobility be taken into consideration.<sup>85</sup> In addition, it made the Judicial Reform Headquarters, the Ministry of Justice, and the METI carry out the necessary measures to protect trade secrets in litigation by the 2005 fiscal year.<sup>86</sup> On the other hand, the Outline required that by 2002, the METI publicized reference guidelines that would help Japanese companies formulate a management strategy to prevent unintended leakage of their technology overseas.<sup>87</sup>

Based on the Guideline and subsequent Intellectual Property Strategy Programs, the Japanese legislature adopted important amendments regarding trade secret protection in 2003, 2005, 2006, and 2009. As the Outline stated, the 2003 amendment focused on the adoption of new criminal sanctions for trade secret misappropriation and the enhancement of civil remedies. It appeared that Japanese companies were also in favor of amending the Japanese UCPA in that direction. In fact, a survey conducted in November 2001 by the Japan Intellectual Property Association and the Association of Corporate Legal Departments revealed that more than 60% of the responding companies said the current civil remedies were insufficient. Various reasons were

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<sup>83</sup> STRATEGIC COUNCIL, IP POLICY OUTLINE, *supra* note 79, at 11.

<sup>84</sup> *Id.*

<sup>85</sup> *Id.* at 32.

<sup>86</sup> METI, INDUSTRIAL COMPETITIVENESS & IP REPORT, *supra* note 74, at 30 (2002); STRATEGIC COUNCIL, IP POLICY OUTLINE, *supra* note 79, at 27.

<sup>87</sup> STRATEGIC COUNCIL, IP POLICY OUTLINE, *supra* note 79, at 36.

given for the insufficiency of civil remedies, with two of them being the “difficulty of proving trade secret misappropriation” and the “difficulty of proving the amount of damages.”<sup>88</sup> The survey also unveiled that approximately 80% of the responding companies were in favor of the adoption of criminal sanctions, especially under restricted situations in which illegality of the conduct was high.<sup>89</sup> The 2003 amendment criminalized some types of trade secret misappropriations, which could be divided into two groups: (1) acquiring, using, or disclosing a trade secret by violating the control of a trade secret holder by unlawful means (deceit, assault, intimidation, theft, etc.) for the purpose of unfair competition;<sup>90</sup> and (2) officers’ or employees’ using or disclosing a trade secret disclosed by its holder at the outside for the purpose of unfair competition.<sup>91</sup> On the other hand, because of concerns over restricting the freedom of employees to choose an occupation or discouraging labor mobility, the amendment did not criminalize an act by a former employee of using or disclosing a trade secret if it did not involve unlawful acquisition.<sup>92</sup> In addition to the adoption of criminal provisions, based on concerns expressed by the Japanese industry, the 2003 amendment improved procedural measures for effective civil

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<sup>88</sup> The Japan Intellectual Property Association (<http://www.jipa.or.jp>) and the Association of Corporate Legal Departments (<http://www.keieihoyukai.jp>) have conducted several surveys examining the consciousness of Japanese companies regarding trade secret law. They have also given comments on the proposal for the amendment of the Japanese UCPA by the Japanese government. The survey, conducted in November 2001, revealed the current problems of civil remedies under the Japanese UCPA. The respondents pointed out “difficulty in proving trade secret misappropriation” as the biggest problem. They further noted, in order of importance, “disclosure of trade secrets in litigation,” “the impossibility of recovering of trade secret status after disclosure,” and “the difficulty of proving the amount of damages.” SANGYŌ KŌZŌ SHINGIKAI, CHITEKIZAISAN SEISAKUBUKAI, FUSEI KYŌSŌ BŌSHI SHŌINKAI [INDUSTRIAL STRUCTURE COUNCIL, INTELLECTUAL PROPERTY POLICY COMMITTEE, SUBCOMMITTEE ON UNFAIR COMPETITION PREVENTION], FUSEI KYŌSŌ BŌSHIHŌ NO MINAOSHI NO HŌKŌSEI NI TSUITE [REPORT ON THE AMENDMENT OF THE UNFAIR COMPETITION PREVENTION ACT] 2-3 (Feb. 2003) (Japan) [hereinafter METI, 2003 AMENDMENT REPORT] (citing the survey by the Japan Intellectual Property Association and the Association of Corporate Legal Departments).

<sup>89</sup> *Id.* at 16.

<sup>90</sup> Fusei kyōsō bōshihō [Unfair Competition Prevention Act], Law No. 47 of 1993 (as amended by Law No. 46 of 2003), art. 14, paras. 3-5 (Japan) [hereinafter 2003 Japanese UCPA]. For a detailed examination of the criminal sanctions adopted by the METI, see METI, 2003 AMENDMENT REPORT, *supra* note 88, at 15-27.

<sup>91</sup> 2003 Japanese UCPA, *supra* note 90, art. 14, para. 6.

<sup>92</sup> METI, 2003 AMENDMENT REPORT, *supra* note 88, at 26.

remedies.<sup>93</sup>

In 2004, the Japanese government took dramatic measures that enabled the relevant parties to guard against the disclosure of trade secrets during the litigation process through the Act of a Partial Amendment of the Court Organization Act.<sup>94</sup> The amended measures included provisions for protective order,<sup>95</sup> required notice to a party regarding a request for inspection of case records,<sup>96</sup> and included provisions for *in camera* examination of the parties.<sup>97</sup> In subsequent years, Japan has amended the Japanese UCPA, focusing on the enhancement of criminal sanctions. The 2005 amendment imposed additional criminal penalties against a person taking a trade secret out of Japan and using or disclosing it for the purpose of unfair competition, to prevent the leakage of Japanese technology abroad.<sup>98</sup> The Japanese UCPA further criminalized the use or disclosure of a trade secret by a former officer or employee who offered to disclose a trade secret in breach of a duty of confidence or who received a request to use or disclose it

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<sup>93</sup> It adopted a system to relieve a plaintiff's burden to prove loss from trade secret misappropriation. 2003 Japanese UCPA, art. 5, para. 1; a provision imposing a defendant's obligation to clarify the specific conditions (*Id.* art. 5 *bis.*); a provision utilizing expert opinion for the calculation of damages (*Id.* art. 6 *bis.*); a provision allowing a party to produce documents *in camera* in case in a trial court the production of documents is necessary for proving trade secret misappropriation or assessing damages (*Id.* art. 6); and a system allowing a court to determine reasonable damages "in case it is extremely difficult to prove the facts necessary for proving the amount of damages due to the nature of said facts (*Id.* art. 6 *ter.*).

<sup>94</sup> Saibanshotou no ichibu wo kaiseisuru hōritsu [Act of a Partial Amendment of the Court Organization Act, etc.], Law No. 120 of 2004 (Japan). Through the Act, the following acts were amended: Saibansho hō [Court Organization Act], Law No. 59 of 1947, Fusei kyōsō bōshihō [Unfair Competition Prevention Act], Law No. 47 of 1993 (Japan), Tokkyōhō [Patent Act], Law No. 121 of 1959 (Japan), Jitsuyōshinanhō [Utility Model Act], Law No. 123 of 1959 (Japan), Ishōhō [Design Act], Law No. 125 of 1959 (Japan), ShōHyōhō [Trademark Act], Law No. 127 of 1959 (Japan), Chosakukenhō [Copyright Act], Law No. 48 of 1970 (Japan), Minji soshōhō [Code of Civil Procedure], Law No. 109 of 1996 (Japan), Benrisihō [Patent Attorney Act], Law No. 49 of 2000 (Japan).

<sup>95</sup> Fusei kyōsō bōshihō [Unfair Competition Prevention Act], Law No. 47 of 1993 (as amended by Law No. 120 of 2004), art. 6 *quarter* (Japan).

<sup>96</sup> *Id.* art. 6 *sexies.*

<sup>97</sup> *Id.* art. 6 *septies.*

<sup>98</sup> Fusei kyōsō bōshihō [Unfair Competition Prevention Act], Law No. 47 of 1993 (as amended by Law No. 750 of 2005), art. 21, para. 11, no. 4 (Japan) [hereinafter 2005 Japanese UCPA]. For the amendment of 2005, see SANGYŌ KŌZŌ SHIGIKAI, CHITEKIZAIKAN SEISAKUBUKAI [INDUSTRIAL STRUCTURE COUNCIL, INTELLECTUAL PROPERTY POLICY COMMITTEE], FUSEI KYŌSŌ BŌSHIHŌ NO MINAOSHI NO HŌKŌSEI NI TSUITE [REPORT ON THE AMENDMENT OF THE UNFAIR COMPETITION PREVENTION ACT] (Feb. 2005) (Japan), <http://www.meti.go.jp/policy/economy/chizai/chiteki/pdf/04fukyohoshou-1.pdf> (last visited Sep. 14, 2010).



while in office, which was not criminalized under the 2003 amendment.<sup>99</sup> To ensure the deterrent effect of the criminal sanctions under the Japanese UCPA, the 2006 amendment further enhanced the punishment for trade secret misappropriations from five to ten years, after considering penal provisions in other intellectual property laws and the Penal Code.<sup>100</sup> Finally, in 2009, the Japanese UCPA enlarged the subjective requirement of criminal sanctions<sup>101</sup> and the scope of acts subject to criminal sanctions by criminalizing an act of fraudulent taking of a trade secret by a person to whom the trade secret had been disclosed.<sup>102</sup>

## 2. Current Trade Secret Law in Japan

### 2.1. Subject Matter

Under the Japanese UCPA, as in the United States, for information to be protected as a trade secret, the information must meet three requirements. The Japanese UCPA protects virtually all information when the information is “useful for commercial activities,” “kept in secret,” and “not publicly known.”<sup>103</sup> However, each requirement is an abstract legal concept,

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<sup>99</sup> 2005 Japanese UCPA, *supra* note 98, art. 21, para. 8.

<sup>100</sup> 2006 Japanese UCPA, *supra* note 1, art. 21.

<sup>101</sup> Fusei kyōsō bōshihō [Unfair Competition Prevention Act], Law No. 47 of 1993 (as amended by Law No. 30 of 2009), art. 21 (Japan) [hereinafter 2009 Japanese UCPA]. The amended Act is becoming effective on October 29, 2010. For background of the amendment and the Japanese government’s point of view regarding the amendment of 2009, see SANGYŌ KŌZŌ SHINGIKAI, CHITEKIZAISAN SEISAKUBUKAI, GIJITSUJŌHŌTŌNO ARIKATANI KANSURU SHŌINKAI [INDUSTRIAL STRUCTURE COUNCIL, INTELLECTUAL PROPERTY POLICY COMMITTEE, SUBCOMMITTEE ON THE PROTECTION OF TECHNOLOGY INFORMATION], EIGYŌHIMITSUNI KAKARU KEIJITEKI SOUCHI NO MINAOSHI NO HŌKŌSEI NI TSUITE [REPORT ON THE AMENDMENT OF CRIMINAL SANCTIONS ASSOCIATED WITH TRADE SECRETS UNDER THE UCPA] (Feb. 2009) (Japan), <http://www.meti.go.jp/policy/economy/chizai/chiteki/pdf/set.eigyohimitsu.pdf> (last visited Sep. 14, 2010).

<sup>102</sup> 2009 Japanese UCPA, *supra* note 101, art. 21, para. 3.

<sup>103</sup> The Japanese UCPA states:

which was not familiar to holders of trade secrets and lawyers in the Japanese society. Thus, the courts have played a role in limiting the scope of the subject matter protected under trade secret law in Japan.<sup>104</sup>

In practice, regarding the subject matter protected under the Japanese UCPA, the Japanese courts seem to have a similar approach regarding the requirements of “usefulness” and “not being publicly known,” compared with the approach of U.S. courts toward “economic value” and “not being generally known.”<sup>105</sup> With respect to the requirement of “usefulness for commercial activities,” the courts in Japan determine whether this exists in a given case by considering the generally accepted notion in society.<sup>106</sup> To satisfy this requirement, the information does not have to be used in the operation of a business, but the information should be helpful for the trade secret owner to save relevant costs or improve the operation of the business by use of the trade secret.<sup>107</sup> In this sense, if so-called “negative” information, such as data from a failed experiment, enables a holder of trade secrets to save relevant costs for new research by avoiding unnecessary investment, the information may be protected as a trade

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The term “trade secret” as used in this Act means technical or business information useful for commercial activities such as manufacturing or marketing methods that is kept secret and that is not publicly known.

2006 Japanese UCPA, *supra* note 1, art. 2, para. 6, *translated in* JAPANESE LAW TRANSLATION DATABASE SYSTEM BY MINISTRY OF JUSTICE, <http://www.japaneselawtranslation.go.jp> (last visited Dec. 30, 2009). By the definition under the Act, technical and nontechnical information, such as customer lists and technical know-how, are protectable trade secrets. *See, e.g.*, Osaka District Court of Japan, Judgment of April 16, 1996, Case No. Heisei 6 (Wa) 4404 (customer lists of men’s wig firm); Osaka District Court of Japan, Judgment of Dec. 22, 1998, Case No. Heisei 5 (Wa) 8314 [Polytetrafluoroethylene (PTFE) sheet lining technology].

<sup>104</sup> It should also be noted that due to the nature of the civil law system of Japan, scholarly interpretations of the Act also have substantial importance affecting the judgments of Japanese courts.

<sup>105</sup> *See* Chapter II.

<sup>106</sup> *See* Tokyo District Court of Japan, Judgment of Feb. 14, 2002, Case No. Heisei 12 (Wa) 9499 (explaining that the purpose of the Japanese trade secret law is not to protect all information kept in secret but to legally protect the information to the extent that it has social significance and necessity).

<sup>107</sup> Tokyo District Court of Japan, Judgment of Feb. 14, 2002, Case No. Heisei 12 (Wa) 9499; METI, UNFAIR COMPETITION PREVENTION ACT, *supra* note 3, at 35-36.

secret.<sup>108</sup> The usefulness of information claimed as a trade secret is determined not by a subjective evaluation by the trade secret holder, but from an objective perspective.<sup>109</sup> Japanese courts, however, do not seem to require “strict proof [of] the economic value of the information.”<sup>110</sup> Instead, the requirement seems to have a primary role in limiting the protectable scope of subject matter under the law.<sup>111</sup> Thus, if information claimed as a trade secret falls within the scope of antisocial conduct, such as scandalous information, information regarding tax evasion, or information regarding a pollutant, it cannot form the basis for a trade secret claim under the Japanese UCPA. For example, in the *Cost Estimation System for Public Works Projects* case, involving information illegally acquired by the plaintiff, the Tokyo District Court rejected the plaintiff’s claim that the information was useful for commercial activities under the Japanese UCPA because the information in this case hurt the public interest concerning fair competition between contractors and proper budgetary operations of a regional government, and the purpose of the Japanese trade secret law is not to protect all information kept in secret, but to legally protect the information to the extent that it has social significance and necessity.<sup>112</sup>

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<sup>108</sup> HIROKAZU AOYAMA, FUSEI KYŌSŌ BŌSHIHŌ [UNFAIR COMPETITION PREVENTION LAW] 101 (3d ed. 2006); METI, UNFAIR COMPETITION PREVENTION ACT, *supra* note 3, at 35-36. *But see* CHINO, *supra* note 3, at 167-69 (placing in doubt protection of negative information under the Japanese UCPA).

<sup>109</sup> METI, UNFAIR COMPETITION PREVENTION ACT, *supra* note 3, at 35-36.

<sup>110</sup> Tatsubumi Sato, Judge of the Intellectual Property High Court, Presentation at the International Conference on Comparative Judicial Protection of Intellectual Property Rights in PRC, Protection of Trade Secret in Japan (Sep. 28-29, 2006) (transcript available at [http://www.ip.courts.go.jp/documents/pdf/thesis/060928\\_29\\_1.pdf](http://www.ip.courts.go.jp/documents/pdf/thesis/060928_29_1.pdf)) (last visited Oct. 10, 2010).

<sup>111</sup> Shigeki Chaen, *Eigyōhimitsu no minjihōjō no hogo* [Protection of Trade Secrets under Civil Law], in *EIGYŌHIMITSU NO HOGO* [PROTECTION OF TRADE SECRETS] 38 (2005) (Japan).

<sup>112</sup> In the *Cost Estimation System for Public Works Projects* case, one of the principal issues was whether the nonpublic unit price information regarding public sector engineering works for government procurement had the required usefulness under the Japanese UCPA. The plaintiff, the seller of cost estimation software for public works projects, put nonpublic unit price information into a unit price table in the software. The defendants were the plaintiff’s former employees who established a competing firm. The plaintiff brought suit against the former employees for trade secret misappropriation. The plaintiff argued that the software has usefulness because it enabled contractors who perform public sector engineering works for regional governments to submit would-be-the-best price for the bidding and contracting procedures. The defendants argued that nonpublic information cannot be protected as a trade secret under the Japanese UCPA because the plaintiff illegally obtained it from a regional

The requirement of “not being publicly known” is also interpreted in a similar way under trade secret law in the United States. The requirement can be met “when information cannot be generally acquired except under the control of a trade secret holder”;<sup>113</sup> thus, information that is readily ascertainable by others or on the published books cannot be protected under the Japanese UCPA.<sup>114</sup> Although the information is disclosed to others, the information does not lose its status as a trade secret, provided the others owe a duty of confidence not to disclose it. This is because it requires substantial secrecy, and it can be said that the information in the above case is under the control of the holder.<sup>115</sup> Even if the information is kept in secrecy by a third party who developed the same information by accident, the information does not become publicly known because the information cannot be generally acquired by others.<sup>116</sup> Moreover, general knowledge within the industry is the scope of the publicity to be examined by the courts; thus, information generally known within the industry cannot be a trade secret even if the information is disclosed to the public at large.<sup>117</sup> As in the United States, even if the information can be reverse engineered by a third party, it can be protected as a trade secret when the reverse engineering requires the third party to spend a considerable amount of money and relevant expertise and great effort are needed.<sup>118</sup> With respect to a determination of whether the information is publicly known, the courts adjudicated it at the time of the trade secret

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government. Tokyo District Court of Japan, Judgment of Feb. 14, 2002, Case No. Heisei 12 (Wa) 9499.

<sup>113</sup> METI, UNFAIR COMPETITION PREVENTION ACT, *supra* note 3, at 36.

<sup>114</sup> Tokyo District Court of Japan, Judgment of Oct. 29, 1999, Case No. Heisei 7 (Wa) 221 (“A plan for installing street lighting is not protected as a trade secret under the Japanese UCPA if the defendant is able to obtain the information easily for himself. If it is available in published materials, the street names and representative names preclude finding that the information is a trade secret.”).

<sup>115</sup> METI, UNFAIR COMPETITION PREVENTION ACT, *supra* note 3, at 36.

<sup>116</sup> *Id.*

<sup>117</sup> CHINO, *supra* note 3, at 170; MITI, 1990 TRADE SECRETS, *supra* note 49, at 176-77.

<sup>118</sup> Osaka District Court of Japan, Judgment of Feb. 27, 2003, Case No. Heisei 13 (Wa) 10308; Heisei 14 (Wa) 2833.

misappropriation in cases in which damage relief is sought and at the time of the close of the oral proceedings in cases in which injunctive relief is sought.<sup>119</sup>

By contrast, security requirements under the Japanese UCPA appear to be interpreted more strictly than those under the U.S. law, which requires reasonableness under a given circumstance. As in the United States, this secrecy criterion of the Japanese UCPA has been critical and is the most frequently disputed for information to qualify as a trade secret.<sup>120</sup> To meet the secrecy requirement, a trade secret holder must prove that the holder administered the information objectively in secrecy from employees or outsiders. Thus, only the holder's subjective intention to keep the information in secrecy does not satisfy this requirement.<sup>121</sup> More specifically, the courts in Japan consider mainly two factors: whether the information is disclosed only to a limited number of persons, and whether the person who has access to the information objectively recognizes it as secret. Indeed, in the case of *Acoma Medical Industry Inc.*,<sup>122</sup> the Tokyo District Court found that the plaintiff had to take security measures that limited access to the information *and* that enabled employees or third parties to recognize that the information was administered as a secret.<sup>123</sup> In addition to these two factors, the courts in Japan further consider any relevant factors, including the nature of the information, the size of the firm, and persons who have access to the information.<sup>124</sup> However, in part because of the strictness of the secrecy

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<sup>119</sup> METI, UNFAIR COMPETITION PREVENTION ACT, *supra* note 3, at 36.

<sup>120</sup> Sato, *supra* note 110.

<sup>121</sup> METI, UNFAIR COMPETITION PREVENTION ACT, *supra* note 3, at 35.

<sup>122</sup> Tokyo District Court of Japan, Judgment of Sep. 28, 2000, Case No. Heisei 8 (Wa) 15112.

<sup>123</sup> *Id.* See also Osaka District Court of Japan, Judgment of Sep. 14, 1999, Case No. Heisei (Wa) 1403 (determining that in order to qualify as a trade secret, the plaintiff must intend to administer the information in secrecy and must take measures not to disclose the information. In addition, persons who use it can recognize the information as a trade secret); Osaka District Court of Japan, Judgment of July 25, 2000, Case No. Heisei (Wa) 933 (finding that although the plaintiff obtained a signed nondisclosure agreement that gave employees notice of its confidential status, the information must be recognizable as secret by the defendant).

<sup>124</sup> Chaen, *supra* note 111, at 40-41. See also Tokyo District Court of Japan, Judgment of March 6, 2003, Case No.

requirement, the secrecy element claims in trade secret cases were denied in thirty-five out of forty-nine cases that examined the element up to 2005.<sup>125</sup> On the other hand, the Japanese government, recognizing the lack of security management in Japanese companies, has made efforts to improve the management of trade secrets in Japanese industry by publishing guidelines.<sup>126</sup>

## 2.2. Misappropriation of Trade Secrets

The Japanese UCPA provides six types of trade secret misappropriation, defined as acts of unfair competition; this approach is similar to that of the UTSA.<sup>127</sup> These can be categorized into the following two groups, depending on how a given trade secret is acquired: (1) where the trade secret was acquired wrongfully; or (2) where the trade secret was lawfully acquired by an original recipient and misappropriated by using or disclosing it later. More specifically, trade secret misappropriation under the first group can be divided into two types. First, the Act imposes liability for the acquisition of a trade secret by “wrongful means,” such as theft, fraud, duress, or subsequent use or disclosure of the trade secret acquired wrongfully, including

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Heisei 15 (Wa) 14794; Nagoya District Court of Japan, Judgment of Nov. 17, 1999, Case No. Heisei 10 (Wa) 3311.

<sup>125</sup> KEIZAI SANGYŌSHŌ [MINISTRY OF ECONOMY, INDUSTRY, COMMERCE], EIGYŌHIMITSU KANRISHISHIN [GUIDELINES FOR THE MANAGEMENT OF TRADE SECRETS] 7 (Oct. 12, 2005), <http://www.meti.go.jp/policy/economy/chizai/chiteki/pdf/18rev-tsguideline.pdf> (last visited Sep. 15, 2010) (Japan).

<sup>126</sup> In January 2003, the METI compiled and published the first edition of the guidelines with comments on trade secret law under the Japanese UCPA to improve Japanese companies’ efforts to manage trade secrets. In addition to the guidelines for Japanese companies, the METI published “Guidelines for Drafting a Trade Secret Management Protocol at Universities” in April 2004. In October 2005, the revised version of the guidelines was published. On the other hand, in March 2003, the METI also published “Guidelines for Prevention of Technology Leakage” for the purpose of giving helpful information to Japanese companies on patterns of unintended technology leakage abroad. See KEIZAI SANGYŌSHŌ [MINISTRY OF ECONOMY, INDUSTRY, COMMERCE], GIJUTSU YŪSHUTSU BŌSHI SHISHIN [GUIDELINES FOR PROTECTION OF TECHNOLOGY LEAKAGE] (MARCH 14, 2003), <http://www.meti.go.jp/policy/economy/chizai/chiteki/pdf/030314guideline2.pdf> (last visited Oct. 24, 2010) (Japan).

<sup>127</sup> 2006 Japanese UCPA, *supra* note 1, art. 2, paras. 4-9.

disclosing it in confidence to others.<sup>128</sup> “Acquisition” under the paragraph could include a case in which a person acquires a trade secret by memorizing it.<sup>129</sup> Use of the trade secret may be presumed when the defendant spent less time to develop the same or similar products that embodied the trade secret compared with the original holder of the trade secret because it is difficult for the plaintiff to prove the defendant’s use of it.<sup>130</sup>

Second, the Act subjects an actor to liability if the actor acquires a trade secret with knowledge, or without knowledge due to gross negligence, that the trade secret was acquired by wrongful means at the time of acquisition.<sup>131</sup> The actor is subject to liability for subsequent use or disclosure of the trade secret acquired.<sup>132</sup> The Act also subjects an actor to liability in cases in which the actor uses or discloses a trade secret acquired if he or she knows, or does not know due to gross negligence, that the trade secret has been acquired by wrongful means after the actor has acquired it.<sup>133</sup> Like “has reason to know” under the Section 1 (2) (i) of the UTSA, the subjective requirement of “gross negligence” under these paragraphs can be satisfied not only in cases in which the actor, based on his or her duty required in ordinary trade, would easily have learned that the trade secret was acquired by wrongful means, but also in cases in which the actor did not know because of reckless disregard of his or her duty; thus, the requirement is said to be quite similar to “has reason to know” under the UTSA.<sup>134</sup>

The second group involves a situation in which a trade secret holder legitimately discloses to a recipient, and the relationship or a contract between the parties creates a duty of

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<sup>128</sup> *Id.* art. 2, para. 4.

<sup>129</sup> CHINO, *supra* note 3, at 176.

<sup>130</sup> Osaka District Court of Japan, Judgment of Dec. 22, 2003, Case No. Heisei 5 (Wa) 8314.

<sup>131</sup> 2006 Japanese UCPA, *supra* note 1, art. 2, para. 5.

<sup>132</sup> *Id.*

<sup>133</sup> 2006 Japanese UCPA, *supra* note 1, art. 2, para. 6.

<sup>134</sup> *See* CHINO, *supra* note 3, at 181.

confidence. First, if a legitimate recipient of a trade secret, such as an employee, subcontractor, or licensee, who owes a duty of confidence arising from a relationship or contract between a trade secret holder and the party above, uses or discloses the trade secret for the purpose of unfair competition or otherwise gaining unfair profit or causing harm to the original holder of a trade secret, he or she is subject to liability for appropriation of the trade secret.<sup>135</sup> This paragraph prohibits the use or disclosure of a trade secret in violation of a duty of confidence. A duty of confidence arises from the relationship between an employee and employer during employment and continues after the termination of the employment.<sup>136</sup> But unlike the UTSA and the Restatement (Third) of Unfair Competition in the United States, under this paragraph the Japanese UCPA requires an actor to have a subjective requirement of “unfair competition,” “gaining unfair profit,” or “causing harm” for imposing liability. In most cases, use or disclosure of a trade secret involving commercial exploitation by the above actor in violation of a duty of confidence may fall within the scope of these subjective requirements, in part because these requirements that meet the doctrine of good faith and fair dealing (*shingi seijitsu*), which is one of the most important and broadly applied principles under the Japanese Civil Code, are violated.<sup>137</sup> By contrast, for example, the disclosure of an employer’s trade secret for purposes other than these, such as external whistle blowing, reporting the misconduct of an organization, or violating the law, may not be subject to liability under trade secret law. Although the privilege

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<sup>135</sup> 2006 Japanese UCPA, *supra* note 1, art. 2, para. 7.

<sup>136</sup> See, e.g., Sapporo District Court of Japan, Decision of July 8, 1994, Case No. Heisei 6 (Mo) 725 (granting a preliminary injunction against a former employee who used a trade secret acquired during employment for a competing firm).

<sup>137</sup> Article 1 of the Civil Code provides as follows.

- (1) Private rights must conform to the public welfare.
- (2) The exercise of rights and performance of duties must be done in good faith.
- (3) No abuse of rights is permitted.

Minpō [Civil Code], Law No. 89 of 1896, art. 1, *translated in* JAPANESE LAW TRANSLATION DATABASE SYSTEM BY MINISTRY OF JUSTICE, <http://www.japaneselawtranslation.go.jp> (last visited Jan. 28, 2010).



to disclose another's trade secret is recognized in the United States, the subjective requirements stipulated under the UCPA seem to show clearly that Japanese lawmakers do not want to restrict the freedom of expression or another significant public interest because of the adoption of trade secret law in Japan.<sup>138</sup> However, in reality, no substantial difference seems to arise from the subjective requirements between the two countries. Second, an actor is subject to liability for acquisition of a trade secret with knowledge, or without knowledge due to gross negligence, of the fact that the trade secret has been disclosed in violation of a duty of confidence at the time of acquisition.<sup>139</sup> The actor is also subject to subsequent use or disclosure.<sup>140</sup> In addition, an actor is liable in a case in which the actor uses or discloses a trade secret acquired if he or she knows, or does not know due to gross negligence, that the trade secret has been disclosed in violation of a duty of confidence after the acquisition.<sup>141</sup> These two paragraphs intend to prohibit a third party, such as a competing firm, from obtaining, using, or disclosing the trade secret of a former employer by a former employee who is in violation of the duty of confidence. On the other hand, the Japanese UCPA excludes the application of these provisions to ensure the safety of the transaction by protecting the position of bona fide acquirer of a trade secret.<sup>142</sup>

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<sup>138</sup> See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 40 cmt. c (1995) ("The existence of a privilege to disclose another's trade secret depends upon the circumstances of the particular case, including the nature of the information, the purpose of the disclosure, and the means by which the actor acquired the information. A privilege is likely to be recognized, for example, in connection with the disclosure information that is relevant to public health or safety, or to the commission of a crime or tort, or to other matters of substantial public concern.").

<sup>139</sup> 2006 Japanese UCPA, *supra* note 1, art. 2, para. 8.

<sup>140</sup> *Id.*

<sup>141</sup> *Id.* art. 2, para. 9.

<sup>142</sup> *Id.* art. 11, para. 6.

## 2.3. Legal Remedies

### 2.3.1. Civil Remedies

The adoption of substantive law in 1990 enabled a trade secret holder to seek injunctive relief as well as damages.<sup>143</sup> In addition, to protect a trade secret holder's interest effectively, some provisions have recently been adopted to improve the procedural aspects of civil trade secret cases. The following discussion looks at current civil remedies under the Japanese UCPA, comparing with the remedies under trade secret law in the United States.

Like the UTSA, Article 3 (1) of the Japanese UCPA allows a trade secret holder to seek injunctive relief by suspending or preventing actual or threatened trade secret misappropriation that may give injury to the trade secret holder's business interests through further use or disclosure of the trade secret.<sup>144</sup> Upon seeking the above injunctive relief, the plaintiff can also ask the court to order affirmative acts, such as "destruction of the articles that constituted the act of infringement, [or] removal of the equipment used for the act of infringement."<sup>145</sup> With respect to injunctive relief in a trade secret case, the "appropriateness and scope" of injunctive relief and the "duration" of injunctive relief may be problematic issues that must be determined by the courts because an inappropriate injunction may unduly interfere with legitimate competition by the defendant. As in the United States, Japanese courts have also determined trade secret cases

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<sup>143</sup> Between 1990 and 2005, roughly 100 civil cases were brought under the Japanese UCPA. Chaen, *supra* note 111, at 37. *See also, supra* note 70 (listing the number of trade secret-related cases from the Westlaw Japan database). The cases appear to be developing at an increasing (although modest) rate. According to the Ministry of Economy, Trade and Industry, the number of trade secret cases in Japan is growing year by year: 1995 (2); 1996 (2); 1997 (2); 1998 (4); 1999 (5); 2000 (11); 2001 (13). KEIZAI SANNGYŌSHŌ, CHITEKIZAISAN SEISAKUSHITSU [INTELLECTUAL PROPERTY DIVISION, MINISTRY OF ECONOMY, TRADE AND INDUSTRY], HEISEI 17NENN KAISEI FUSEI KYŌSŌ BŌSHIHŌ NO GAIYŌ [OVERVIEW OF THE UNFAIR COMPETITION PREVENTION ACT AMENDED IN 2005] 21 (Oct. 2005) (Japan). Most of the cases to date relate to the issue of misappropriation of trade secrets by former employees.

<sup>144</sup> 2006 Japanese UCPA, *supra* note 1, art. 3. para. 1

<sup>145</sup> *Id.* art. 3. para. 2.

by considering this aspect. For example, in a case involving a staff list acquired wrongfully by a former employee establishing a competing staffing firm,<sup>146</sup> the Tokyo District Court denied the injunctive relief of the further use of an alleged trade secret, opining that at the time of the judgment, the staff list had substantially lost its usefulness, which is required for trade secret protection, considering the reality in the staffing industry, in which the usual employment period is short and in which many job seekers register with various staffing firms. In addition, in some cases, for effective injunctive relief, the Japanese courts seem to prohibit beyond the scope of the very trade secret. For example, in the *Men's Wig* case,<sup>147</sup> the Osaka district court enjoined a defendant, a competing firm manufacturing men's wigs providing a related service, not only from using the trade secret, a customer list, but also from providing a relevant future service, reasoning that if the defendant could provide a future service, the defendant could benefit from the former use of the trade secret.<sup>148</sup> However, regarding the duration of injunctive relief, there do not seem to have been cases directly mentioning this issue.<sup>149</sup> The right to seek injunctive relief is extinguished by prescription if a trade secret holder does not exercise the right within three years of the time the holder became aware of such fact and of the misappropriator, or when ten years has elapsed from the time the misappropriation commenced.<sup>150</sup>

In lieu of or in addition to injunctive relief, damages for trade secret misappropriation are also available under Article 4 of the Japanese UCPA.<sup>151</sup> As in the United States, although the

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<sup>146</sup> Tokyo District Court of Japan, Judgment of Nov. 13, 2003, Case No. Heisei 12 (Wa) 22457.

<sup>147</sup> Osaka District Court of Japan, Judgment of April 16, 1996, Case No. Heisei (Wa) 4404.

<sup>148</sup> *Id.*

<sup>149</sup> Although the appropriateness and scope of injunctive relief were debated during the preparation of the bill to amend the Japanese UCPA in 1990, the duration was not focused by lawmakers. See CHUNYANG JIN, EIGYOHIMITSU NO HOTEKI HOGO [LEGAL PROTECTION OF TRADE SECRETS] 149-54 (2007).

<sup>150</sup> 2006 Japanese UCPA, *supra* note 1, art. 4. Chino states that the prescription rule applied to the right to seek injunctive relief was the first case in Japan. CHINO, *supra* note 3, at 197.

<sup>151</sup> 2006 Japanese UCPA, *supra* note 1, art. 4.

provision, as a special rule, states the rule as applicable to cases relating to acts of unfair competition, the general rules of tort law (Article 710 et seq.) governing monetary relief apply in trade secret cases.<sup>152</sup> As in an ordinary tort case, to seek damage relief in a trade secret case, a holder must prove (1) a defendant's intention or negligence; (2) that a defendant misappropriated the trade secret of another; (3) that damage was sustained by the holder; and (4) a causal relationship between the defendant's act and the holder's damage. Unlike in the United States, punitive damages are not possible because Japanese tort law does not have a function in punishing egregious conduct and deterring the recurrence of possible future tortious conduct.<sup>153</sup> Pecuniary damages are divided into actual loss and expected loss, and under some circumstances, nonpecuniary damages may be awarded.<sup>154</sup>

A trade secret holder must prove the amount of damage. In reality, however, it is not easy for a plaintiff to prove and calculate the damage or loss in trade secret cases, and in part because of this difficulty, trade secret holders have had difficulty recovering damages resulting from trade secret misappropriations.<sup>155</sup> Under the Japanese UCPA, as in other areas of intellectual property

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<sup>152</sup> However, unlike the United States, with respect to the issue of whether the general rules regarding the restitution of benefit (§ 703 and § 704 of the Japanese Civil Code) apply in an action for trade secret misappropriation, there is no agreement among scholars. CHINO, *supra* note 3, at 195-96. It should be noted that Article 709 of the Japanese Civil Code was amended as a part of the modernization of the Civil Code. Through the amendment, the subject matter of damages expanded and became included as a right and *legally protected interest*. For an overview of general rules of tort law in Japan, see Eri Osaka, *Reevaluating the Role of the Tort Liability System in Japan*, 26 ARIZ. J. INT'L & COMP. L 393, 394-97 (2009); ODA, *supra* note 9, at 180-200.

<sup>153</sup> The Supreme Court of Japan has explicitly stated this tradition. For example, in a case dealing with a issue of "the possibility of rendering an enforcement judgment for a foreign judgment which ordered payment of the so-called punitive damages," the Japanese Supreme Court held that "the system of damages based upon tort in Japan assesses the actual loss in a pecuniary manner, forces the culprit to compensate this amount, and thus enables the recovery of the disadvantage suffered by the victim and restores the status quo ante, and is not intended for sanctions on the culprit or prevention of similar acts in the future, i.e., general prevention." Supreme Court of Japan, Judgment of July 11, 1997, Case No. Heisei 5 (O) 1762 (citation omitted), <http://www.courts.go.jp/english/judgments/text/1997.07.11-1993-O-No.1762.html>. See also SOGA, *supra* note 6, at 162-71.

<sup>154</sup> SOGA, *supra* note 6, at 162-71.

<sup>155</sup> METI, UNFAIR COMPETITION PREVENTION ACT, *supra* note 3, at 104; METI, 2003 AMENDMENT REPORT, *supra* note 88, at 4-6.

law, such as patent law and trademark law, a trade secret holder can enjoy various supporting devices for measuring monetary relief under the Act.<sup>156</sup> First, in cases in which technical information matters as a trade secret and a misappropriator has no or little monetary gain, the quantity of articles sold or transferred multiplied by the amount of profit per unit of the articles that the trade secret holder could have sold in the absence of the misappropriation can be deemed the amount of damage suffered by the holder.<sup>157</sup> Second, in cases in which a plaintiff proves that a defendant's profit was earned through the misappropriation, the amount of profit is presumed to be the amount of damages.<sup>158</sup> Third, a plaintiff can seek damages calculated based on a reasonable royalty for the defendant's use of the trade secret.<sup>159</sup> Fourth, in cases in which proving the amount of damages is extremely difficult, a court may award the plaintiff a reasonable royalty for the defendant's use of the trade secret.<sup>160</sup> The right to seek damages is extinguished when the right to seek injunctive relief due to the above prescription rules expires.<sup>161</sup> Finally, one special device in civil remedies for trade secret misappropriation in Japan, which shows an aspect of the Japanese legal culture, is that the Japanese UCPA authorizes a court to order necessary measures for restoring the business reputation of the trade secret holder injured, in lieu of or in addition to monetary damages.<sup>162</sup> One common type of civil

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<sup>156</sup> 2006 Japanese UCPA, *supra* note 1, art. 4.

<sup>157</sup> *Id.* art. 5. para. 1. Article 102 (1) of the Japanese Patent Act and Article 38 (1) of the Japanese Trademark Act also have this provision.

<sup>158</sup> 2006 Japanese UCPA, *supra* note 1, art. 5. para. 2. Article 102 (2) of the Japanese Patent Act and Article 38 (2) of the Japanese Trademark Act also have this provision.

<sup>159</sup> 2006 Japanese UCPA, *supra* note 1, art. 5. para. 3. Article 102 (3) of the Japanese Patent Act and Article 38 (3) of the Japanese Trademark Act also have this provision. But there was debate regarding the question of whether this provision is proper for trade secret misappropriation because a certain type of trade secret, such as negative information, is not licensed to others in ordinary situations. METI, UNFAIR COMPETITION PREVENTION ACT, *supra* note 3, at 111.

<sup>160</sup> 2006 Japanese UCPA, *supra* note 1, art. 9.

<sup>161</sup> *Id.* art. 4.

<sup>162</sup> *Id.* art. 14.

measure is to request a misappropriator to publish an apology for the misappropriation in the newspaper, because “an apology is regarded as a very severe penalty in Japanese culture.”<sup>163</sup>

### 2.3.2. Criminal Remedies

The Japanese UCPA criminalizes relatively limited types of trade secret misappropriation under Article 21 of the Japanese UCPA compared with the Economic Espionage Act (EEA). Under the criminal trade secret provisions, the scope of subject matter was not expanded; thus, the scope of subject matter is the same as that under civil law.<sup>164</sup> These provisions can be grouped into three categories. The first group criminalizes the use or disclosure of a trade secret acquired by “an act of fraud or others” or “an act of violating control obligations” for the purpose of unfair competition.<sup>165</sup> The criminal provisions limit the scope of acts of misappropriation by specifying and clarifying “an act of fraud or others” or “an act of violating control obligations” for criminal charges. According to legislative history, this was intended to clarify the scope of criminal offenses under the Japanese UCPA.<sup>166</sup> In addition, the Act does not criminalize all wrongful acquisition, but only that acquisition of a trade secret “through an act of acquisition of or reproduction of a medium containing the trade secret under the control of a holder” for the purpose of using or disclosing a trade secret in the manner above, considering the high risks of

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<sup>163</sup> HEATH, UNFAIR COMPETITION PREVENTION IN JAPAN, *supra* note 66, at 247. Heath noted that the Japanese Supreme Court held that the provision for an apology was constitutional, and by contrast, the Korean Supreme Court held that the provision was unconstitutional. *Id.* n.123.

<sup>164</sup> METI, UNFAIR COMPETITION PREVENTION ACT, *supra* note 3, at 172.

<sup>165</sup> 2006 Japanese UCPA, *supra* note 1, art. 21. para. 1. item 1. “An act of fraud or others” means “an act of deceiving, assaulting, or intimidating a person.” *Id.* para. 1. “An act of violating control obligations” means “an act of stealing a document or a data storage medium containing a trade secret, trespassing on a facility where a trade secret is kept, making an unauthorized access [an act of unauthorized access prescribed in Article 3 of the Unauthorized Computer Access Act (Act No. 128 of 1999), or violating the control of a trade secret maintained by its holder in any other way.” *Id.* para. 1. item 1.

<sup>166</sup> METI, UNFAIR COMPETITION PREVENTION ACT, *supra* note 3, at 174.

infringing on legal interests by such acts.<sup>167</sup> The second group criminalizes an act of taking possession, using, or disclosing a trade secret by an offender to whom the trade secret has been legitimately disclosed. This group can be further divided into three types of acts of misappropriation. First, as a corresponding crime of embezzlement in the Japanese Penal Code, the Act prohibits the person, for the purpose of unfair competition, from using or disclosing the trade secret after “taking possession of or making a document or a data storage medium containing the trade secret, [by taking possession of a medium or reproducing information contained in a medium a trade secret under the control of the holder,] through an act of fraud or others or an act violating control obligations, or through embezzlement or other acts of breaching the duty to keep safe custody of the medium containing the trade secret.”<sup>168</sup> Second, as a corresponding crime of breach of trust in the Japanese Penal Code, the Act criminalizes acts of using or disclosing trade secrets by current officers<sup>169</sup> or employees in breach of the duty of confidence for the purpose of unfair competition.<sup>170</sup> Third, in principle, a former officer or employee is not subject to criminal trade secret liability.<sup>171</sup> Thus, the Act criminalizes only the acts of using or disclosing trade secrets by former officers or former employees who offer to disclose trade secrets in breach of confidence or who receive a request to use or disclose them while in office.<sup>172</sup> The third group prohibits the use or disclosure by a second acquirer to whom trade secrets have been disclosed by an offender violating paragraph one or paragraphs three to

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<sup>167</sup> 2006 Japanese UCPA, *supra* note 1, art. 21. para. 1. item 2.

<sup>168</sup> *Id.* art. 21. para. 1. item. 3.

<sup>169</sup> “An officer” means “a director, operating officer, managing partner, secretary, auditor, or an equivalent person to them.” *Id.* art. 21. para. 1. item 4.

<sup>170</sup> *Id.*

<sup>171</sup> METI, UNFAIR COMPETITION PREVENTION ACT, *supra* note 3, at 184.

<sup>172</sup> “An officer” means “a director, operating officer, managing partner, secretary, auditor, or an equivalent person to them.” 2006 Japanese UCPA, *supra* note 1, art. 21. para. 1. item 4.

five.<sup>173</sup>

Regarding the culpability requirement, the Japanese UCPA requires only the “purpose of unfair competition,” which means the purpose of allowing himself or herself, or other specific competitors, to gain a competitive advantage.<sup>174</sup> The METI explains that such examples include cases in which (1) a misappropriator uses a trade secret acquired for his or her own business; (2) a misappropriator directly or indirectly discloses the trade secret to a specific competitor, knowing that the trade secret is used by the competitor; or (3) a misappropriator discloses the trade secret to the public to allow a specific competitor to gain a competitive advantage over the original holder of the trade secret.<sup>175</sup> Although this culpability requirement appears to be similar to that under the general criminal trade secret statute under Section 1832 of the EEA, requiring prosecutors to prove that a defendant intends to convert a trade secret to “the economic benefit of anyone other than the owner” and intends or knows that the offense will injure the owner of the trade secret,<sup>176</sup> this requirement was established with the intent of protecting freedom of the press or whistle-blowing from the inside.<sup>177</sup> The Act provides for a term of up to ten years, fines up to 10 million yen, or both.<sup>178</sup> The jurisdiction of the criminal provisions can reach outside Japan.<sup>179</sup> But unlike the EEA in the United States, the Japanese UCPA limits its application and requires at least some connection between the misappropriation and Japan by adding some requirements that the “trade secret ... had been kept within Japan at the time of an act of fraud or others, or the act of violating control obligations, or at [the time] the trade secret was disclosed

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<sup>173</sup> *Id.* art. 21. para. 1. item 5.

<sup>174</sup> METI, UNFAIR COMPETITION PREVENTION ACT, *supra* note 3, at 175.

<sup>175</sup> *Id.*

<sup>176</sup> 18 U.S.C.A. § 1832(a) (West 2009).

<sup>177</sup> METI, UNFAIR COMPETITION PREVENTION ACT, *supra* note 3, at 172 n.02.

<sup>178</sup> 2006 Japanese UCPA, *supra* note 1, art. 21. para. 1.

<sup>179</sup> *Id.* art. 21. para. 4.



by its holder.”<sup>180</sup> In addition to criminal trade secret provisions, prosecutors can rely on alternative legal theory under the Japanese Penal Code.<sup>181</sup> The Japanese UCPA does not allow prosecutors to prosecute without a complaint by a victim, to prevent unintended disclosure of the holder’s trade secret through criminal proceedings.<sup>182</sup>

### 3. Law of Postemployment Contracts in Japan

Under the Japanese employment tradition, work rules, in which employers establish unilateral conditions, have primarily regulated the employment relationship, which was based on collective human resources management.<sup>183</sup> Similarly, under these employment practices, executing covenants not to compete, as a form of agreement individually negotiated between an employer and an employee, had not been common practice in Japanese employment relationships.<sup>184</sup> However, as mentioned earlier in *Foseco Japan Ltd.*,<sup>185</sup> even before the adoption of the Japanese UCPA, courts in Japan had enforced postemployment covenants not to

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<sup>180</sup> *Id.* art. 21. para. 4.

<sup>181</sup> *Id.* art. 21. para. 7.

<sup>182</sup> *Id.* art. 21. para. 3.

<sup>183</sup> Work rules in Japan are “a set of regulations set forth by an employer for the purpose of establishing uniform rules and conditions of employment at the workplace.” TAKASHI ARAKI, *LABOR AND EMPLOYMENT LAW IN JAPAN* 51 (2002). The Japanese Labor Standards Law requires an employer who “continuously employs 10 or more workers” to draw up work rules dealing with required matters such as “the time to begin and end work, rest periods, rest days, leaves and matters pertaining to changes in shift” and submit them to the relevant government agency. Rōdōkijinhō [Labor Standards Law], Law No. 49 of 1947, art. 89 (as amended by Law No. 147 of 2004) (Japan). For the general overview of work rules in Japan, see KAZUO SUGENO, *JAPANESE EMPLOYMENT AND LABOR LAW* 110-28 (2002).

<sup>184</sup> See Takashi Araki, *Legal Issues of Employee Loyalty in Japan*, 20 *COMP. LAB. L. & POL’Y J.* 267, 269 (1999) [hereinafter Araki, *Employee Loyalty*] (“In Japan, it is rare for an employer and an employee to make a written contract and prescribe concrete terms and conditions of employment.”); Miwako Ogawa, *Noncompete Covenants in Japanese Employment Contracts: Recent Developments*, 22 *HASTINGS INT’L & COMP. L. REV.* 341 (1999) (“Individual agreements concerning noncompetition between the employer and the employee are less common.”).

<sup>185</sup> Nara District Court of Japan, Judgment of Oct. 23, 1970, Case No. Shōwa 45 (Yo) 37.

compete involving confidential information, such as technical secrets, when the covenants were reasonable.<sup>186</sup> The adoption of trade secret law in the early 1990s appears to have affected the approach of courts toward the theory regarding postemployment restrictions in Japan.

Nevertheless, the issue of postemployment restrictions is still controversial in this society, as seen by the recent failure of efforts for statutory regulation of the issue under the Japanese Labor Contracts Law, which codified and clarified common principles established in relevant precedents in responding to an increasing number of labor disputes.<sup>187</sup> This section explores the development of law in Japan regarding postemployment restrictions on the ability of employees to compete with former employers.

As in the United States, it has been recognized that employees in Japan owe a duty of confidence and a duty of noncompetition, as ancillary duties of the employment contract, under the concept of a duty of loyalty (*seijitsu gimu*) during an employment relationship.<sup>188</sup> If an employee violates such duties, an employer may resort to disciplinary measures stipulated in the work rules, including disciplinary dismissal, normal dismissal, or legal remedies, which include injunctive relief or damages.<sup>189</sup> By contrast, there have been disagreements among scholars with

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<sup>186</sup> As for the question of the validity of an explicit agreement not to compete after employment is terminated, the court in *Foseco Japan* opined that the reasonableness should be scrutinized based on several factors, including the duration of the restriction, the geographical limitation, the types of business subject to the restriction, and the existence of compensation. Nara District Court of Japan, Judgment of Oct. 23, 1970, Case No. Shōwa 45 (Yo) 37.

<sup>187</sup> Initially, the new Japanese labor contracts law was intended to include provisions relating to employees' noncompetition and confidentiality duties. However, these relevant provisions were not included in the final bill prepared by the Ministry of Health, Labor and Welfare in part because of difficulties in regulating these cases with diverse factual bases. For a brief overview of the new Japanese Labor Contracts Law, see Lawrence Carter et al., *New Japanese Labor Law*, at [http://www.dlapiper.com/files/Publication/802ddd9-07d9-42a8-a423-2e49c19bb6b0/Presentation/PublicationAttachment/0d8507d2-bfb1-457d-af93-3116e6be5038/New\\_Japanese\\_Labor\\_Law.pdf](http://www.dlapiper.com/files/Publication/802ddd9-07d9-42a8-a423-2e49c19bb6b0/Presentation/PublicationAttachment/0d8507d2-bfb1-457d-af93-3116e6be5038/New_Japanese_Labor_Law.pdf) (last visited April 14, 2010). See also Mitsui Masanobu, *Rodōkeiyakuhōno seiteito sono igi* [The Enactment of Labor Contract Law and Its Significance], 32 HIROSHIMAHŌGAKU [HIROSHIMA LAW JOURNAL] 142 (2008) (Japan).

<sup>188</sup> Araki, *Employee Loyalty*, *supra* note 184, at 268.

<sup>189</sup> Araki notes that “disciplinary actions including disciplinary dismissals, normal dismissals, and/or a reduction, or forfeiture of severance pay, are more common measures.” *Id.* at 274.

regard to the question of whether the duty of confidence remains after the termination of the employment relationship. Scholars have recognized the duty of confidence when there are explicit agreements or specific provisions in the work rules governing the issue and when they are reasonable and not against public policy.<sup>190</sup> A more problematic issue to Japanese society arises when there are no explicit agreements or such provisions related to the duty of confidence because, in employment practice, “there is usually no such explicit provision on post-employment confidentiality.”<sup>191</sup> However, scholars have expressed different views on the issue, and this debate was not resolved until the adoption of the trade secret law in 1990.<sup>192</sup>

On the other hand, courts and scholars have looked strictly and critically at the duty of noncompetition after the termination of the employment relationship. Accordingly, they have agreed that there is no duty of noncompetition in the absence of an explicit agreement or a provision in the work rules.<sup>193</sup> In such cases, employees are able to work freely for competitors or to establish their own businesses. As Araki noted, the general consideration of the court in *Foseco Japan*, was that an employer and an employee with a postemployment covenant not to

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<sup>190</sup> SUGENO, *supra* note 183, at 79. As to whether work rules can be concrete terms and conditions in employment contracts, Japanese Supreme Court held that as far as terms and conditions under work rule clauses are reasonable, they are able to become the contents of employment contracts even in the absence of an explicit agreement. *See* Supreme Court of Japan, Judgment of Nov. 28, 1991, Case No. Shōwa 61 (O) 840. On the other hand, Article 89 of the Labor Standards Act, which provided for employers to be responsible for drawing up and notifying employees of work rules, did not require employers to cover matters with regard to postemployment restraints. In practice, it seems that there have been few explicit provisions with respect to postemployment restraints, including the issues of confidentiality and noncompetition in work rules. Thus, in many cases, Japanese courts and legal scholars have discussed employees’ postemployment restraint issues under the concept of the duty of loyalty, which includes the duty of confidentiality, the duty not to compete, and other duties, as ancillary duties derived from employment contracts, in interpreting implicit terms and conditions in work rule clauses or contracts. Araki, *Employee Loyalty*, *supra* note 184, at 270-73 (1999).

<sup>191</sup> Araki, *Employee Loyalty*, *supra* note 183, at 273.

<sup>192</sup> Sugeno summarizes the debate as follows:

Some argue that the duty to keep business secrets that is incidental to the labor contract also ends and is dissolved when the labor relationship ends. The view that the duty to guard secrets may continue pursuant to the duty-of-good faith principle has been opposed.

SUGENO, *supra* note 183, at 79 (citation omitted).

<sup>193</sup> Araki, *Employee Loyalty*, *supra* note 184, at 274-75.

compete often had unequal bargaining power.<sup>194</sup> They also found that the covenant would restrain the employee's Constitutional right to freely choose his or her occupation, would restrain him or her from competing with a former employer after the termination of employment, and would hinder fair competition.<sup>195</sup>

The adoption of trade secret law in 1990 changed the framework of law regarding postemployment restrictions on employees because the law imposed additional statutory obligations on employees in cases involving trade secrets, apart from the ancillary duties derived from the employment contract. As mentioned earlier, if the legitimate recipient of a trade secret, such as an employee, subcontractor, or licensee who owes a duty of confidence arising from a relationship or a contract between a trade secret holder and the party above, uses or discloses the trade secret for the purpose of unfair competition or otherwise gaining unfair profit or causing harm to the original holder of a trade secret, he or she is subject to liability for appropriating the trade secret, regardless of the existence of an agreement between the two parties.<sup>196</sup> Therefore, as far as trade secrets are concerned and these subjective requirements are met, employees owe a duty of confidence during or after employment, even in the absence of agreements with their employers.<sup>197</sup> The Japanese UCPA played a role in resolving the issue of whether the duty of confidence existed after the termination of employment in the absence of express contracts by extending the scope of employees' duty of confidence. By contrast, the Japanese courts have

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<sup>194</sup> Araki, *Employee Loyalty*, *supra* note 184, at 275. Nara District Court of Japan, Judgment of Oct. 23, 1970, Case No. Shōwa 45 (Yo) 37.

<sup>195</sup> District Court of Japan, Judgment of Oct. 23, 1970, Case No. Shōwa 45 (Yo) 37. Article 22 of the Japanese Constitution states that “[e]very person shall have freedom to choose and change his residence and to choose his occupation to the extent that it does not interfere with the public welfare.” Kenpō [the Constitution], art. 22 (Japan), *translated in* JAPANESE LAW TRANSLATION DATABASE SYSTEM BY MINISTRY OF JUSTICE, <http://www.japaneselawtranslation.go.jp>.

<sup>196</sup> *See* 2006 Japanese UCPA, *supra* note 1, art. 2, para. 7.

<sup>197</sup> *See id.* art. 2, para. 7.

limited the scope of the duty of confidence when information other than trade secrets is involved in nondisclosure agreements so that this form of agreement may also restrict the right of an employee to freely choose his or her occupation.<sup>198</sup> Accordingly, with respect to confidential information not qualifying as a trade secret, the prevailing view does not appear to recognize this duty in the absence of an agreement, arguing that “the ancillary duty of employment should be terminated at the end of the contract.”<sup>199</sup>

On the contrary, a duty of noncompetition after termination of the employment relationship has been highly controversial. One of the most controversial issues is whether the Japanese UCPA can be directly applied to enjoin a former employee from working in a job that would inevitably result in the use or disclosure of trade secrets acquired during employment by extending the scope of the duty of noncompetition ancillary to the employment relationship.<sup>200</sup> *Tokyo Legal Mind*<sup>201</sup> may be a crucial case that gave rise to the debate.<sup>202</sup> In this case, the court examined the duty of confidence and the duty of noncompetition owed by an employee under the new framework of the trade secret law. The court first reaffirmed that, under the Constitutional

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<sup>198</sup> Shinpei Ishida, *Eigyōhimitsu hogo to taishokugo no kyōgōkisei (1); Americani okeru hukahiteki kaijiron no keisei to tenkai wo humaete* [The Protection of Trade Secrets and Duties of Noncompetes after Employment (1)], 58 DOSHISHA L. REV. 1941, 1972-74 (2006) (Japan).

<sup>199</sup> Araki, *Employee Loyalty*, *supra* note 184, at 273.

<sup>200</sup> For in-depth research on the issue in Japan compared to the application of the doctrine of inevitable disclosure in the United States, see Ishida, *supra* note 197; Shinpei Ishida, *Eigyōhimitsu hogo to taishokugo no kyōgōkisei (1); Americani okeru hukahiteki kaijiron no keisei to tenkai wo humaete* [The Protection of Trade Secrets and Duties of Noncompetes after Employment (2)], 58 DOSHISHA L. REV. 2227 (2006); Shinpei Ishida, *Eigyōhimitsu hogo to taishokugo no kyōgōkisei (1); Americani okeru hukahiteki kaijiron no keisei to tenkai wo humaete* [The Protection of Trade Secrets and Duties of Noncompetes after Employment (3)], 58 DOSHISHA L. REV. 2551 (2007).

<sup>201</sup> Tokyo District Court of Japan, Decision of Oct. 16, 1995, Case No. Heisei 7 (Yo) 3587. The case involves the plaintiff Tokyo Legal Mind, various exam preparatory schools, which sought a provisional injunction against the defendants, a former auditor who also had served as instructor and a former chief executive officer, from enjoining the operation of a competing preparatory school established by the defendants after termination of their work, based on provisions in the work rules for employees, provisions in the work rules for officers, and separate covenants not to compete prohibiting the defendants from working for competitors or establishing their own business in competition with the plaintiff.

<sup>202</sup> *Id.*

right of an employee to freely choose his or her occupation, in principle, there was no duty of noncompetition as an ancillary duty of noncompetition after the termination of the employment relationship. However, the court recognized the duty of noncompetition on two different legal bases. First, the court recognized that the duty of noncompetition for securing the duty of confidence arises under the Japanese UCPA regardless of the existence of an express agreement under some limited circumstances in which an employee would inevitably use a former employer's trade secrets to engage in competing acts with the former employer.<sup>203</sup> Second, the court also recognized the duty of competition arising from an express agreement between the parties.<sup>204</sup> The court further differentiated the requirements for the validity of the duty of noncompetition. On the one hand, in cases in which the duty of noncompetition exists under the trade secret law in the absence of an express agreement between the parties, the scope of the restraint must be reasonable, considering the duration of the restriction, the geographical scope, and the acts prohibited. When the restriction is excessive for the purpose of securing a duty of confidence, it violates public policy and is invalid.<sup>205</sup> On the other hand, the court stated that in cases in which the duty of noncompetition arises out of an express agreement, for the agreement to be valid, compensation is required because the restrictions on the employee are imposed to secure an employer's interests.<sup>206</sup> This bifurcated approach on the legal basis of the duty of noncompetition after the termination of the employment relationship has been criticized by a majority of Japanese scholars in the field of labor and employment law. They argue that injunctive relief under the Japanese UCPA is only available against the use or disclosure of trade

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<sup>203</sup> *Id.*

<sup>204</sup> *Id.*

<sup>205</sup> *Id.*

<sup>206</sup> *Id.*

secrets by a misappropriator for the purpose of unfair competition or otherwise gaining an unfair profit or causing harm to the original holder of a trade secret because the legislative intent does not hinder the employee's Constitutional right to choose his or her occupation.<sup>207</sup> In addition, the view against the existence of the duty of noncompetition under the statutory trade secret law explains that the duty of noncompetition should be recognized as being as limited as possible because allowing injunctive remedies conflicts with the right of an employee to freely choose his or her occupation, and balancing conflicting interests between employers and employees can be achieved through injunctive relief against the use or disclosure of trade secrets under the Japanese UCPA and through separate nondisclosure agreements.<sup>208</sup> Apart from the bifurcated approach in *Tokyo Legal Mind*, the majority of courts also appear to share a view similar to that of scholars on postemployment restrictions. In other words, the prevailing view of academics and the courts in Japan does not seem to prohibit employees from competition after termination of the employment relationship in the absence of express agreements.<sup>209</sup>

In cases in which a covenant not to compete exists as an explicit agreement, like courts in the United States, the courts in Japan have struggled to balance conflicting interests between employers and employees, and have also considered public interests (the threat of monopoly and the effects on consumers in general).<sup>210</sup> If an agreement appears unreasonable, it is considered an agreement against public policy, and thus is treated as void because, unlike its counterparts in the United States, the courts in Japan do not have the authority to apply the “blue pencil rule,” in which a court may strike parts of a noncompetition agreement to make the covenant

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<sup>207</sup> See, e.g., Tsuchida Michio, *Rōdōsijyōno ryūdōwo meguru hōritsumondai* [Legal Problems in Labor Market Flexibility], 1040 JURISUTO [JURIST] 53 (1994).

<sup>208</sup> *Id.*; Hajime Wada, *Taishokugono kyōgyōhishigimuto sasiseikyōno kahi* [Postemployment Duty of Noncompetition and Injunctive Relief], 1408 RŌDŌHŌRITSUJYUNBŌ [LABOR LAW REPORT] 50 (May 1997).

<sup>209</sup> See JIN, *supra* note 149, at 159-61.

<sup>210</sup> Nara District Court of Japan, Judgment of Oct. 23, 1970, Case No. Shōwa 45 (Yo) 37.

reasonable.<sup>211</sup> In determining reasonableness, the Japanese courts consider several factors, including the duration of the restriction, the geographical limitations, the types of businesses subject to the restriction, and the existence of compensation.<sup>212</sup> However, as in the United States, the courts in Japan have shown a lack of consistency in reaching determinations.<sup>213</sup> In particular, compensation (*daishō shochi*) for covenants not to compete has been debated.<sup>214</sup> On the one hand, the courts do not seem to consider compensation as a requirement for a noncompetition agreement. For example, the court in *Tokyo Legal Mind* stated that compensation is required only in cases in which the duty of noncompetition arises out of an express agreement.<sup>215</sup> On the other hand, the prevailing view of scholars is that compensation is an essential requirement for a noncompetition agreement to be valid.<sup>216</sup> One scholar noted that the intent behind the scholars' view favoring compensation as a requirement for a noncompetition agreement to be valid is to make trade secret law and the duty of nondisclosure play a more significant role in protecting trade secrets, rather than the duty of noncompetition, which should be recognized in strictly limited circumstances.<sup>217</sup>

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<sup>211</sup> Minpō [Civil Code], Law No. 89 of 1896, art. 90 (“A juristic act with any purpose which is against public policy is void.”). Araki, *Employee Loyalty*, *supra* note 184, at 274 n.26 [“Though a constitutional provision does not have a direct effect on contracts between private persons, the freedom to choose one’s occupation constitutes public policy (Civil Code Art. 90) and a private person’s contract contrary to public policy is held null and void.”]; *Id.* at 280 n.48 (“In Japan, the power of the courts is confined to adjudication of the validity or invalidity of the agreement and is restricted from rewriting the content of the agreement.”).

<sup>212</sup> Nara District Court of Japan, Judgment of Oct. 23, 1970, Case No. Shōwa 45 (Yo) 37; Tokyo District Court of Japan, Judgment of Dec. 18, 2000, Case No. Heisei 8 (Wa) 613.

<sup>213</sup> Ogawa, *supra* note 184, at 364.

<sup>214</sup> JIN, *supra* note 149, at 159-60; Ogawa defines compensation as “monetary payment made in exchange for the future restraints on freedom of competition, but it is not necessarily a bargained-for exchange or an inducement to a contract.” Ogawa, *supra* note 184, at 365.

<sup>215</sup> Tokyo District Court of Japan, Decision of Oct. 16, 1995, Case No. Heisei 7 (Yo) 3587.

<sup>216</sup> For the academics view of compensation, see Ogawa, *supra* note 184, at 365-66.

<sup>217</sup> JIN, *supra* note 149, at 159. Jin noted a recent case denying the validity of a noncompetition agreement, reasoning if a holder can protect trade secrets through a nondisclosure agreement under certain circumstances, it is not necessary to restrict an employee’s movement to another firm. See Osaka District Court of Japan, Judgment of Jan. 22, 2003, Case No. Heisei 13 (Wa) 11749. Jin argues that the case shows the court’s intent in favor of trade



#### 4. Summary

In the early 1990s, the Japanese government adopted a trade secret law that lacked sufficient procedural law, essentially in an effort to avoid foreign trade retaliation. Accordingly, the impact of the law on Japanese society was not profound in the early stage of implementation. However, since the early 2000s, the Japanese government has strengthened trade secret protection based on its recognition of the importance of trade secret protection to the Japanese economy in the new business cycle, for example, by improving procedural measures, expanding the scope of trade secret misappropriations, and adopting new criminal sanctions for trade secret misappropriations.

On the other hand, despite the continuing expansion of trade secret protection through criminal law, the Japanese government has endeavored not to overextend trade secret holders' rights by limiting the scope of criminal sanctions against former employees. Furthermore, the government has refrained from becoming excessively involved in the litigation of trade secret cases by limiting the prosecutorial discretion to file charges against a suspect, and by not criminalizing attempts and conspiracy. Likewise, in part because of the abstract legal concept of a trade secret and in part because of a lack of relevant precedents, the courts in Japan have had a role in reconciling conflicting interests between parties since the trade secret law was adopted. The courts, in fact, have limited the scope of the subject matter protected under trade secret law, specifically by interpreting the secrecy requirement and the scope of injunctive relief strictly.

The adoption of trade secret law has also affected the framework of law regarding postemployment restrictions on employees. As a result, as far as trade secrets are concerned, as long as the relevant subject requirements are met, an employee owes a duty of confidence in the

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secrets and the duty of confidence for protecting trade secrets.

absence of a separate agreement with an employer. However, in the absence of express agreements, the majority of courts in Japan prohibit employees from competition after their employment relationship has terminated. In addition, with respect to covenants not to compete, the Japanese courts have adopted a strict reasonableness standard, as have most states in the United States, but the role of the courts in developing the law of covenants not to compete is relatively limited compared with its counterparts in the United States because of the courts' lack of discretion in rewriting the contents of the covenants.

## **CHAPTER IV. TRADE SECRET LAW IN KOREA**

During the period of rapid economic growth, the Korean economy had relied heavily on the importation, imitation, and assimilation of foreign technologies, specifically from the United States and Japan. Thus, despite the lack of sufficient legal protection of trade secrets, the cost of strong legal protection for valuable information appeared to outweigh the benefits of the protection. As in Japan, however, as the international regime focusing on trade-related aspects of intellectual property rights emerged and technology importation began to decrease under the influence of insufficient protection of intellectual property rights, the Korean government strategically adopted the substantive law of trade secrets in 1991 for the purpose of coping with the changes in the external economic environment.

As Korea's technological capability reached the global level in some areas, such as in information technology and shipbuilding, the number of industrial espionage cases, and the estimated loss from these cases, increased sharply in the late 1990s. The Korean government has been active in strengthening trade secret law, looking to the law governing trade secrets in the United States. On the other hand, debate continues in Korea regarding the optimal trade secret protection in Korean society, with tension arising between those who demand strong trade secret protection for employers and those who demand a Constitutional right for employees.

The first section of this chapter explores the history and recent developments of the law of trade secrets. It reveals how the Korean government has adapted the law to changing domestic and international situations to achieve economic development. The second section examines current trade secret law in Korea from a comparative perspective. The third section looks at how the framework of the law of postemployment restraints was affected by the adoption of the statutory trade secret law.

## 1. History and Development

### 1.1. Background

As in Japan, current trade secret law in Korea is codified in one part of the Unfair Competition Prevention and Trade Secret Protection Act (hereafter, the “Korean UCPA”).<sup>1</sup> However, the history of the Korean UCPA is somewhat different from that of the Japanese UCPA. In the modern context, the first law governing unfair competition in Korea was promulgated under the title of the *Chosun Unfair Competition Prevention Ordinance* by the Japanese Governor General of Chosun<sup>2</sup> on December 28, 1934, during the period of Japanese rule in the Korean peninsula.<sup>3</sup> Because of the political situation at that time, the role of the ordinance was to confirm that the Japanese UCPA<sup>4</sup> governing unfair competition was directly implemented in Chosun.<sup>5</sup> After Japanese rule ended in Korea, the U.S. military government ruled in South Korea for approximately three years, from 1945 to 1948.<sup>6</sup> It issued an ordinance providing that all laws, including regulations, ordinances, and notices issued by the Korean or

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<sup>1</sup> Pujōng kyōngjaeng pangji mit yōnggōp pimil pohoe kwanhan pōmnyul [Unfair Competition Prevention and Trade Secret Protection Act], Law No. 9537, 2009 (S. Korea) [hereinafter 2009 Korean UCPA].

<sup>2</sup> The title of “Chosun” is derived from the “Chosun Dynasty,” which lasted from 1392 to 1910 in the Korean peninsula. The term “Chosun” had been used to refer to Korea until the end of Japanese rule in Korea in 1945, upon defeat of the Japanese in World War II.

<sup>3</sup> Chosōn Pujōng kyōngjaeng pangji ryōng [Chosun Unfair Competition Prevention Order], Chosōn ch’ongdokpu jeryōng [The Japanese Government General of Chosun Order], No. 24 (1934). It took effect on January 1, 1934.

<sup>4</sup> See Fusei Kyōsō bōshiō [Unfair Competition Prevention Act], Law No. 14 of 1934 (Japan).

<sup>5</sup> It included only two sentences: “Unfair competition prevention is governed by the [Japanese] law of Unfair Competition Prevention. But relevant Ministries in the law are replaced by the Japanese Governor of Chosun.” Chosun Bujeoung gyeongjaeng bangi ryong [Chosun Unfair Competition Prevention Order], Chosōn ch’ongdokpu jeryōng [The Japanese Government General of Chosun Order] No. 24 (1934). For an overview of the legal system in Korea under Japanese rule, see Edward J. Baker, *Establishment of a Legal System under Japanese Rule*, in INTRODUCTION TO THE LAW AND LEGAL SYSTEM OF KOREA 185-212 (Sang Hyun Song ed., 1983) [hereinafter INTRODUCTION TO KOREAN LAW].

<sup>6</sup> The period of the U.S. occupation and rule in South Korea began on September 8, 1945, and ended on August 15, 1948, following World War II. For an overview of the U.S. rule in South Korea, see Channing Liem, *United States Rule in Korea*, 18 FAR EASTERN SURVEY 77 (1949); Pyong Choon Hahm, *Korea’s Initial Encounter with the Western Law 1910-1948 A.D.*, in KOREAN JURISPRUDENCE, POLITICS AND CULTURE 144-51 (1986).

Japanese government during the period of Japanese rule continue in force unless repealed or modified by the U.S. military government.<sup>7</sup> Although the U.S. military government enacted the Patent Act covering inventions, utility models, and designs, and enacted the Trademark Act by ordinances of the military government in 1946, it did not engage in the separate enactment of laws relating to copyright protection and unfair competition.<sup>8</sup> Thus, the law relating to these areas was continued in force even after the end of the Japanese rule in Korea.<sup>9</sup> The ordinance concerning unfair competition was repealed by the Korean UCPA, which was enacted in 1961 as a part of the modernization measures of Korean law in general.<sup>10</sup> The Act did not contain a general clause on unfair competition. Rather, it included only ten articles that mainly provided civil remedies, including injunctive relief and damages, for six forms of unfair competition.<sup>11</sup> Accordingly, as in Japan, there was no statutory protection directly governing the misappropriation of trade secrets in Korea until 1991.

Because there was no legal concept of “*yöngöpp pimil* [trade secret]” and no general provision governing unfair competition, it was difficult for Korean lawyers and holders of valuable information to rely on the Korean UCPA when seeking legal remedies in cases involving the misappropriation of valuable information. Absent such legal protections as general laws, the Civil Code and Penal Code in Korea were in a position to play alternative roles in

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<sup>7</sup> Ijönpömnöngg üi hyoryök e kwanhan kõn [Regarding the effects of previous laws, etc.], U.S. Military Government Ordinance No. 21, 1945, art. 1 (effective on Nov. 3, 1945) (S. Korea).

<sup>8</sup> T‘ükhöpöpp [Patent Act], U.S. Military Government Ordinance No. 91, 1946 (S. Korea). However, a commentator states that “the modern intellectual property law system was introduced around the 1960s. For example, the Patent Act was enacted in 1961; the Trademark Act in 1963; Copyright Act in 1957.” Son-Guk Kim, *Recent Trends in Korean Intellectual Property Law System*, in RECENT TRANSFORMATIONS IN KOREAN LAW AND SOCIETY (Dae-Kyu Yoon ed. 2000) (hereinafter, Kim, *Korean Intellectual Property*).

<sup>9</sup> Because Japan amended the Japanese UCPA in 1939, the amended Japanese UCPA was in force until 1961.

<sup>10</sup> Pujöngg kyönggjaeng pangjipöpp [Unfair Competition Prevention Act], Law No. 911, 1961.

<sup>11</sup> *Id.* arts. 2-3.

providing legal remedies to holders of valuable information.<sup>12</sup> However, valuable information was not considered property under the Korean Civil Code unless it was created by laws or customary laws,<sup>13</sup> and holders of the information had to resort to general contract law<sup>14</sup> and tort law<sup>15</sup> under the Korean Civil Code.<sup>16</sup> Nevertheless, protections available under contract law and tort law did not provide sufficient legal remedies to holders of the information because the Korean Civil Code had the same limitations as its counterparts under the Japanese Civil Code.<sup>17</sup> On the one hand, contract law could not provide legal remedies to holders in cases in which there was no contractual relationship. On the other hand, although the general provisions of tort law did not require “infringement of a *right*” for tort liability, unlike the general provisions governing tort law in Japan, injunctive relief was not recognized as a legal remedy for tort liability, as in Japan.<sup>18</sup> In part because of the lack of civil remedies, individual criminal provisions, such as

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<sup>12</sup> Valuable information had been referred to generally as “know-how” rather than trade secrets. UI-CHANG HWANG & KWANG-YEON HWANG, PUJŎNG KYŎNGJAENG PANGJI MIT YŎNGŎP PIMIL POHOPŎP [UNFAIR COMPETITION PREVENTION AND TRADE SECRET PROTECTION LAW] 120 (4th ed. 2006) (S. Korea).

<sup>13</sup> A recent Korean case that examined whether the right to publicity is a protectable exclusive right similar to a property right under the Korean Civil Code illustrates the issue well. The case involved the plaintiff, the James Dean Foundation, having the right to publicity over James Dean, seeking injunctive relief against the defendant, arguing that the defendant infringed on the right to publicity over James Dean by using his signature and name on products of the defendant. The court held that, under the Korean law that adopted the Civil Law system, it is hard to recognize the right to publicity without a basis in statutory laws, international treaties, or customary laws. Seoul High Court of Korea, Judgment of April 16, 2002, Case No. 2000na42061.

<sup>14</sup> See Minpŏp [Civil Code], Law No. 8720, art. 390 (2007) (S. Korea) (“If an obligor fails to effect performance in accordance with the tenor and purpose of the obligation, the obligee may claim damages.”).

<sup>15</sup> See *id.* art. 750 (“Any person who causes losses to or inflicts injuries on another person by an unlawful act, willfully or negligently, shall be bound to make compensation for damages arising therefrom.”).

<sup>16</sup> However, it seems that no case had dealt directly with the issue under contract law or tort law before the adoption of trade secret law in Korea. Chung also noted that there had been no tort case involving trade secret misappropriation before the adoption of trade secret law. See Ho-Yeol Chung, *Yŏngŏppimil poho wa baramjik han kyŏngjaengpŏp che’ge* [Trade Secret Protection and Desirable Competition Law System], 6 PŎPGWASAHEOI [LAW AND SOCIETY] 124, 140 n.7 (1992) (S. Korea).

<sup>17</sup> The Korean Civil Code that took effect in 1960 consists of five books: “general principles,” “law of property,” “law of obligations,” “law of family,” and “law of succession.” Although the first three books of the Code are “comprehensive revisions of the same parts of the old Code (the Japanese Civil Code),” and, in some parts, they are closer to the German Civil Code than the Japanese Civil Code, the Korean Civil Code and the Japanese Civil Code share many similarities. See INTRODUCTION TO KOREAN LAW, *supra* note 5, at 382-84.

<sup>18</sup> See Chapter III.

larceny,<sup>19</sup> embezzlement, or breach of trust,<sup>20</sup> seem to have played a more significant role in the holder protecting valuable information.<sup>21</sup> Nevertheless, criminal sanctions against trade secret misappropriation had inherent limitations because, as in Japan, for example, the Korean Penal Code did not recognize intangible items, such as computer files, as property.<sup>22</sup>

The lack of legal remedies mentioned above might have seemed problematic from the point of view of holders of valuable information. However, before the adoption of trade secret law, strengthening the rights of holders of valuable information did not seem to have received much support in Korean society. The efforts to amend the Korean Penal Code to include crimes involving trade secret misappropriation, which ended in failure, are informative. The Korean government started the process of amending the Penal Code beginning in 1985. During the process, a “Special Committee on the Amendment of the Penal Code” considered establishing “corporate secret leakage by officers and employees” and “spying out technical or business secrets” as crimes. However, the crimes proposed were dropped at the modification stage of the amendment for the reasons that strong legal protection of technical and business information would not be appropriate in light of the Korean situation, in which Korean corporations needed to adopt foreign technology and business techniques, and it would have restricted the right of

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<sup>19</sup> Supreme Court of Korea, Judgment of Sep. 23, 1986, Case No. 86do1205 (convicting a former employee of larceny who took documents that included valuable information). See Hyōngpōp [Penal Code], Law No. 7623, 2005, art. 329 (S. Korea) (“A person who steals another’s property shall be punished by imprisonment for not more than six years or by a fine not exceeding ten million won.”).

<sup>20</sup> Gwangju District Court of Korea, Judgment of Mar. 21, 1984, Case No. 83godan2371 (convicting a former employee of an occupational breach of trust for taking confidential technical information with the intent to supply the document to a competitor). See Hyōngpōp [Penal Code], Law No. 7623, arts. 355 (Embezzlement and Breach of Trust) & 356 (Occupational Embezzlement, Occupational Breach of Trust) (2005) (S. Korea).

<sup>21</sup> Munhwan Kim, *Yōngōp pimilūi pōpjōk poho* [Legal Protection of Trade Secrets], 1 CHICHŌK CHAESANKWŌN YŌN’GU [INTELLECTUAL PROPERTY REVIEW] 84 (1991) (S. Korea).

<sup>22</sup> Seoul District Court of Korea, Judgment of July 18, 2001, Case No. 2001no942 (holding that a computer file does not fall into the scope of subject matter under the crime of larceny because it is not a “thing” protected under the provision). See Tae-Yeong Ha, *Han’guk hyōngpōp e issōsō “chaemul kwannyōm” ūi nonjaengsa* [Discussion on “the Concept of Property” in criminal law in Korea], 5 PIGYOHYŌNGSAPŌP YŌN’GU [COMPARATIVE CRIMINAL LAW REVIEW] 279 (2003) (S. Korea).

employees to freely choose their occupations.<sup>23</sup>

## 1.2. Adoption of Trade Secret Law

In 1991, the Korean UCPA was amended to include provisions governing trade secret protection.<sup>24</sup> As seen above, Japan adopted trade secret law in 1990 primarily because of trade pressure from the United States. In Korea, however, the law was adopted not only for external reasons, but also for internal reasons. On the one hand, external reasons may have existed, including trade pressure and a unilateral change in the intellectual property system in the World Trade Organization system. Although Korea has had intellectual property statutes, including patent law, copyright law, and trademark law, as one Korean commentator noted, “there ha[d] been no widespread understanding or recognition of intellectual property until the 1980s.”<sup>25</sup> However, the situation in Korea has changed and the issues regarding intellectual property have been receiving much more attention than ever before since the mid-1980s.<sup>26</sup> The roots of these changes were trade pressure from foreign countries and the emerging unilateral system in the area of intellectual property in the world economy.<sup>27</sup> In 1985, as a part of efforts to reduce the U.S. trade deficit, the United States began investigating the adequacy of Korean laws for the

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<sup>23</sup> Jae Bong Kim, *Yöngöp pimil üi yöngsapöppök poho bangan* [The Criminal Protection for Trade Secrets], 14 HYÖNGSAJÖNGCH'AEK [CRIMINOLOGY] 169, 183-84 (2002), citing MINISTRY OF JUSTICE, REPORT ON THE AMENDMENT OF THE PENAL CODE (1989). The adoption of criminal sanctions against the misappropriation of trade secrets in the Korean UCPA that was being discussed at that time also influenced the amendment of the Penal Code. As a result, criminal remedies were adopted under the Korean UCPA in 1991.

<sup>24</sup> Pujöng kyöngjaeng pangjipöp [Unfair Competition Prevention Act], Law No. 4478, 1991 (effective on Dec. 15, 1992) (S. Korea) [hereinafter 1991 Korean UCPA].

<sup>25</sup> Kim, *Korean Intellectual Property*, *supra* note 8, at 241.

<sup>26</sup> See SANG JO JONG, CHICHÖKCHAESANKWÖNPÖP [INTELLECTUAL PROPERTY LAW] 18 (2004) (S. Korea) [hereinafter JONG, IP LAW].

<sup>27</sup> See *id.* at 56; Kim, *Korean Intellectual Property*, *supra* note 8, at 260 n.2.



protection of intellectual property rights under Section 301 of the Trade Act of 1974.<sup>28</sup> After initiating the investigation, on July 21, 1986, the United States and Korea reached an agreement on the amendment of intellectual property laws in Korea.<sup>29</sup> The investigation focused on patent law, copyright law, and trademark law; thus, the agreement included provisions for Korea primarily to amend the existing laws and to improve the enforcement of those laws by the Korean government.<sup>30</sup> By contrast, strengthening trade secret protection was not explicitly stated in the agreement. Rather, a Memorandum of Understanding between Korea and the United States, which listed in detail the measures to be taken by the Korean government, merely stated that “[Korea] also will ensure adequate protection of proprietary data” as a way of strengthening the enforcement of relevant laws.<sup>31</sup> Given the context under the Memorandum and the situation surrounding the agreement, it does not appear that the U.S. government asked for the law to be adopted in Korea at that time in a manner that requested the Korean government to amend patent

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<sup>28</sup> The United States Trade Representatives stated the following:

Korea’s laws appear to deny effective protection for U.S. intellectual property. For example, Korea’s patent law does not cover certain types of products. In other cases, protection is limited to processes only. Copyright protection is virtually non-existent for works of U.S. authors. U.S. industry has expressed concern that these practices have inhibited U.S. sales and investment in Korea. USTR is therefore initiating an investigation concerning the adequacy of Korea’s laws and their effect on U.S. trade.

Korea Intellectual Property, 50 Fed. Reg. 45, 883-01 (Off. U.S. Trade. Rep. 1985) (investigation initiation). For an overview and relevant cases on Japan and Korea of section 301 of the Trade Act of 1974, see Patricia I. Hansen, Note, *Defining Unreasonableness in International Trade: Section 301 of the Trade Act of 1974*, 96 YALE L. J. 1122 (1987).

<sup>29</sup> Memorandum for the United States Trade Representative, 51 Fed. Reg. 29445 (Presidential Memorandum, Aug. 14, 1986) (termination of the investigation).

<sup>30</sup> In the Memorandum, the Korean government agreed to take the following measures:

Introduce for enactment by July 1, 1987, comprehensive copyright laws explicitly covering computer software; accede to the Universal Copyright convention and Geneva Phonograms Convention by October 1987; introduce amendments to its patent law to extend product patent protection for chemicals and pharmaceuticals and for new uses of these products; adhere to the Budapest Treaty and extend patent protection to new microorganisms; and remove requirements for technology inducement and exportation previously applied to trademarked goods and remove restrictions on royalty terms in trademark licenses.

*Id.*

<sup>31</sup> United States of America and Republic of Korea, Record of Understanding on Intellectual Property Rights (with related letter), 2231 U.N.T.S. 308, 310 (2004), *available at* [http://untreaty.un.org/unts/144078\\_158780/2/9/11269.pdf](http://untreaty.un.org/unts/144078_158780/2/9/11269.pdf) (last visited Oct. 1, 2010).

law, copyright law, and trademark law within time limits. Nonetheless, the U.S. government was concerned about deficiencies in trade secret protection in Korea, including no trade secret protection against third parties, inadequate civil remedies, and inadequate criminal penalties, which could result in an unintended loss of trade secrets from U.S. companies.<sup>32</sup> It is difficult to deny the possibility that, given this situation, Korea wanted to avoid possible trade retaliation by the U.S. government. In fact, a review report on the amendment of the Korean UCPA prepared by the Korean National Assembly pointed out that Korea should implement a measure strengthening trade secret protection as enumerated the 1986 agreement between Korea and the United States.<sup>33</sup> In addition, to avoid possible future trade conflicts caused by the lack of trade secret protection, the Korea government needed to adopt minimum levels of legal protection of trade secrets, as required under the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs)<sup>34</sup> of the General Agreement on Tariffs and Trade (GATT),<sup>35</sup> which was under discussion at that time.<sup>36</sup>

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<sup>32</sup> Korea was identified as one of the countries with deficiencies in the protection of trade secrets, along with Mexico, Brazil, Taiwan, China, and Japan, in the report by the U.S. International Trade Commission. The report pointed out that Korea had the following problems concerning trade secret protection: no protection against third parties; no preliminary or final injunctive relief; lack of seizure and impoundment remedies; lack of exclusion of imports; lack of compulsory process and/or discovery; inadequate civil remedies; inadequate criminal penalties; unreasonably slow enforcement process; enforcement officials discriminating against foreigners; court decisions biased or political. Foreign Protection of Intellectual Property Rights and the Effect on U.S. Industry and Trade 50 (USITC Pub. 2065, Investigation No. 332-245, Feb. 1988), *available at* 1988 ITC LEXIS 21.

<sup>33</sup> See Sangongwiwonhoe hoeüirok [Minutes of Commerce and Industry Committee Meeting regarding the Amendment of the Korean Unfair Competition Prevention Act] (National Assembly of Korea, Nov. 21, 1991) (S. Korea), *available at* [http://likms.assembly.go.kr/kms\\_data/record/data1/156/156ka0008b.PDF#page=1](http://likms.assembly.go.kr/kms_data/record/data1/156/156ka0008b.PDF#page=1) (last visited Feb. 24, 2010) [hereinafter Minutes].

<sup>34</sup> Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, 33 I.L.M. 1197. As Article 3 of TRIPs indicated, the agreement seeks to remove the economic tension arising from differences in the extent of protection and enforcement of intellectual property rights among member countries and to encourage technological advances and innovation. TRIPs, art. 3.

<sup>35</sup> General Agreement on Tariffs and Trade (GATT), Oct. 30, 1947, 55 U.N.T.S. 187 (as amended).

<sup>36</sup> See Minutes, *supra* note 33; Sang-Hyun Song & Seong-Ki Kim, *The Impact of Multilateral Trade Negotiations on Intellectual Property Laws in Korea*, 13 UCLA PAC. BASIN L.J. 118, 129-30 (1994) (“The trade secret law could not have been enacted in such a timely manner in Korea without the international recognition of trade secrets as a kind of IPR which was crystallized in the draft TRIPs provisions.”).

On the other hand, the Korean government seemed to have considered the adoption of trade secret law as having a sort of announcement effect to induce technology transfer and direct investment from foreign countries. Since the early stage of industrialization in the 1960s, Korea had relied on foreign technologies, and two of the largest technology suppliers, especially through licensing, had been Japan and the United States.<sup>37</sup> In the late 1980s and early 1990s, however, technology transfer through licensing decreased sharply.<sup>38</sup> One of the reasons for the decrease in technology transfer from foreign countries with advanced technologies was said to be the lack of intellectual property laws protecting the technology transferred after licensing was terminated.<sup>39</sup> In this context, it seems plausible that Japan's adoption of trade secret law in 1990 affected the Korean government, which wanted to adopt trade secret law to attract more foreign technology, especially from Japan and the United States. Indeed, the intent of the Korean government was apparent in the legislative purpose of the trade secret law as well. The proposed amendment to the Korean UCPA in 1991 pointed out one of the necessities of the amendment as follows:

Korea has been recognized as a free rider regarding the use of know-how among foreign advanced countries. For this reason, there have been many cases in which the advanced countries have avoided supplying new technologies and know-how. Now, in light of the stage of our industrial economy, it seems difficult to use these technologies without paying fair compensation. Thus, it is necessary to protect trade secrets, which may enable Korea to gain trust and promote technology transfer from foreign countries.<sup>40</sup>

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<sup>37</sup> For example, in Korea, 8,069 technology transfers through licensing were undertaken between 1962 and 1992. Japan undertook 50.1% (4,045 cases) of them and ranked first. CHEONSEOK IM, CH'OEĞÜN URINARA ÜI ILBON KISUL TOIP HYÖNHWANG KWA CHÖNGCH'AEK PANGHYANG [RECENT TRENDS IN TECHNOLOGY TRANSFER OF KOREA FROM JAPAN] 27 (Korea Institute for International Economy Policy, 1993) (S. Korea). For an overview of technology imports in Korea until 1990, see Kwang Doo Kim & Sang Ho Lee, *The Role of the Korean Government in Technology Import*, in *THE ECONOMIC DEVELOPMENT OF JAPAN AND KOREA* (Chung H. Lee & Ippei Yamazawa eds., 1990).

<sup>38</sup> Korea's inward technology transfer decreased from 738 cases in 1989 to 533 cases in 1992. IM, *supra* note 37, at 27.

<sup>39</sup> IM, *supra* note 37, at 74; Minutes, *supra* note 33, at 28.

<sup>40</sup> Minutes, *supra* note 33, at 28.

For these internal and external reasons, the Korean government began preparing to adopt trade secret law. In August 1988, the Korean Intellectual Property Office (KIPO) formed a research team that collected and analyzed foreign laws regarding trade secret protection.<sup>41</sup> Between 1989 and 1990, the KIPO held seminars in which trade secret laws in West Germany, Switzerland, the United States, and Japan were examined, and it concluded that the new trade secret law should be incorporated into the Korean UCPA.<sup>42</sup> In June 1991, a public hearing was held to hear comments on the proposed amendment by the KIPO. In the hearing, the following issues were raised and debated: possible conflicts between patent protection and trade secret protection; possible restrictions on the right of employees to freely choose their occupations; the necessity of statutes of limitation with a shorter time period; the preservation of secrecy in litigation; and concerns regarding criminal sanctions against former employees.<sup>43</sup> Some of these issues, such as comments regarding statutes of limitation and criminal sanctions against former employees, were reflected in the final bill. On July 4, 1991, a notice regarding the amendment was placed in the *Official Gazette*. During the period for public comment, some comments were submitted by several entities, such as the Korea Electronics Association, Gold Star (currently LG), the Korea Invention Promotion Association, and Korea IBM. Interestingly, Korean companies, including the Korea Electronics Association and Gold Star, pointed out possible negative effects of the law on Korean industry because, under the law, Korean companies could be required to enter into unfair agreements when they adopted advanced know-how from foreign countries.<sup>44</sup> On the

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<sup>41</sup> Youngcheol Chung, *Yŏngŏppimilpŏp jejŏng ūi munje* [Problems in the Enactment of Trade Secret Law], 9 SANGSAPŎPYŎN'GU [COMMERCIAL LAW REVIEW] 289 (1991) (S. Korea) [hereinafter Chung, *Enactment of Trade Secret Law*] (introducing legislative history of the 1991 amendment of the Korean UCPA).

<sup>42</sup> *Id.* at 289.

<sup>43</sup> *Id.*

<sup>44</sup> *Id.* On the other hand, Hwang noted the survey results by the Korean Chamber of Commerce and Industry and

other hand, Korea IBM, a multinational company in Korea, argued that the law should extend the definition of a trade secret, the scope of trade secret misappropriations, and criminal penalties.<sup>45</sup> The U.S. government also submitted comments in nonpaper form in which it raised questions regarding the requirement for independent economic value in the definition of a trade secret and subjective requirements (intent or gross negligence) for trade secret misappropriation.<sup>46</sup> The Korean government introduced the final bill to the Korean National Assembly on October 11, 1991, and the Korean National Assembly passed the bill without much debate; the bill was promulgated on December 31, 1991.<sup>47</sup>

The 1991 Korean UCPA adopted the definition of a trade secret, which included six types of trade secret misappropriation and legal remedies, including injunctive relief and damages for trade secret misappropriation. The Korean trade secret law enacted in 1991 seems to have been affected in part by the Uniform Trade Secrets Act (UTSA) in the United States and substantially affected by the Japanese UCPA. The subject matter of trade secret protection under the Korean UCPA is “any technical or business information useful for any production and sales methods and other business activities, which is not known to the public, has an independent economic value, and has been maintained in secret by considerable efforts.”<sup>48</sup> The definition of a trade secret seems to have been affected by the UTSA because provisions in the definition expressly include an “independent economic value” requirement, unlike that under the Japanese UCPA.<sup>49</sup>

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the Federation of Korean Information Industries, which indicated 93.6 and 89.3% of the Korean companies surveyed acknowledged the need for adoption of a trade secret law. Uichang Hwang, *Yöngöpp pimil poho ippöpan ch'ukcho haesöl* [Explanation of Trade Secret Law Bill], 172 KIGYESANÖP [ENGINEERING INDUSTRIES] 44 (1991).

<sup>45</sup> Chung, *Enactment of Trade Secret Law*, *supra* note 41, at 289.

<sup>46</sup> *Id.* at 292.

<sup>47</sup> 1991 Koran UCPA, *supra* note 24.

<sup>48</sup> 1991 Koran UCPA, *supra* note 24, art. 2, para. 2.

<sup>49</sup> See UNIF. TRADE SECRETS ACT § 1 (4), 14 U.L.A. 537 (2005).

On the other hand, as Korean scholars and commentators have also noted, other provisions, such as the types of trade secret misappropriation, injunctive relief, and damages, are very similar to their counterparts under the Japanese UCPA.<sup>50</sup> The Korean UCPA did not include a general provision governing unfair competition. Instead, it provided six types of trade secret misappropriation almost identical to those under the Japanese UCPA.<sup>51</sup> Like the Japanese UCPA, these can be divided mainly into two groups, depending on how the trade secrets are acquired. According to the legislative record, it seems that the Korean government wanted to protect domestic companies that had a relatively inferior level of technology compared with companies in foreign countries with advanced technology.<sup>52</sup> In other words, it appears to have been intended to prevent foreign companies' abuse of suits involving trade secrets by restricting the types of trade secret misappropriation. The Korean UCPA also provided legal remedies, including injunctive relief and damages for trade secret misappropriation, and these legal remedies were said to be special rules for tortious acts.<sup>53</sup> The primary difference in trade secret law between Korea and Japan was that the 1991 Korean UCPA provided criminal sanctions against current officers and employees who leaked technology information qualifying as a trade secret with the purpose of gaining unfair profit or causing harm to a trade secret holder.<sup>54</sup> This criminal penalty was adopted based on consideration of the Korean people's traditional attitude toward litigation, in which they preferred to rely on criminal sanctions rather than civil

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<sup>50</sup> SANGJO JONG & JUNSEOK PARK, YÖNGÖPPIMIL ŪI SAPÖPJÖK POHO E KWANHAN PIGYOPÖPJÖK YÖN'GU [COMPARATIVE STUDY ON JUDICIAL PROTECTION OF TRADE SECRETS] (Seoul National University Center for Law and Technology, 2009) (S. Korea).

<sup>51</sup> 1991 Korean UCPA, *supra* note 24, art. 2, para. 3.

<sup>52</sup> Minutes, *supra* note 33, at 28.

<sup>53</sup> 1991 Korean UCPA, *supra* note 24, arts. 4-5.

<sup>54</sup> 1991 Korean UCPA, *supra* note 24, art. 18, para. 1, item 3.

remedies.<sup>55</sup> In addition to similarities in the contents of trade secret law, the Korean UCPA also had inherent limitations in properly protecting trade secret holders because of its lack of procedural measures allowing the trade secret to be preserved in secret during litigation under the Korean Constitution.<sup>56</sup>

### 1.3. Development

Although the statutory protection of trade secrets has been available since December 1992, only a small number of trade secret cases were brought to trial in the early stages of implementing the law.<sup>57</sup> In part because of the lack of a strong impact on Korean industry, the trade secret law enacted in 1991 remained unchanged until 1998. Trade secret law in Korea began to be strengthened dramatically in 1998. Indeed, since then, the law has been amended several times to enlarge the scope of trade secret protection under the Act and to enhance punishments for trade secret misappropriations. The primary cause for enhancing trade secret law in Korea was a 1998 industrial espionage case involving trade secrets relating to semiconductor technology by Samsung Electronics Co., the world's largest memory-chip maker,

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<sup>55</sup> Chung, *Enactment of Trade Secret Law*, *supra* note 41, at 296.

<sup>56</sup> As examined below, as in Japan, Article 109 of the Korean Constitution provides for the principle of an open trial. Hönpöp [Constitution of the Republic of Korea], art. 109 (S. Korea) (“Trials and decisions of the courts are open to the public: Provided, that when there is a danger that such trials may undermine the national security or disturb public safety and order, or be harmful to public morals, trials may be closed to the public by court decision.”). Pursuant to the Article of the Constitution, the Court Organization Act reaffirmed the principle of opening of the trial to the public. *See* Pöpwon jojikipöp [Court Organization Act], Law No. 4300, 1990, art. 57, para. 1 (S. Korea) (“The hearing and ruling of a trial shall be open to the public. However, if a public hearing is perceived to potentially harm national security, public order, or social morality, it may be decided to close the trial to the public.”).

<sup>57</sup> I examined trade secret cases on the legal information site of the Korean Supreme Court. Although the site does not include all cases published in Korea, I found only seven cases involving trade secrets until 1997. *See* Legal Information Site of the Korean Supreme Court, <http://glaw.scourt.go.kr/jbsonw/jbson.do> (last visited Feb. 27, 2010).

and LG Electronics Co., which triggered a series of amendments. In February 1998, Korean prosecutors announced that they had arrested 16 people on charges of stealing and selling secret technology information for manufacturing 64-megabit dynamic random-access memory (DRAM) chips produced by the Korean manufacturers, which were the largest memory chips then in mass production. The 16 people, former and current employees of Samsung and LG, had sold the technology, which was acquired in a wrongful manner, to Nanya Technology Corp. (NTC), a Taiwanese semiconductor manufacturer.<sup>58</sup> The semiconductor industry in Korea began as a strategic industry in the early 1980s with the support of the Korean government.<sup>59</sup> Since then, it has developed rapidly as a core industry supporting the export-oriented economy of Korea. After experiencing a learning stage of the relevant technology, the Korean semiconductor industry pursued its counterparts in the United States and Japan in the global market. In the mid-1990s, Samsung developed 64-megabit DRAMs and expected this new semiconductor to improve exports.<sup>60</sup> Thus, this industrial espionage case related to high-level technology with an international competitive advantage provided a strong incentive for the Korean government to

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<sup>58</sup> See Chip Technology Leaked to Taiwan, SEATTLE TIMES, Feb. 3, 1998, at A5, available at 1998 WLNR 1500558; Taiwan Firm Denied Charges of Industrial Espionage, CEN. NEWS AGENCY (Taiwan), Feb. 3, 1998, available at 1998 WLNR 4477116 (“Seoul prosecution officials said that Kim Hyong-ik, a former Samsung researcher, set up Korea Semiconductor Technology Co. (KSTC) in Seoul in 1997 and has received monthly payments of US\$100,000 from NTC in exchange for technology it has stolen from Samsung and LG.”).

<sup>59</sup> For an overview of the Korean semiconductor industry from the 1980s to 1990s, see MICHAEL PECHT ET AL., THE KOREAN ELECTRONICS INDUSTRY 29-44 (1997); S. Ran Kim, *The Korean system of Innovation and the Semiconductor Industry: A Governance Perspective*, 7 INDUS. CORP. CHANGE 275 (1998).

<sup>60</sup> Michael Pecht et al. states:

In 1994, Samsung, LG and Hyundai were in the global top-10 list of memory suppliers. A major factor in this considerable success is that Korean manufacturers have successfully implemented more efficient mass production techniques, thus allowing for more competitive unit pricing. . . . The Korean semiconductor industry captured nearly one-quarter of the world market in 1994, and specifically, Korea’s share of the DRAM market increased from 10% in 1993 to a 1994 value of 29%. . . . In 1996, forecasts for Korean semiconductor exports have been revised downward several times due to a glut and plummeting prices for 16 Mbit DRAMs (\$30 to \$11). In response, the industry has pushed ahead with early transition to 64 Mbit DRAMs and higher-value-added memory chips.

PECHT ET AL., *supra* note 59, at 11.



strengthen the relevant laws.

The Korean government's anxiety about foreign economic espionage led to amendments to the Korean UCPA in 1998.<sup>61</sup> As a result, the 1998 amendments focused on adopting measures to protect critical indigenous technologies with a competitive advantage in the global market. First, in the 1998 amendment, the Korean government showed that trade secret protection was important to the Korean economy by adding the phrase "trade secret protection" in the title of the Korean UCPA.<sup>62</sup> Second, as in Japan, the amendment adopted some provisions relieving the plaintiff's burden of proof regarding the amount of damages in trade secret cases. These provisions included a provision that presumed the amount of damages based on the amount of profit gained by the defendants and a provision that allowed the plaintiffs to seek damages based on a reasonable royalty.<sup>63</sup> Third, the amendment enlarged the scope of employees who were subject to criminal liability for trade secret misappropriation by including former employees.<sup>64</sup> With respect to foreign economic espionage, as in the Economic Espionage Act (EEA) in the United States, the amendment exacted greater penalties for trade secret misappropriation in cases in which the use of trade secrets occurred abroad, by providing a term of up to seven years in prison, 1 billion Korean won (about \$1 million), or both.<sup>65</sup>

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<sup>61</sup> See SANÖPCHAWÖN WIWÖNHÖE [COMMITTEE OF COMMERCE, INDUSTRY, AND ENERGY], PUJÖNG KYÖNGJAENG PANGIPÖP CHUNG KAEJÖNG PÖPRYULAN GÖMTO POKOSÖ [REVIEW REPORT OF THE AMENDMENT BILL OF THE UNFAIR COMPETITION PREVENTION ACT] (Nov. 1998) (stating the need to address the increasing number of industrial espionage cases as the primary legislative purpose of the amendment).

<sup>62</sup> The Korean UCPA changed its title to "the Unfair Competition Prevention and Trade Secret Protection Act." See Pujöng kyöngjaeng pangji mit yöngöp pimil pohoe kwanhan pömyul [Unfair Competition Prevention and Trade Secret Protection Act], Law No. 5621, 1998, art. 14 *bis*. (effective on Jan. 1, 1999) (S. Korea) [hereinafter 1998 Korean UCPA].

<sup>63</sup> *Id.* art. 14 *bis*.

<sup>64</sup> *Id.* art. 18, para. 2.

<sup>65</sup> *Id.* art. 18, para. 1. COMMITTEE OF COMMERCE, INDUSTRY, AND ENERGY OF THE KOREAN NATIONAL ASSEMBLY, PUJÖNGKYÖNGJAENG PANJIPÖPRYULAN SIMSA POGOSÖ [REVIEW REPORT ON THE AMENDMENT OF UNFAIR COMPETITION PREVENTION ACT] 4 (Dec. 1998) (S. Korea).

The Korean government further amended the Korean UCPA in 2001, 2004, and 2009 to strengthen trade secret protection. However, except for the 2001 amendment, which provided additional provisions relieving the plaintiff's burden of proof for the amount of damages awarded in damage relief, the other amendments focused on strengthening criminal sanctions.<sup>66</sup> The 2004 amendment expanded the scope of subject matter by adding business information to the category of material protected as a trade secret under criminal sanctions; the amendment also expanded the scope of persons subject to criminal liability by making "any person" liable for misappropriation of trade secrets, broadening the statute's scope beyond current and former employees or officers.<sup>67</sup> Further, the 2004 amendment criminalized attempts to, preparation to, and conspiracy to misappropriate a trade secret, and removed a provision that prohibited punishment for trade secret misappropriation without a complaint from a plaintiff.<sup>68</sup> It also imposed criminal liability on legal persons for trade secret misappropriations by a representative or an agent, employee, or other person employed by a legal person.<sup>69</sup> The 2009 amendment criminalized the acquisition of a trade secret, knowing that the trade secret would be used abroad.<sup>70</sup> The Korean government and proponents of sterner measures looked to the United States' passage of the EEA in 1996 to support similar measures in Korea.<sup>71</sup>

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<sup>66</sup> See Pujǒng kyǒngjaeng pangji mit yǒngǒp pimil pohoe kwanhan pǒmnyul [Unfair Competition Prevention and Trade Secret Protection Act], Law No. 6421, 2001, art. 14, paras. 2 & 5. (S. Korea) [hereinafter 2001 Korean UCPA].

<sup>67</sup> Pujǒng kyǒngjaeng pangji mit yǒngǒp pimil pohoe kwanhan pǒmnyul [Unfair Competition Prevention and Trade Secret Protection Act], Law No. 7095, 2004, art. 18, paras. 1 & 2. (S. Korea) [hereinafter 2004 Korean UCPA].

<sup>68</sup> *Id.* art. 18 *bis.* & *ter.*

<sup>69</sup> *Id.* art. 19.

<sup>70</sup> 2009 Korean UCPA, *supra* note 1, art. 18, para. 1.

<sup>71</sup> See KUKHOE SANŎP CHAWŎN WIWŎNHŎE [THE COMMITTEE ON COMMERCE, INDUSTRY, AND ENERGY OF THE KOREAN NATIONAL ASSEMBLY], PUJŎNG KYŎNJAENG BANGJI MIT YŎNGŎP PIMIL POHOE GWANHAN PŎPNYUL JUNG KAEJŎNG PŎPNYULAN SIMSAPOGOSŎ [THE EXAMINING REPORT FOR BILL OF THE AMENDMENT OF THE UNFAIR COMPETITION PREVENTION AND TRADE SECRET PROTECTION ACT] (Dec. 2003) (S. Korea).

However, there have been some criticisms of the amendments that enlarged the scope of trade secret protection and increased the applicable punishments. Critics, especially scientists, engineers, and employers of medium-sized enterprises, have maintained that the amendments could restrict employees' right to choose employment, which is protected under the Korean Constitution. This, in turn, would potentially harm small- to medium-sized companies, which might rely on the skill and expertise previously acquired by employees at large companies, to develop their own technologies.<sup>72</sup> The tension between the enhancement of punishments to deter industrial espionage and protection of the Constitutional right to choose one's occupation is illustrated in recent efforts in the Korean legislature to adopt a measure criminalizing industrial espionage while keeping the management of critical technology under the control of the Korean government.<sup>73</sup> The Korean government has been concerned with the increasing incidents of theft of proprietary information and the potential loss from these incidents. These cases of industrial espionage, especially technology leakage to foreign countries, appear to have threatened the Korean economy because of their focus on the development of high-technology industries, such as information technology and biotechnology. Indeed, in September of 2004, the Ministry of Commerce, Industry, and Energy, in an interagency meeting, stated that 51 foreign industrial espionage cases related to technology leakage to foreign countries had been identified by the National Intelligence Service between 1998 and 2004, and that the potential losses could total approximately \$4 billion.<sup>74</sup> The Ministry further indicated that information technologies, such as technologies related to the mobile phone and the plasma display panel, were top targets for

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<sup>72</sup> See, e.g., Kwon-Chul Shin, *Killojaŭi kyŏngŏp kŭmji ūimu* [Employee's Duty of Noncompetition], 18 NODONGPŎP Yŏn'gu [LABOR LAW STUDIES] 264 (2005) (S. Korea).

<sup>73</sup> See Seoul to Regulate Technology Outflow, THE KOREA HERALD, Sep. 20, 2004.

<sup>74</sup> SANŎP CHAWŎN PU [MINISTRY OF COMMERCE, INDUSTRY, AND ENERGY], KISULYUCH'UL PANGJII DAECHAEK [PREVENTION OF TECHNOLOGY LEAKAGE] (Sep. 18, 2004) (S. Korea) [hereinafter MOCIE, 2004 TECHNOLOGY LEAKAGE]. See also Industrial Spying Cost W4.4 trillion. Since '98, THE KOREA HERALD, Sep. 1, 2004.

foreign industrial espionage, and they concluded that in response to the growing problem of foreign industrial espionage, additional legislative measures should be taken.<sup>75</sup> Likewise, large enterprises with state-of-the-art technologies and relevant governmental agencies in charge of dealing with industrial espionage cases emphasized the need for a new law effectively protecting critical national technologies, and these arguments became more persuasive in Korean society in light of several high-profile cases of industrial espionage.<sup>76</sup> In contrast, scientists and civil rights advocates opposed the bill based on the possibility of excessive restraint on employees' right to choose employment and ambiguities about the scope of the subject matter protected under the proposed law.<sup>77</sup>

Despite these criticisms, Korea eventually enacted the Industrial Technology Leak Prevention and Protection Support Act (hereafter, the "ITPA").<sup>78</sup> Unlike the Korean UCPA, the ITPA limits its protected subject matter to "industrial technology," which does not include business information, but can be broadened by authorities with the discretion to designate it.<sup>79</sup>

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<sup>75</sup> MOCIE, 2004 TECHNOLOGY LEAKAGE, *supra* note 74. It further indicated that information technologies, such as mobile phone-related technologies and PDP, were top targets for foreign industrial espionage.

<sup>76</sup> See IT Industry Threatened by Espionage, THE KOREA HERALD, June 3, 2004. The arguments of proponents regarding the enactment of this act seem to be similar to those of the U.S. Congress concerning the enactment of the EEA. Dreyfuss explains that even if there were some laws protecting proprietary information and secret information before the enactment of the EEA, the U.S. Congress did not think that they were adequate. Moreover, she explains that the Congress "found that companies often fail[ed] to avail themselves of their civil remedies due to the cost of pursuing legal action and the possibility that the defendant [would] be found judgment proof. . . . Congress also spoke of a need for legislation that is comprehensive, meaning protection that transcends state and national borders." (citation omitted). Rochelle Cooper Dreyfuss, *Trade Secrets: How Well Should We Be Allowed to Hide Them? The Economic Espionage Act of 1996*, 9 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 1, 6-7 (1998).

<sup>77</sup> For example, the Association of Scientists and Engineers of Korea expressed concerns about the bill. Although the bill was originally introduced to the Korean National Assembly on November 2004, the Assembly eventually passed the bill in September 2006.

<sup>78</sup> Sanŏp kisul ũi yuch'ul pangji mit poho e kwanhan pŏpnyul [Industrial Technology Leak Prevention and Protection Support Act], Law No. 8062, 2006 (S. Korea) [hereinafter 2006 ITPA]. The Act came into effect on April 28, 2007.

<sup>79</sup> To be protected under this act, the three principal requirements for trade secrets—not generally known to the public, independent economic value, and considerable efforts to keep the secret—are not necessary. Sanŏp kisul ũi yuch'ul pangji mit poho e kwanhan pŏpnyul [Industrial Technology Leak Prevention and Protection Support Act], Law. No 9368, 2009, art. 34, para. 1 & art. 36., para. 5 (S. Korea) [hereinafter 2009 ITPA].

The Korean government explained that, unlike the Korean UCPA, the primary goal of the ITPA is to prevent illegal leaks of industrial technologies to parties at home as well as abroad, and to support preventive activities in protecting industrial technologies.<sup>80</sup> Thus, the Act focuses on the administrative management of industrial technology with international competitiveness by creating the Committee on Industrial Technology Protection under the Prime Minister. The ITPA also controls the free export of technologies designated as national critical technologies.<sup>81</sup> Nevertheless, the Act also provides strong criminal punishment for leaking industrial technologies, and it has been criticized for possible restrictions on labor mobility and the right of employees to choose their occupation.

## **2. Current Trade Secret Law in Korea**

### **2.1. Subject Matter**

As mentioned briefly above, the Korean UCPA appears to have been affected by the definition of a trade secret under the UTSA in the United States. Accordingly, the requirements under the substantive law to qualify for trade secret protection are almost identical to those under the UTSA, and these requirements can be said to be very similar to those under the Japanese UCPA as well. In addition, although Korea has accumulated fewer cases determining the definition of a trade secret under the Korean UCPA compared with the United States and Japan,

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<sup>80</sup> To achieve this goal, the act establishes a national framework to protect domestic industrial technologies by creating “the Committee on Industrial Technology Protection” under the Prime Minister. *Id.* art. 7.

<sup>81</sup> When an entity (or institution) develops national critical technologies with government R & D funds, and intends to export by sale or transfer of technology to a foreign country, the entity must obtain the approval of the Minister of Commerce, Industry, and Energy. In the case of an entity that holds and manages national critical technologies and intends to export them, the entity must report to the Minister of Commerce, Industry, and Energy in advance. *Id.* art. 11, para. 1.

the courts' approach to the scope of the subject matter under the Korean UCPA does not appear to be very different from its counterparts in the United States and Japan.<sup>82</sup> Like its counterparts in these two countries, the Korean UCPA provides three requirements for information to qualify as a trade secret.<sup>83</sup>

First, information must have “independent economic value.” The Korean Supreme Court held that “information has independent economic value when the information provides competitive advantages over competitors or when considerable efforts or costs are necessary to acquire or develop the information.”<sup>84</sup> The Court further held that “in cases in which the information falls into the scope of the above occasions, even if the information does not reach the final stage in which it can be used for business operations, the information has not actually helped the third party, or anyone with prototypes who can learn the information through experiment, these facts do not hinder the information from being protected as a trade secret.”<sup>85</sup> Given the context of the judgment of the Court, negative or potential information satisfies this requirement.<sup>86</sup> In addition, the requirement seems to play a role in limiting protectable subject matter. Thus, as in Japan, information that harms honest commercial practices, such as information relating to tax evasion and pollutants, cannot be protected under the Korean UCPA.

Second, the information must not be generally known. The Supreme Court of Korea held that information meets the requirement “when it is not readily ascertainable to acquire the

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<sup>82</sup> This may be in part because of the influence of Korean scholars and commentators who have introduced the U.S. cases and Japanese cases in the area of trade secret law in the courts.

<sup>83</sup> 2009 Korean UCPA, art. 18, para. 1.

<sup>84</sup> Supreme Court of Korea, Judgment of July 9, 2009, Case No. 2009do250; Supreme Court of Korea, Judgment of Feb. 15, 2008, Case No. 2005do6223; Supreme Court of Korea, Judgment of July 9, 2009, Case No. 2006do7916; Supreme Court of Korea, Judgment of Dec. 23, 1996, Case No. 96da16605.

<sup>85</sup> Supreme Court of Korea, Judgment of Feb. 15, 2008, Case No. 2005do6223.

<sup>86</sup> Most Korean legal scholars also agree that negative information meets the requirement of independent economic value because a person who acquires the negative information can save his or her efforts or costs without the same failure in the process of development. See JONG & PARK, *supra* note 50, at 50.

information except by the owner of the trade secret because it is not generally known to the public.”<sup>87</sup> The criterion used for determining the requirement of secrecy is that it be in the same industry in which the information is exploited.<sup>88</sup> Thus, if the information is disclosed in a patent or contained in published materials, it does not qualify as a trade secret under the Korean UCPA.<sup>89</sup> In addition, in cases in which an idea has not been used in Korea, if it is generally known to or used by people who can gain economic value from it in foreign countries, it is not a secret qualifying for protection as a trade secret.<sup>90</sup> However, if a technology holder has kept a technology imported from a foreign country secret after improving the technology, it is protectable as a trade secret.<sup>91</sup> Nevertheless, the requirement of secrecy “does not mean absolute secrecy.”<sup>92</sup> Accordingly, even though the information may be known by some people, if the information remains secret from others, it may fall into the scope of a trade secret protected under trade secret law.<sup>93</sup> With respect to the theoretical possibility of others ascertaining the information through proper means, the Supreme Court of Korea held that the theoretical possibility of reverse engineering the trade secret from semiconductors containing the information sold by competitors does not necessarily preclude protection as a trade secret.<sup>94</sup>

Third, the trade secret holder must make considerable effort to keep it in secrecy.

Although the Korean UCPA stipulates that efforts to keep trade secrets in secrecy be

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<sup>87</sup> Supreme Court of Korea, Judgment of Sep. 23, 2004, Case No. 2002da60610.

<sup>88</sup> See Supreme Court of Korea, Judgment of July 10, 2008, Case No. 2006do8278.

<sup>89</sup> Supreme Court of Korea, Judgment of Sep. 23, 2004, Case No. 2002da60610.

<sup>90</sup> Seoul District Court of Korea, Judgment of Feb. 14, Case No. 96gahap7170.

<sup>91</sup> Supreme Court of Korea, Judgment of Nov. 26, 1996, Case No. 96da31574; Seoul District Court of Korea, Decision of March 27, 1995, Case No. 94kahap12987.

<sup>92</sup> Seoul High Court of Korea, Judgment of Feb. 28, 1996, Case No. 95da14420.

<sup>93</sup> *Id.*

<sup>94</sup> Supreme Court of Korea, Judgment of March 12, 1999, Case No. 98do4704 (Samsung semiconductor case)

“considerable (*sangdanghan*),” the requirement seems to have a meaning identical to “reasonable” under the UTSA in the United States. In practice, the courts’ approach to this requirement seems to be similar to that of the courts in Japan. Indeed, the Supreme Court of Korea held that the requirement of keeping it secret through considerable effort is satisfied in a situation in which, from an objective point of view, it is possible to know that the information has been kept and maintained in secrecy.<sup>95</sup> The Court illustrated measures for keeping and maintaining secrecy, such as “marking or notifying [others of] the existence of a [trade] secret, limiting access to a trade secret, or imposing a duty of confidence on a person who has access to the information.”<sup>96</sup> But from the fact-intensive nature of the inquiry into the existence of “considerable efforts,” as in the United States and Japan, Korean courts seem to consider several factors and circumstances, thereby seeking a balance between the economic value of the alleged trade secret and the costs of keeping the information secret.<sup>97</sup>

## 2.2. Misappropriation of Trade Secrets

The Korean UCPA provides for six types of trade secret misappropriation.<sup>98</sup> As mentioned briefly above, the words and contents of these are almost identical to those under the Japanese UCPA. As in the Japanese UCPA, these can be divided into two groups, depending on the method of acquiring the trade secrets: (1) where trade secrets are acquired by improper

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<sup>95</sup> Supreme Court of Korea, Judgment of July 10, 2008, Case No. 2008do3435.

<sup>96</sup> *Id.*

<sup>97</sup> Supreme Court of Korea, Judgment of Jan. 24, 2003, Case No. 2001do4331.

<sup>98</sup> 2009 Korean UCPA, *supra* note 1, art. 2, para. 3.



means,<sup>99</sup> and (2) where trade secrets are legitimately acquired by an original recipient.<sup>100</sup> In the first group, the Korean UCPA subjects an actor to liability in a case in which he or she acquires trade secrets by improper means, or subsequently uses or discloses the trade secrets acquired by improper means. As to “improper means,” the Korean Supreme Court takes an approach similar to that of the 5th Circuit Court and the UTSA in the United States.<sup>101</sup> The Supreme Court of Korea held that “‘improper means’ include not only conducts that are actionable under the Korean Penal Code, such as theft, deception, and coercion, but also all conducts and means against the good custom and order of society in light of ideals of sound order of trade and fair competition, such as breach or inducement of a breach of a duty to keep secrecy.”<sup>102</sup> In a similar context, the Court made it clear that a trade secret claim can be established either by the physical taking of documents, drawings, pictures, or recording tapes or by memorizing it.<sup>103</sup> Thus, memorization may not be a defense to a trade secret claim. The disclosure includes cases in which a wrongful acquirer discloses the trade secret to specific persons in confidence, such as licensing or selling it to others.<sup>104</sup> Furthermore, the Act subjects an actor to liability when he or she acquires trade secrets, or uses or discloses them with the knowledge that improper acquisition of the trade secret has occurred or when the lack of such knowledge was caused by gross negligence.<sup>105</sup> An actor is also subject to liability in cases in which, after he or she acquires the trade secret, the actor uses or discloses the trade secret with knowledge, or without

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<sup>99</sup> *Id.* art. 2, para. 3, items 1-3 (S. Korea).

<sup>100</sup> *Id.* art. 2, para. 3, items 4-6 (S. Korea).

<sup>101</sup> *See* E.I. DuPont deNemours & Co. v. Christopher, 431 F.2d 1012 (5th Cir. 1970).

<sup>102</sup> Supreme Court of Korea, Judgment of Dec. 23, 1996, Case No. 96da16605.

<sup>103</sup> Supreme Court of Korea, Judgment of June 9, 1998, Case No.1998da1928.

<sup>104</sup> 2009 Korean UCPA, *supra* note 1, art. 2, para. 3, item 1.

<sup>105</sup> *Id.* art. 2, para. 3, item 2.

knowledge due to gross negligence, regarding its improper acquisition.<sup>106</sup> The subjective requirement of “gross negligence” can be interpreted in a similar way as “gross negligence” under the Japanese UCPA and “has reason to know” under the UTSA.<sup>107</sup>

The second group intends to prohibit a legitimate recipient to whom a trade secret has been disclosed from using or disclosing the trade secret in violation of a duty of confidence.<sup>108</sup> To be liable under the provision, three requirements are necessary: (1) an actor owes a duty of confidence, (2) the actor has the intent to obtain improper benefits or to damage the owner of the trade secret, and (3) the actor uses or discloses the trade secret. In general, it has been recognized that a duty of confidence arises when a statute expressly imposes the obligation not to use or disclose a trade secret, when there is a separate contract between relevant parties, or when there is a trust relationship between a trade secret holder and a recipient.<sup>109</sup> In particular, regarding the duty of confidence arising from the employment relationship, the Korean Supreme Court held that the duty of confidence to maintain the trade secret in secrecy arises from an express agreement in which the recipient has explicitly agreed to bear the duty of confidence, or from a trust relationship in which the recipient has implicitly consented to the duty of confidence. The Court further recognized the duty of confidence that arises during the employment relationship or even after termination of the employment relationship.<sup>110</sup> Thus, even in the absence of an enforceable contract, the duty of confidence owed by the employee continues after the employment relationship is terminated. On the other hand, the courts in Korea have

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<sup>106</sup> *Id.* art. 2, para. 3, item 3.

<sup>107</sup> *See* Fusei kyōsō bōshihō [Unfair Competition Prevention Act], Law No. 47 of 1993 (as amended by Law No. 55 of 2006), art. 2, paras. 5-6 (Japan); UNI. TRADE SECRETS ACT § 1 (1985).

<sup>108</sup> 2009 Korean UCPA, art. 2, para. 3, item 4 (“using or disclosing trade secrets to obtain improper benefits or to damage the owner of the trade secrets while under a contractual or other duty to maintain secrecy of the trade secrets.”).

<sup>109</sup> JONG & PARK, *supra* note 50, at 71.

<sup>110</sup> Supreme Court of Korea, Judgment of Dec. 23, 1996, Case No. 96da16605.

struggled to balance the interests of former employees and employers in cases involving competition.<sup>111</sup> As in Japan, the Act also subjects an actor who has acquired trade secrets, or who uses or discloses them with knowledge of the disclosure by the legitimate recipient, or without knowledge due to gross negligence, to liability in breach of the duty of confidence.<sup>112</sup> Finally, an actor is subject to liability in cases in which, after the actor acquires the trade secrets, he or she uses or discloses them with knowledge of the disclosure by the legitimate recipient, or without knowledge, in breach of the duty of confidence.<sup>113</sup>

### **2.3. Legal Remedies**

The Korean UCPA provides civil and criminal remedies for trade secret misappropriation. Scholars have noted that in practice, as in other areas of intellectual property law, a preliminary injunction, in which the plaintiff can seek a legal remedy quickly, and a criminal complaint, which places mental pressure on defendants, have been useful and effective means of legal remedies, among others. However, in recent years, trade secret cases dealt with by the Korean Supreme Court have almost all been criminal cases. Korean legal scholars suggest this may be because many cases involving trade secret misappropriation have been concluded in the lower courts, which deal with preliminary injunctions.<sup>114</sup>

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<sup>111</sup> See Supreme Court of Korea, Judgment of July 16, 2003, Case No. 2002 ma 4380.

<sup>112</sup> 2009 Korean UCPA, art. 2, para. 3, item 5.

<sup>113</sup> *Id.* art. 2, para. 3, item 6.

<sup>114</sup> JONG & PARK, *supra* note 50, at 73 n.204.

### 2.3.1. Civil Remedies

For civil remedies, the Korean UCPA provides injunctive and damage remedies.<sup>115</sup> Under Article 10 of the Korean UCPA, a trade secret holder who is injured or threatened by a trade secret misappropriation can seek a court prohibitive or preventive order against a trade secret misappropriator.<sup>116</sup> The “trade secret holder” includes not only the original developer of the trade secret, as well as a holder who acquired the trade secret by reverse engineering, but also anyone having or using the trade secret based on justifiable legal rights, such as a grantee and a licensee.<sup>117</sup> In Korea, the appropriateness and scope of injunctive relief have also been debated. With respect to the appropriateness of injunctive relief, scholars have argued that to seek injunctive relief, the trade secret must be kept in secrecy by the end of the oral proceedings. Thus, if the trade secret has generally become known to the public before the end of the oral proceedings, for example, through patent prosecution, injunctive relief would not be appropriate.<sup>118</sup> In addition to the secrecy of the information, to seek injunctive relief, a plaintiff must prove “actual or threatened misappropriation.” Regarding the term “threatened” misappropriation, the court in Korea states that “the mere possibility of infringement is not sufficient to support injunctive relief, rather, high probability of infringement is necessary.”<sup>119</sup> The court further states, regarding the plaintiff’s burden of proof, that if it is proven that the

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<sup>115</sup> In Korea, injunctive relief seems to be a more efficient remedy compared with damages, because it takes longer to get the final result for the latter remedy. *Id.* at 73.

<sup>116</sup> 2009 Korean UCPA, *supra* note 1, art. 10.

<sup>117</sup> See Seoul High Court of Korea, Judgment of Feb. 28, 1996, Case No. 95da14420 (recognizing a plaintiff who acquired trade secrets by reverse engineering as “a person” under the Korean UCPA).

<sup>118</sup> JONG & PARK, *supra* note 50, at 78. Nevertheless, one Korean scholar argued that in a case in which a misappropriator with a duty of confidence actively leads to public disclosure of the trade secret, the misappropriator is not allowed to claim the public disclosure of the trade secret as a defense based on the doctrine of estoppels. See JONG, IP LAW, *supra* note 26, at 18.

<sup>119</sup> Seoul High Court of Korea, Judgment of Feb. 28, 1996, Case No. 95da14420.

defendant has acquired the trade secret by improper means, it can be presumed that the use or disclosure by the misappropriator threatens the right of the trade secret holder, based on the premise that the status of trade secrecy is lost upon public disclosure, and maintaining developed or acquired trade secrets in secrecy is critical for survival in the business world, which is very competitive.<sup>120</sup>

In recent years, the duration of injunctive relief has been hotly debated among legal scholars and commentators.<sup>121</sup> The Supreme Court of Korea adopted the “head start” or “lead time” theory, in which injunctive relief continues only until defendants or others could have acquired the trade secret by proper means, such as reverse engineering or independent discovery.

The Court made it clear that

the purpose of injunctive relief for trade secret misappropriation is to prevent the misappropriator from unjustly benefiting from a head start or lead time advantage that is attributable to the misappropriation and to put the holder of the trade secret in the position that he would have been in the absence of such misappropriation. Thus, injunction should be limited to a specific period within the time period in which injunctive relief can achieve this purpose, reflecting the time the misappropriator or other fair competitors could have acquired the trade secret by proper means such as reverse engineering in light of the rapid development of technology, and personal and physical facilities.<sup>122</sup>

The Court further explained that a perpetual injunction would be a punitive injunction and would undermine the public interest in promoting fair competition and making employees use their knowledge and capabilities.<sup>123</sup> Thus, as in the UTSA, the Korean Supreme Court has

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<sup>120</sup> *Id.*

<sup>121</sup> Scholars’ debates focus on the effect of an injunctive order with a specific time limitation. In other words, the issue is whether the trade secret cannot be protected under trade secret law after lapse of the period of injunction order. But the prevailing view seems to be in favor of the holder of the trade secret. *See* JONG & PARK, *supra* note 50, at 91.

<sup>122</sup> Supreme Court of Korea, Judgment of Dec. 23, 1996, Case No. 96da16605 (confirming a judgment of an appellate court limiting the period of injunctive order to two to three years). *See also* Supreme Court of Korea, Judgment of Feb. 13, 1998, Case No. 97da24528 (following the head start or lead time theory).

<sup>123</sup> Supreme Court of Korea, Judgment of Dec. 23, 1996, Case No. 96da16605.

tried to balance conflicting interests between the parties, considering the public interest in promoting vigorous competition and in ensuring the Constitutional right of employees to choose their occupation.<sup>124</sup> The right to injunctive relief expires if the trade secret holder does not exercise it within three years of the date of actual knowledge that the business interests of the holder were damaged or were threatened to be damaged by a misappropriator and of the actual knowledge of the identity of the misappropriator. The right expires if ten years has elapsed after the date on which the trade secret misappropriation first occurred.<sup>125</sup> In addition to injunctive relief, the plaintiff may request the destruction of articles that constituted the trade secret misappropriation, removal of the equipment used for the misappropriation, or other measures for suspension or prevention of the misappropriation.<sup>126</sup>

Damages are also available when a person's intentional or negligent trade secret misappropriation causes damages to another person's business interests.<sup>127</sup> Unlike patent law, which has a provision recognizing the presumption of the infringer's negligence, the general rules relating to tort liability under the provisions of the Korean Civil Code (Article 750 et seq.) govern monetary relief for trade secret misappropriation.<sup>128</sup> Under the Korean Civil Code, a trade secret holder must prove (1) the intention or negligence of an alleged misappropriator, (2) the existence of trade secret misappropriation (fault), (3) damages to the plaintiff's business interests, and (4) a causal relationship between the trade secret misappropriation and damages to

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<sup>124</sup> See UNIF. TRADE SECRETS ACT § 2, 14 U.L.A. 619 (2005).

<sup>125</sup> 2009 Korean UCPA, *supra* note 1, art. 14.

<sup>126</sup> 2009 Korean UCPA, *supra* note 1, art. 10, para. 2. See Supreme Court of Korea, Judgment of Dec. 23, 1996, Case No. 96da16605 (ordering a defendant to return to a plaintiff a note on which the defendant had written down the plaintiff's trade secret).

<sup>127</sup> 2009 Korean UCPA, *supra* note 1, art. 11.

<sup>128</sup> See Minpŏp [Civil Code], Law No. 8720, 2007, arts. 750 et seq. (S. Korea); T'ŭkhŏpŏp [Patent Act], Law No. 9381, 2009, art. 130 (S. Korea) ("A person who has infringed a patent right or exclusive license of another person is presumed to have been negligent regarding the act of infringement.").

the holder. In practice, however, once the existence of trade secret misappropriation has been proven, fault on the part of the alleged misappropriator can be presumed; thus, the alleged misappropriator must prove that he or she was not at fault in many cases.<sup>129</sup>

As in Japan, tort law in Korea does not recognize punitive damages or exemplary damages with a deterrent effect.<sup>130</sup> Thus, damage relief focuses on compensatory damages for the defendant's actual or expected loss, and additional damages for emotional distress may be awarded in limited situations.<sup>131</sup> To relieve the plaintiff's burden of proof for damage relief, as in other areas of intellectual property law, the Korean UCPA provides some special devices for measuring the scope of damages. First, when a trade secret holder claims compensatory damages for trade secret misappropriation, damages may be calculated as "the amount of goods transferred" multiplied by "the amount of profit per unit that the person whose business interests have been infringed could have been able to sell it for had the infringement not taken place."<sup>132</sup> However, the compensation may not exceed the amount of the estimated profit per unit multiplied by the number of articles that the holder of trade secrets could have produced subtracted by the number of units actually sold. If the holder was unable to sell the product for reasons other than trade secret misappropriation, a sum calculated according to the number of articles subject to these reasons must be deducted.<sup>133</sup> Second, the profits gained by the misappropriator through the trade secret misappropriation are presumed to be the amount of

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<sup>129</sup> This is the case in Japan as well. See HIROSHI ODA, *JAPANESE LAW* 184 (3d ed. 2009).

<sup>130</sup> See Sang-Chan Kim & Choong-Eun Lee, *Chingböl chök sonhaepaesang ūi toip ūl wihan pigyopöpchök koch 'al* [Comparative Study for Adoption of the Punitive Damage System], 35 PÖPHAK YÖN'GU [LAW REVIEW] 163 (2009) (suggesting the adoption of a punitive damage system in Korea).

<sup>131</sup> See Supreme Court of Korea, Judgment of Nov. 26, 1996, Case No. 96da31574; Supreme Court of Korea, Judgment of Dec. 13, 1994, Case No. 93da59779.

<sup>132</sup> 2009 Korean UCPA, *supra* note 1, art. 14 *bis*, para. 1.

<sup>133</sup> *Id.*

damages suffered by the holder whose business interests were infringed.<sup>134</sup> Third, the holder may claim as damages the amount of money that the holder would normally be entitled to receive for using trade secrets that were the object of the trade secret misappropriation.<sup>135</sup> Fourth, in the third case, if the amount of actual damages caused by the trade secret misappropriation exceeds a reasonable royalty, the excess amount may also be claimed as compensation for damages.<sup>136</sup> Finally, although the court recognizes the damages suffered by the holder, if it is extremely difficult for the holder to provide relevant facts to prove the amount of damage, the court may determine the reasonable amount as damages based on the relevant evidence and the parties' arguments.<sup>137</sup> Because the Korean UCPA does not provide a statute of limitations provision regarding damages, the rule in tort law governs the statute of limitations.<sup>138</sup> As in Japan, the Korean UCPA also includes a provision that authorizes the court to issue an order for restoring the business reputation of the holder of the trade secrets. However, the defendant's apology in the newspaper is no longer available in Korea because the Constitutional Court of Korea, in a 1991 case involving a court-ordered notice of apology based on Article 764 of the Korean Civil Code, held that an order for the defendant to publish an apology for her wrongful acts in the newspaper was unconstitutional.<sup>139</sup>

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<sup>134</sup> *Id.* art. 14 *bis*, para. 2.

<sup>135</sup> *Id.* art. 14 *bis*, para. 3.

<sup>136</sup> *Id.* art. 14 *bis*, para. 4.

<sup>137</sup> *Id.*

<sup>138</sup> *See* Minpōp [Civil Code], Law No. 8720, 2007, art. 766 (S. Korea) (“(1) The right to claim for damages resulting from an unlawful act shall lapse by prescription if not exercised within three years commencing from the date on which the injured party or his agent by law becomes aware of such damage and of the identity of the person who caused it. (2) The provisions of paragraph (1) shall also apply if ten years have elapsed from the time when the unlawful act was committed.”).

<sup>139</sup> *See* Constitutional Court of Korea, Decision of April 1, 1991, Case No. 89Hun-Ma160 (holding that “Article 764 unconstitutional insofar as it is interpreted to include the notice of apology as a suitable measure for restoring damaged reputation after elaborating on the nature of freedom of conscience and public apology”).



### 2.3.2. Criminal Remedies

Under Korean criminal law, at least three possible criminal remedies exist. Above all, a trade secret misappropriator may be liable for crimes such as larceny or breach of trust in the Korean Penal Code. However, as briefly mentioned earlier, criminal remedies under the Korean Penal Code have some inherent limitations in providing sufficient legal remedies for the trade secret holder.<sup>140</sup> In addition to the Korean Penal Code, the Korean UCPA and the ITPA provide criminal sanctions for trade secret misappropriation, which have become an important issue for scientists, engineers, and human rights activists in Korea. The expansion of criminal punishment for trade secret misappropriation has become the target of much criticism by legal scholars.<sup>141</sup>

Under the Korean UCPA, the subject matter criminally protected is the same as that under the civil law. The contour of the criminal remedies seems similar to that under the EEA in the United States.<sup>142</sup> Articles 18 (1) and (2) of the Korean UCPA have almost identical language, with different culpability requirements and different severities of punishments. Article 18 (2) of the Act provides that any person who acquires or uses a trade secret useful to a company or who discloses it to a third party for the purpose of obtaining improper benefits or damaging the company is liable to imprisonment with labor for a term of up to five years or to fines exceeding twice the pecuniary profit, not to exceed ten times the profit, or both.<sup>143</sup> On the other hand, Article 18 (1) of the Act, which focuses on foreign economic espionage, requires additional

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<sup>140</sup> See Chapter IV. 1-1.

<sup>141</sup> For example, Jong and Park criticize the continuing expansion of criminal sanctions against trade secret misappropriation by arguing that it reflects Korean people's attitude toward criminal law, which shows their preference for criminal complaints and punishment to resolve legal disputes. JONG & PARK, *supra* note 50, at 113.

<sup>142</sup> 2009 Korean UCPA, *supra* note 1, art. 18.

<sup>143</sup> *Id.* art. 18, para. 2.

culpability requirements for criminal sanctions for trade secret misappropriation. Thus, under this paragraph, any person who acquires, uses, or discloses trade secrets for the purpose of obtaining improper benefits or damaging the company in foreign countries, or with knowledge that the trade secret will be used in foreign countries, is subject to criminal liability for a term of up to ten years or fines exceeding twice the pecuniary profit, not to exceed ten times the profit, or both.<sup>144</sup> The Korean UCPA punishes attempts, preparation, and conspiracy.<sup>145</sup> Unlike the Japanese UCPA, under the current law, prosecutors can prosecute a trade secret misappropriator without a complaint by a victim. In addition, when a representative of a legal entity or an agent, or an employee of any other servant of a legal or natural person, commits this criminal conduct with regard to the business of the legal or natural person, not only is the offender liable, but also the legal or natural person is liable to the fine prescribed in Article 18.<sup>146</sup> However, this provision does not apply when the legal or natural person has engaged in reasonable care and supervision with regard to the business to prevent trade secret misappropriations by the offender.

Under the ITPA, stronger criminal penalties are available. This primarily protects industrial technology and criminalizes the acquisition of industrial technology by improper means, use, or disclosure.<sup>147</sup> The term “industrial technology” is defined as technology designated, notified, or announced by the Ministry of Knowledge Economy as enhancing industrial competitiveness, considering the quality and international competitiveness of a given technology.<sup>148</sup> In addition, the ITPA imposes a duty of confidentiality on officers or employees,

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<sup>144</sup> *Id.* art. 18, para. 1.

<sup>145</sup> *Id.* arts. 18 *bis* & *ter*.

<sup>146</sup> *Id.* arts. 19.

<sup>147</sup> The Act takes a similar approach toward the punishments on foreign economic espionage, which can be punished by up to ten years in prison, or a fine of up to 1 billion won (about \$1 million), or both. 2009 ITPA, *supra* note 79, art. 2, paras. 1-4.

<sup>148</sup> The following technology can be designated as “industrial technology” under the ITPA:

including professors, researchers, and students of entities that have the industrial technology, and criminalizes the breach of their duty.<sup>149</sup> In other words, anyone who works for entities with industrial technology that can be designated based on somewhat vague and abstract standards may be criminally liable under the law.<sup>150</sup> The Act seems likely to be applied first in cases involving the industrial technology designated under the law, regardless of the fact that the technology qualifies as a trade secret under the Korean UCPA.<sup>151</sup>

### 3. Law of Postemployment Contracts in Korea

As in Japan, it has generally been accepted that a current employee in Korea is subject to a general duty of loyalty, which is an ancillary duty derived from the employment contract.<sup>152</sup> It

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- (a) Original technology, developed within this country, being equal or superior to one in a developed country and being able to be commercialized;
  - (b) Technology that can reduce the cost of an existing product or notably improve the quality of an existing product;
  - (c) Technology with a large technical and economic ripple effect that can contribute to the advancement of national technology and the enhancement of national competitiveness;
  - (d) Technology applying the technologies described between (a) and (c).

*Id.* art. 2, para. 1.

<sup>149</sup> The crime can be punished by up to five years in prison, or the defendant can be required to pay a fine of up to 50 thousand won (about \$50,000), or both. 2009 ITPA, *supra* note 79, art. 34, para. 1 & art. 36., para. 5.

<sup>150</sup> The Act has been criticized for the vague and abstract definition of industrial technology and core industrial technology by legal commentators and scholars. In fact, the term “national core technology” is defined as industrial technology, whose leakage to parties abroad could threaten national security and the development of a national economy having high technical or economic value in domestic and foreign markets and growth potential in related fields. See, e.g., Seung Kyoony Kye, *Sanŏp kisul ūi yuch’ul panji mit poho e kwanhān pŏpnyul unyong si yesang toenŭn myŏt kaji mujechŏm* [Some Critique on the Technology Leak Prevention and Industrial Technology Protection and Support Act], 23 SANŎPCHAESANGWŎN [INDUSTRIAL PROPERTY] 63 (2007).

<sup>151</sup> 2009 ITPA, *supra* note 79, art. 4 (“This Act is to be applied with regard to industrial technology leak prevention and protection unless other statutes have special provisions for the application.”).

<sup>152</sup> See Seong-Ho Lee, *Kŭlloja e taehan kyŏngŏp kŭmji yakchŏng ūi hyoryŏk kwa chŏnjik kŭmji kachŏbun ūi hyoryŏk yŏbu* [Effects of Covenants Not to Compete and Injunctive Relief], 62 JŎSŪTISŪ [JUSTICE] 84, 86 (2001) (S. Korea) [hereinafter Lee, *Covenants Not to Compete*]; YUSEONG KIM, NODONGPŎP I [LABOR LAW I] 343 (2005) (S. Korea) (explaining employees’ ancillary duties) [hereinafter KIM, LABOR LAW].

is also generally accepted that the duty of loyalty includes a duty not to use or disclose to others confidential information acquired through employment and a duty not to compete with the former employer.<sup>153</sup> Thus, if a current employee breaches these duties during the employment relationship, liability may be imposed without regard to the existence of a specific agreement with an employer. However, scholars and courts have shown somewhat different opinions on these duties after the employment relationship is terminated. With respect to whether an employee owes a duty of confidence derived from the duty of loyalty after the employment ends, some scholars argue that the duty continues to exist after the employment relationship is terminated, even in the absence of a specific confidential agreement.<sup>154</sup> By contrast, others assert that a former employee does not remain subject to the ancillary duty in breach of a duty of confidence in the absence of specific legal bases, such as a separate agreement, because duties based on the employment contract are extinguished once the employment has ended.<sup>155</sup> In such cases, the confidential agreement between the employee and the employer is enforceable if covenants in the agreement are reasonable, but the reasonableness of the agreement does not seem to be assessed in a strict way compared with the reasonableness of covenants not to compete.<sup>156</sup> Accordingly, several factors, such as the scope of restraints (e.g., time or area restrictions) and the existence of compensation, may not be assessed strictly to verify that employee confidentiality agreements are valid.<sup>157</sup> On the other hand, according to the prevailing view of scholars and commentators, without a valid covenant not to compete, a former employee

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<sup>153</sup> See Supreme Court of Korea, Judgment of Nov. 26, 1996, Case No. 96da31574; Shin, *supra* note 72, at 235; Dhal-Hugh Lee, *Külloja üi pimil yujiüimuwa yöngöppimil* [Employee's Duty of Confidence and Trade Secrets], 11 CHUNGANG PÖPHAK [CHUNGANG LAW REVIEW] 411, 414 (Aug. 2009) (S. Korea) [hereinafter Lee, *Employee Duty*].

<sup>154</sup> See, e.g., Lee, *Covenants Not to Compete*, *supra* note 152, at 88; HYUNGBAE KIM, GUNROGIJUNPÖP [LABOR STANDARD LAW] 140 (2001).

<sup>155</sup> See, e.g., Lee, *Employee Duty*, *supra* note 153, at 414.

<sup>156</sup> *Id.* at 416.

<sup>157</sup> *Id.*

does not owe a duty of noncompetition derived from the employment contract because, unlike a nondisclosure agreement, covenants not to compete may directly restrict the Constitutional right of the employee to choose his or her occupation freely and engage in work.<sup>158</sup> Thus, the former employee may compete with the former employer and may use knowledge or experience acquired in the course of the employment in competition with the employer.

The law of postemployment restraints, which are based on the ancillary duties an employee derived from the employment contract, changed after trade secret law was adopted in 1991 because the Korean UCPA may have been another statutory legal basis imposing duties on the employee in cases involving trade secrets after the employment relationship had terminated. In fact, most scholars agree that under the Korean UCPA, an employee has a duty to maintain trade secrets in confidence after the employment relationship is terminated. Some argue that this is because the Korean UCPA recognizes injunctive relief and damages as legal remedies for tortious acts that infringe trade secrets that are intangible property or intellectual property.<sup>159</sup> As observed before, the Supreme Court of Korea also recognizes this duty, stating

an employee owes a duty of confidence after the termination of the employment relationship even in the absence of an explicit agreement to the extent that it is reasonable under the principle of good faith as far as it does not restrain freedom to choose an occupation guaranteed by the Constitution if the trade secret was offered based on a special relationship with mutual trust.<sup>160</sup>

On the other hand, as in Japan, the issue regarding the duty of noncompetition or

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<sup>158</sup> See Hōnpōp [Constitution of the Republic of Korea], art. 15 (S. Korea) (“All citizens enjoy freedom of occupation.”); *Id.* art. 32, para. 1 (“All citizens have the right to work. The State endeavors to promote the employment of workers and to guarantee optimum wages through social and economic means and enforces a minimum wage system under the conditions as prescribed by law.”). See also KIM, LABOR LAW, *supra* note 152, at 343.

<sup>159</sup> See, e.g., Sang Jo Jong, *Pujōng kyōngjaeng pangjipōp sang chongōpwōn ūi pimil yuji ūimu* [Protection of Trade Secrets in the Context of Employment], 36 SEOUL DAEHAKGYO PŎPHAK [SEOUL NATIONAL UNIVERSITY LAW REVIEW] 164, 168(May 1995) (S. Korea); Lee, *Covenants Not to Compete*, *supra* note 152, at 88.

<sup>160</sup> Supreme Court of Korea, Judgment of Nov. 26, 1996, Case No. 96da31574. See also Supreme Court of Korea, Judgment of Dec. 23, 1996, Case No. 96da16605.

covenants not to compete after the termination of an employment relationship has been controversial among scholars, and the courts have shown a lack of consistency in their precedents. Primarily in this area, scholars and courts have debated and examined two important issues: (1) whether the Korean UCPA can be a legal basis for injunctive relief that restricts the ability of a former employee to compete with a former employer in the absence of a separate covenant not to compete; and (2) which factors should be examined to assess the reasonableness of covenants not to compete.

With respect to the first issue, the injunction provision of the Korean UCPA provides that a trade secret holder who is injured or *threatened* by a trade secret misappropriation can seek a court prohibition or preventive order against a trade secret misappropriator.<sup>161</sup> In this case, the holder can also request the destruction of goods and the removal of facilities used in the misappropriation, or any other measures necessary to prohibit or prevent the misappropriation.<sup>162</sup> However, the provision does not indicate whether a former employer may enjoin a former employee from working for a competitor without having the employee sign a covenant not to compete. Accordingly, the issue has become a hot topic among legal scholars and commentators. On the one hand, some scholars have argued that a former employee's duty of noncompetition may be established on the basis of an explicit agreement; thus, the former employer may not resort to the injunction provision of the Korean UCPA when the employer wants to seek an injunction to prohibit the former employee from working in a job in which the trade secrets acquired by the employee would be used or disclosed in the absence of an explicit agreement.<sup>163</sup> On the other hand, scholars argue that even if a former employee did not owe a duty of

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<sup>161</sup> 2009 Korean UCPA, *supra* note 1, art. 10.

<sup>162</sup> *Id.*

<sup>163</sup> See Lee, *Covenants Not to Compete*, *supra* note 152, at 88.

nondisclosure, the employee has a duty not to misappropriate trade secrets within a reasonable scope of duration and geography without regard to the employment relationship before or after.<sup>164</sup>

Likewise, until recently, the lower courts in Korea have shown inconsistencies in relevant precedents. In some cases, the courts have found that a former employer could seek an injunction to prohibit a former employee from engaging in work in a specific position in which the trade secret would be used or disclosed when it would be impossible to protect the trade secret unless the former employee was prohibited from working for a competitor.<sup>165</sup> On the contrary, some lower courts have found that the injunction provision cannot be a positive law for an injunction to prohibit a former employee from working for a competitor.<sup>166</sup> In 2003, the Supreme Court of Korea ended the debate on the issue, stating that a former employer could seek an injunction to prevent a former employee from working in a specific position in which a trade secret would be used in or disclosed to a competing firm.<sup>167</sup> In that case, Samsung Electronics Co. and Pantech Co. Ltd. were competitors in the mobile handset business, and the defendant was an R & D team leader with Samsung Electronics Co. who left to take a CEO position with Pantech Co. Ltd. The lower court held that “where a specific covenant not to compete between the parties is not recognized, given that claim of prohibition of an employee’s changing a job inevitably restricts the employee’s freedom to choose his or her occupation under the Constitution, in principle, it is not allowed to seek an injunction to prohibit the employee from

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<sup>164</sup> See JONG & PARK, *supra* note 50, at 99, citing Sangjo Jong, *Yōngōppimil chimhaeguemjicheonggukwonui siganjeok beomwi* [Time Scope of Injunction Claim of Trade Secret Misappropriation], in SANGSAPANRAEYŌN’GU [COMMERCIAL CASE STUDIES] 392 (2000) (S. Korea).

<sup>165</sup> See, e.g., Seoul District Court of Korea, Judgment of Mar. 27, 1995, Case No. 94kahap12987; Incheon District Court of Korea, Judgment of Dec. 5, 2000, Case No. 2000gahap658.

<sup>166</sup> See, e.g., Incheon District Court of Korea, Judgment of Sep. 14, 2004, Case No. 2004kahap1189.

<sup>167</sup> Supreme Court of Korea, Judgment of July 16, 2003, Case No. 2002ma4380.

working for a competitor based solely on section 1 of Article 10 of the Korean UCPA.”<sup>168</sup>

However, the Supreme Court recognized the possible application of the Korean UCPA in issuing an injunction under limited circumstances, stating that

where it would be impossible to protect a trade secret of the plaintiff unless the former employee were prohibited from engaging in the trade secret-related work in the new firm, it may be available to prohibit the former employee from engaging in the trade secret-related work in the new firm as a necessary measure to prohibit or prevent the trade secret misappropriation on the basis of paragraph 1 of Article 10 of the Korean UCPA.<sup>169</sup>

This was the first Korean Supreme Court case that recognized the Korean UCPA as a legal basis for an injunction to prohibit a former worker from engaging in specific work in a competing firm in which the trade secret of the former employer would be used or disclosed. Interestingly, a closer examination of the case shows how the Court struggled to balance conflicting interests between the employer, as a trade secret holder, and the employee, as one who has the Constitutional right to choose his or her occupation and engage in work. In fact, the intent of the court does not seem to be to prohibit a former employee from working for a competitor, but to prohibit him or her from working in a specific position in which a trade secret acquired by the former employee in the course of employment in a firm would inevitably be used or disclosed in a competing firm. In this context, we may assume that the court tried to avoid severe and direct restriction of the employee’s Constitutional right to freedom of occupation by limiting the scope of the application of the Korean UCPA to an injunction against the former employee only to the extent of *trade secret-related work in the new firm*. Nevertheless, in this case, the court did not explain in detail any limited or exceptional circumstances. In addition, even if, after the decision,

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<sup>168</sup> Seoul High Court of Korea, Judgment of Nov. 12, 2002, Case No. 2002ra313.

<sup>169</sup> However, the Court held in favor of the defendant because it did not find this case fell into the limited situation without sufficient explanation on the “limited situation.” Supreme Court of Korea, Judgment of July 16, 2003, Case No. 2002ma4380.



the possible application of the Korean UCPA in seeking an injunction against the former employee in the absence of a separate covenant not to compete was followed by lower courts, in these cases, there was no clear explanation of the circumstances.<sup>170</sup> As a result, this issue deriving from the Court's statement has led scholars to question what the limited circumstances are, and it has triggered another problem in the law of postemployment restraints in Korea, which should be resolved by the accumulation of relevant decisions by the courts.<sup>171</sup>

With respect to the second issue, courts in Korea have adopted a reasonableness approach to determine the validity of postemployment covenants not to compete. In other words, a postemployment covenant not to compete is valid if it is reasonable in view of the circumstances of the case.<sup>172</sup> To examine the validity and enforceability of the covenant, the courts in Korea, like their counterparts in the United States and Japan, have principally considered three aspects. As mentioned before, under the Korean Constitution, the rights of the freedom to choose an occupation and to engage in work must be protected. Accordingly, in cases involving postemployment covenants not to compete that would directly restrain these rights, the primary role of the courts seems to be to protect the employee, who often has unequal bargaining power, from having undue hardship imposed through the agreement.<sup>173</sup> In addition, the courts in Korea have considered the interests of employers in protecting valuable information.<sup>174</sup> Finally, within

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<sup>170</sup> See JONG & PARK, *supra* note 50, at 99 n.265, citing Seoul Eastern District Court of Korea, Judgment of May 18, 2006, Case No. 2005gahap13637; Seoul High Court of Korea, Judgment of Dec. 20, 2007, Case No. 2007ra509.

<sup>171</sup> See, e.g., JEONG-HWAN CHOI, KÜLLOJA ŪI JEONJIK GUMJIYAKJEONGGWA YÖNGÖPPIMIL POHOUIMU [POSTEMPLOYMENT COVENANTS NOT TO COMPETE AND DUTY OF PROTECTING TRADE SECRETS], JÖNGPOPÖPPANRAEBAESÖN [INFORMATION LAW CASES 100] 808, 814 (2006).

<sup>172</sup> Supreme Court of Korea, Judgment of June 13, 1997, Case No. 97da8229; Seoul District Court of Korea, Decision of June 17, 1997, Case No. 97kahap758.

<sup>173</sup> Supreme Court of Korea, Decision of Mar. 29, 2007, Case No. 2006ma1303.

<sup>174</sup> See Suwon District Court of Korea, Decision of June 7, 2000, Case No. 2000kahap95 (granting a preliminary injunction against a former employee who worked in an information technology area for one year after the termination of the employment relationship).

Korean constitutional theory, the Constitutional right of the freedom to choose an occupation has only had an indirect effect on private contracts, and the right is protected through Article 103 of the Korean Civil Code, which is a general provision governing the validity of a private contract.<sup>175</sup> Thus, public policies (“good morals and other social order” or “restraint of free competition”) are also one aspect of the courts’ consideration.<sup>176</sup>

The reasonableness of a postemployment covenant has been examined based on several factors: “the existence of protectable employer interests, a former employee’s position in a former employer’s firm, durational and geographical scope of the restraint, field of work, the existence of compensation offered to an employee, reasons for termination of the employment relationship, public interests, and so on.”<sup>177</sup> However, the courts have shown inconsistency and unpredictability in examining these factors in relevant precedents. For example, with regard to the scope of an employer’s protectable interests, which may be the central problem of postemployment covenants not to compete, the courts have been in disagreement. Under the Korean UCPA, most courts have confined a trade secret to a protectable interest, but in the case of the lower courts, the protection of an employer’s protectable interests has extended somewhat beyond the scope of trade secrets under the Korean UCPA.<sup>178</sup> Until recently, the question of whether severance should be applied to an unreasonable postemployment covenant not to compete (e.g., regarding duration or geographical scope) has also been debated.<sup>179</sup> However, the

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<sup>175</sup> See Minpōp [Civil Code], Law No. 8720, 2007, art. 103 (S. Korea) (“A juristic act which has for its object such matters as are contrary to good morals and other social order shall be null and void.”).

<sup>176</sup> See Seoul Central District Court of Korea, Decision of Mar. 19, 2008, Case No. 2007kahap3903 (pointing out the public interest as a factor to be considered).

<sup>177</sup> *Id.*

<sup>178</sup> See *id.* (holding that despite the fact that the knowledge or information does not qualify as a trade secret, an employer’s protectable interest may include knowledge or information which is possessed by only a former employer).

<sup>179</sup> See Shin, *supra* note 72, at 223.

Supreme Court of Korea, in a recent decision, recognized the court's authority to reduce the duration of the restraining covenant.<sup>180</sup> Finally, with respect to the issue of whether compensation (*daesang*) is required for covenants not to compete to be valid or enforceable, although legal scholars and commentators have expressed disagreement on this point,<sup>181</sup> the courts in Korea have not looked at this factor as one of the requirements for a covenant not to compete to be valid.<sup>182</sup>

#### 4. Summary

In 1991, trade secret law was adopted in Korea based on a strategic judgment regarding economic and trade policy in response to trade pressures from foreign countries. After its adoption, in response to grave concern about espionage cases that could undermine the international competitiveness of Korean industries, the Korean government began to strengthen trade secret protection in the late 1990s. However, conflict between corporate control of valuable information and employee freedom has now emerged and has sharpened in Korean society in recent years. For example, the Korean government took a more active role in deterring trade secret-related cases than did the Japanese government because the Korean UCPA not only

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<sup>180</sup> Supreme Court of Korea, Decision of Mar. 29, 2007, Case No. 2007ma1303.

<sup>181</sup> See Shin, *supra* note 72, at 249-51. Most labor law scholars assert that compensation is a requirement for the validity of postemployment covenants not to compete because of the feature of covenants not to compete, which is a comprehensive restriction on an employee's Constitutional rights through a contract by parties with unequal bargaining power. By contrast, scholars in the intellectual property area argue that salary and wages for an employee during the employment relationship may become compensation, and they support the covenants not to compete.

<sup>182</sup> Seoul Central District Court of Korea, Decision of Mar. 19, 2008, Case No. 2007kahap3903. The court stated that although the defendant did not receive direct monetary compensation, the defendant enjoyed job security for a long time and had chances for promotion in a specific field in which the defendant keep his professionalism. In this context, the lack of direct compensation for covenants not to compete alone does not affect their validity.

criminalized attempts to, preparation to, and conspiracy to misappropriate trade secrets, but also provided prosecutors with the discretion to decide whether to file charges against perpetrators without a victim's complaint. Furthermore, the newly enacted 2006 ITPA provided administrative authorities with broad discretion to designate industrial technology that was the subject matter for criminal sanctions under the ITPA, and it imposed a duty of confidentiality on workers for entities with the designated industry technologies that were subject to criminal liability in breach of the duty of confidentiality.

In addition, even though the courts in Korea, like those in the United States and Japan, have also endeavored to prevent the excessive expansion of a trade secret holder's rights by limiting the subject matter protectable under the Korean UCPA and limiting the duration of injunctive relief, the approach of the courts appears to have been more in favor of employers in the area of laws governing restrictive postemployment covenants. In fact, although the courts in Korea have adopted a relatively strict reasonableness standard in assessing the validity of covenants not to compete, they have not only recognized their authority to sever or reduce the duration of the covenants so as to permit partial enforcement, but have also extended the applicability of trade secret law as a legal basis for an injunction to prohibit a former employee from engaging in specific work in a competing firm in which the former employer's trade secret would be used or disclosed. These sterner measures by the government and courts to deter industrial espionage and trade secret misappropriations have been criticized by opponents based on concerns about the possibility of excessive restraint on a former employee's Constitutional right to choose employment and to work and earn a living.

## CHAPTER V. ECONOMIC THEORY OF TRADE SECRET LAW

### 1. Law and Economics of Trade Secret Protection from a Comparative Perspective

Trade secret law in Japan and Korea was adopted in these countries for strategic reasons that were mainly influenced by extrinsic motivation. As a result, the initial impact of the imported law on the behavior of the relevant parties in these countries did not seem to be profound. As observed earlier, however, as socioeconomic circumstances have changed since the recent economic downturns, trade secret law in the two Asian countries has been dramatically strengthened, based primarily on internal motivation. This raises two questions: What is the practical impact of the initial adoption and recent development of trade secret law on relevant parties, such as firms? and How can the impact on the relevant parties' incentives be explained in a sophisticated way?

However, it is widely accepted that an imported law often has different effects on the behavior of the relevant parties in the receiving legal system because the receiving country's political, social, and economic structures are not homogeneous with those of the donor country.<sup>1</sup> Thus, in certain circumstances, an endogenous alternative in the receiving country, such as an existing local institution or social norm, as a *substitute* for the imported legal rule may fit better and be more efficient in the context of the receiving country. Given the above fact, as noted earlier, the analytical tools and concepts used in the economic analysis of law provide more sophisticated methods in comparative law, which presupposes different laws or institutions in donor and receiving states that allow us to capture the endemic incentive structures surrounding

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<sup>1</sup> See David Nelken, *Towards a Sociology of Legal Adaptation*, in ADAPTING LEGAL CULTURES 35-70 (David Nelken & Johannes Feest eds., 2001).

the imported law in the receiving states.<sup>2</sup> Accordingly, to investigate the answers to these questions, this chapter discusses the existing economic theory of trade secret law and relevant empirical works that support the theory in the United States.

The issue of trade secret protection is closely related to questions of innovation policy and human capital embodied in employees. This chapter examines the existing economic theory of trade secret law, focusing on incentive theory, the fencing cost, reverse engineering, and postemployment covenants not compete. The functional analysis used here in economic analysis of trade secret law in the United States enables us to identify local substitutes for trade secret law and restrictive postemployment covenants in the two Asian countries before trade secret law was adopted in the early 1990s. Further, it plays a role in explaining the incentive structures of relevant parties, which appear to have changed in recent years since the economic downturns in the two countries. In addition, it helps us assess the current role of these substitutes in the context of trade secret protection in these countries based on recent empirical works, which would be a significant consideration for a normative standard for evaluating trade secret law and relevant policy.

## **2. Law and Economics of Trade Secrets**

### **2.1. Incentive Theory**

As has been established, trade secret law does not confer an absolute exclusive right because it allows competitors to appropriate a given qualified trade secret through reverse engineering or independent discovery. In addition, to protect the information under trade secret

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<sup>2</sup> See Introduction.

law, the owner must take reasonable security precautions. These characteristics of the law may distinguish trade secret law not only from property law but also from other intellectual property laws, such as patent law. Despite the differences between trade secret law and other forms of intellectual property rights, scholars who focus on incentive theories suggest that trade secrets share some critical features with intellectual property rights, although their views are still controversial to some extent.<sup>3</sup>

Like other forms of intellectual property laws, trade secret law is said to provide “a means of internalizing the benefits of innovation.”<sup>4</sup> There are three primary economic arguments on incentive theories for trade secret law. The first is that the law promotes incentives to invent and create valuable information.<sup>5</sup> For example, Kitch argues that trade secret law provides firms with incentives to invest in trade secrets, which have a low depreciation rate and are thus “especially subject to the risk of theft.”<sup>6</sup> Friedman, Landes, and Posner also focus on the

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<sup>3</sup> See, e.g., William M. Landes & Richard A. Posner, *The Economics of Patent Law*, in *THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* 294-333(2003) [hereinafter LANDES & POSNER, *ECONOMIC STRUCTURE*] (“The standard rationale of patent law is that it is an efficient method of enabling the benefits of research and development to be internalized, thus promoting innovation and technological progress.”).

<sup>4</sup> David D. Friedman, William M. Landes & Richard A. Posner, *Some Economics of Trade Secret Law*, 5 J. ECON. PERSP. 61, 64 (1991) [hereinafter Friedman et al., *Economics of Trade Secret Law*].

<sup>5</sup> See, e.g., Mark A. Lemley, *The Surprising Virtues of Treating Trade Secrets as IP Rights*, 61 STAN. L. REV. 311, 329-32 (2008) [hereinafter Lemley, *Trade Secrets as IP Rights*] (arguing “the additional incentive provided by trade secret law is important for innovation,” noting that trade secret law has a broader scope of subject matter than patent law); Friedman et al., *Economics of Trade Secret Law*, *supra* note 4, at 71 (“the law of trade secrets may have surprising efficiency properties that would reward further research.”); MICHAEL J. TREBILCOCK, *THE COMMON LAW OF RESTRAINT OF TRADE: A LEGAL AND ECONOMIC ANALYSIS* 120-25 (1986); Edmund W. Kitch, *The Law and Economics of Rights in Valuable Information*, 9 J. LEGAL STUD. 683 (1980) [hereinafter Kitch, *Valuable Information*]. *But see* Michael Risch, *Why Do We Have Trade Secrets?*, 11 MARQ. INTELL. PROP. L. REV. 1, 26-28 (2007) [hereinafter Risch, *Why Trade Secrets?*] (“creating incentives to innovate is a very minor justification of trade secret law.”); Robert G. Bone, *A New Look at Trade Secret Law: Doctrine in Search of Justification*, 86 CAL. L. REV. 243, 262-70 (1998) [hereinafter Bone, *Trade Secret Law*] (analyzing and criticizing the incentive-based argument for trade secret law). *See also* Michael Risch, *Trade Secret Law and Information Development Incentives*, in *THE LAW AND THEORY OF TRADE SECRECY: A HANDBOOK OF CONTEMPORARY RESEARCH* (Rochelle C. Dreyfuss, Katherine J. Strandburg, eds., 2010).

<sup>6</sup> Kitch, *Valuable Information*, *supra* note 5, at 714. In his welfare analysis, Kitch seems to ground his argument, which relates to the incentive effect of the law, on the difference between the characteristics of information goods and markets and those of traditional, tangible goods. He explains (1) “information is self-protecting”; (2) “firm organization substitutes for contract”; and (3) “markets transmit information.” *Id.* at 708-23.

incentive effect of trade secret law and suggest that “the law of trade secrets may have surprising efficiency properties that would reward further research.”<sup>7</sup> They point to countries such as Japan, Germany, and the United Kingdom that have weaker trade secret laws and suggest that these countries “generate higher information costs compared to the corresponding practices of American firms.”<sup>8</sup> Similarly, Lemley argues that “[trade secret law] gives the developer of new and valuable information the right to restrict others from using it, and therefore the prospect of deriving supracompetitive profits from information.”<sup>9</sup> He also noted the reasoning in *Kewanee Oil Co. v. Bicron Corp.*,<sup>10</sup> in which the court recognized the effect of state trade secret law on incentives to invent.<sup>11</sup>

With respect to the incentive effect in trade secret law, Friedman, Landes, and Posner focus particularly on features of the state trade secret protection regime, complementary to the federal patent regime, and suggest that “trade secret law supplements the patent system” because “patent law cannot be tailored finely enough to cover every case.”<sup>12</sup> They argue that under some circumstances and for particular types of inventions, trade secret protection may provide firms with more incentive than patent protection. They also suggest three categories of invention in which inventors have an incentive to opt for trade secret protection: (1) when the cost of patent

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<sup>7</sup> Friedman et al., *Economics of Trade Secret Law*, *supra* note 4, at 71.

<sup>8</sup> *Id.*

<sup>9</sup> Lemley, *Trade Secrets as IP Rights*, *supra* note 5, at 330.

<sup>10</sup> 416 U.S. 470, 484-85 (1974).

<sup>11</sup> Lemley, *Trade Secrets as IP Rights*, *supra* note 5, at 330. As to whether patent law preempts state trade secret law, the court recognized the role of state trade secret law to “encourage invention in areas where patent law does not reach, and . . . prompt the independent innovator to proceed with the discovery and exploitation of this invention” by holding that “the patent policy of encouraging invention is not disturbed by the existence of another form of incentive [such as trade secret protection] to invention. 416 U.S. 470, 484-85 (1974).

<sup>12</sup> Friedman et al., *Economics of Trade Secret Law*, *supra* note 4, at 64. Lemley also notes this feature of trade secret protection as a complement to patent law and suggests that “[trade secret law] need merely provide sufficient advantage in terms of lead time or relative costs to minimize or eliminate the public goods problem.” Lemley, *Trade Secrets as IP Rights*, *supra* note 5, at 329-32.



protection is high compared with the value of the information at stake, (2) when keeping information secret is more valuable than disclosing the information in exchange for patent-monopoly rights limited to a specific protection period, and (3) when the invention is not patentable.<sup>13</sup> In fact, in terms of the cost-effectiveness of trade secret protection, some empirical works have examined U.S. firms' strategic choice of trade secret protection. Lerner sought to learn "how firms choose between various forms of intellectual property protection" by examining the patterns of litigation among 530 manufacturing firms based in Massachusetts that had litigated in the federal and state judicial systems.<sup>14</sup> He focused on "firm size, research intensity, and access to capital," and found that "cases involving informal protection—through the mechanism of trade secrecy rather than patents, trademarks or copyrights—are commonplace, figuring in 43% of the intellectual property disputes," and that "intellectual property cases litigated by smaller firms disproportionately involve trade secrecy."<sup>15</sup> The findings of Cordes,

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<sup>13</sup> Friedman et al., *Economics of Trade Secret Law*, *supra* note 4, at 62-66. While Bone criticizes the above argument, especially (2) and (3) on the grounds that "[the argument] exaggerates the benefits of trade secret law and underestimates the costs," and thus "it is not clear that trade secret law promotes creation incentives to the extent necessary to justify its additional costs," he recognized the effect of trade secret law in enhancing incentives in two situations: (1) "intermediate research results" and (2) "nontechnological information." Bone, *Trade Secret Law*, *supra* note 5, at 262-72.

<sup>14</sup> Josh Lerner, *The Choice of Intellectual Property Protection: Evidence from Civil Litigation 1* (Harv. Bus. Sch., Unpublished Working Paper, 2001).

<sup>15</sup> *Id.* Indeed, in the United States, trade secret protection appears to be a more useful mechanism for SMEs with limited research intensity and limited access to capital for protecting their technological innovations. In practice, however, the firms' choice between patent protection and trade secret protection is a complex process; thus, the reasons for SMEs' propensity for trade secret protection may vary across industries. See Welsey M. Cohen et al., *Protecting Their Intellectual Assets: Appropriability Conditions and Why U.S. Manufacturing Firms Patent (or Not)* (NBER Working Paper, 2000); Andrew Beckerman-Rodau, *The Choice Between Patent Protection and Trade Secret Protection: A Legal and Business Decision*, 84 J. PAT. & TRADEMARK OFF. SOC'Y 371 (2002). For example, firms with a limited capability to enforce intellectual property rights may not patent their patentable inventions, but keep them secret because they are concerned that "disclosure through patenting or voluntary disclosure will provide competitors with usable information." James J. Anton & Dennis A. Yao, *Little Patents and Big Secrets: Managing Intellectual Property*, 35 RAND J. ECON. 1, 1 (2004); see also Ignatius Horstmann et al., *Patents as Information Transfer Mechanisms: To Patent or (Maybe) Not to Patent*, 93 J. POL. ECON. 837, 839 (1985) (predicting that "the propensity to patent will be lower the more profitable (ex ante) a competing product is expected to be . . . if patenting directly reveals information that raises profits for the competitor, the equilibrium propensity to patent is reduced. This seems to be what is meant by 'trade secrecy.'"). However, this is also the case concerning the cost-effective aspects of trade secret protection, to which financially weaker firms would be sensitive.

Hertzfeld, and Vonortas also support the cost-effectiveness of trade secret protection. They examined small high-technology firms in the United States and found that patent protection was less important than informal means of intellectual property protection, such as trade secrets and lead time, and that one of the primary reasons for not relying on patents was the cost of patents.<sup>16</sup>

The second economic argument on incentives in trade secret law is that trade secret law, by providing legal protection, creates incentives not to invest expenditures wastefully on self-help. Courts and scholars supporting this view argue that trade secret owners would invest expenditures wastefully on precautionary measures and countermeasures in an extremely costly manner in the absence of trade secret law, which would increase the social cost as well as the private cost.<sup>17</sup> In fact, Lemley provides two pieces of empirical evidence (guilds in the Middle

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<sup>16</sup> JOSEPH. J. CORDES, HENRY R. HERTZFELD & NICHOLAS S. VONORTAS, A SURVEY OF HIGH TECHNOLOGY FIRMS 55-59 (U.S. Small Business Administration, February 1999) (“lead time dominated all other means of intellectual property protection in terms of respondents rating it as important or very important. Keeping trade secrets was rated a very close second for protecting product innovations and, even more, process innovations. . . . The most important limitations of patent protection were reported to be . . . High enforcement costs (74%) Competitors can legally invest around most patents (72%) Portfolio of patents is too expensive to maintain (61%) Rapid changes in technology limit patent protection (57%)”). Indeed, the costs of patents have been said to be one of the greatest barriers to SMEs’ resorting to patent protection:

In budgeting the costs relating to the acquisition of IP rights, companies need to take into consideration not only the official fees (including application fees, publication fees and maintenance fees) but also the costs relating to legal advice and translation costs whenever the applicant intends to apply for protection abroad. Overall, the costs of protection may be perceived by many SMEs as exceeding the potential benefits to be obtained from protection, particularly considering that a significant part of the costs may be incurred before the product has reached the market and that lenders, investors or government programs rarely provide financial support for the protection of IP rights.

OECD, NETWORKS, PARTNERSHIPS, CLUSTERS AND INTELLECTUAL PROPERTY RIGHTS: OPPORTUNITIES AND CHALLENGES FOR INNOVATIVE SMEs IN A GLOBAL ECONOMY 45 (2004), <http://www.oecd.org/dataoecd/6/10/31919244.pdf> (last visited July 5, 2009).

<sup>17</sup> See, e.g., *E.I. DuPont deNemours & Co. v. Christopher*, 431 F.2d 1012, 1016 (5th Cir. 1970) (“To require DuPont to put a roof over the unfinished plant to guard its secret would impose an enormous expense to prevent nothing more than a school boy’s trick.”); Friedman et al., *Economics of Trade Secret Law*, *supra* note 4, at 68-69 (“Denial of legal protection might induce firms in Du Pont’s position to invest heavily on roofing over construction sites; and the competitors expended real resources on hiring an airplane and pilot to steal Du Pont’s trade secret. Holding the defendant liable induces him not to spend real resources on the airplane and pilot and eliminates Du Pont’s incentive to spend excessively on roofing.”); Richard Posner, Note, *Trade Secret Misappropriation: A Cost-Benefit Response to the Fourth Amendment Analogy*, 106 HARV. L. REV. 461, 476 (1992) [hereinafter Posner, *Trade Secret Misappropriation*]; Risch, *Why Trade Secrets*, *supra* note 5, at 26 (2007) (“the primary benefit of trade secret law is the decrease in both the amount spent on protection secrets and the amount spent by those who seek to learn them.”);

Ages, Mexico, and Brazil without strong legal protection for secrets) “that overinvestment in secrecy is a real problem in the absence of trade secret protection”; thus, disclosure of information is inefficiently hindered.<sup>18</sup>

The third argument, which is closely related to the second, is that trade secret law provides incentives to diffuse the knowledge embodied in inventions and innovations. Scholars in favor of this view argue that regardless of the nature of the trade secrets for which secrecy is required under trade secret law, trade secret law actually encourages disclosure or use of information and facilitates an exchange of value through licensing, and thus provides the benefit of these innovations to the public.<sup>19</sup> Regarding what makes this possible, Lemley suggests ways in which the disclosure of information occurs and the reasons it occurs. He explains that “[t]rade secret law developed as a substitute for the physical and contractual restrictions those companies would otherwise impose in an effort to prevent a competitor from acquiring their information.”<sup>20</sup> According to Lemley, trade secret law serves to resolve a paradoxical situation (referred to as “Arrow’s information paradox”) in which, in the absence of special legal protection, a developer of valuable information has difficulty selling his or her information in the open market, because to sell the information, he or she must reveal it to a potential buyer who wants to evaluate the information, but the information will lose the status of secrecy through such a revelation.<sup>21</sup>

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Lemley, *Trade Secrets as IP Rights*, *supra* note 5, at 334.

<sup>18</sup> Lemley, *Trade Secrets as IP Rights*, *supra* note 5, at 334-35.

<sup>19</sup> *Id.* at 332-37. See also Steven N. S. Cheung, *Property Rights in Trade Secrets*, 20 *ECON. INQUIRY* 40, 44 (1982) (“Without legal protection, it would become impossible to delineate and enforce exactly what right the buyer or licensee is getting, since after the transaction either party has the capability to reveal the secret to someone else.”). But see Bone, *Trade Secret Law*, *supra* note 5, at 272-81 (criticizing a theory of creating incentive effect of trade secret law on transfer information, arguing the theory “ignores enforcement costs and underestimates the transaction costs of licensing”).

<sup>20</sup> Lemley, *Trade Secrets as IP Rights*, *supra* note 5, at 334.

<sup>21</sup> *Id.* at 332-37. For Arrow’s Information Paradox, see Kenneth J. Arrow, *Economic Welfare and the Allocation of Resources for Invention* 9-10 (RAND Corporation, RAND paper P-1856-RC, 1959), available at <http://www.rand.org/pubs/papers/P1856/> (last visited Oct. 5, 2010). But Kitch points out the “low depreciation rate”

## 2.2. Reasonable Security Precautions and Fencing Cost

Trade secret protection requires those seeking to assert it to incur several costs arising from the very nature of trade secrets. Under the Uniform Trade Secrets Act, in addition to the requirement of secrecy-in-fact, trade secret law further requires the holder of a trade secret to make reasonable efforts to maintain its secrecy and to demonstrate those efforts in trade secret cases.<sup>22</sup> This security requirement can also be said to be one of the unique features of trade secret protection, which may limit the rights of trade secret holders, compared with other property rights and intellectual property rights.<sup>23</sup> Because it seems clear that trade secret holders may rely less on trade secret protection when too high a fencing cost is required, two questions arise:<sup>24</sup> Why does trade secret law require the owner of trade secrets to incur a further fencing cost to maintain secrecy in a situation in which trade secret law provides formal legal protection of valuable secret information? In other words, what is the role of or justification for this unusual requirement in the area of trade secret law? and Given the role (or economic arguments) of trade secret law in innovation, what level of reasonable secrecy effort would optimize the regime of trade secret protection?

Law and economics scholars have suggested some possible answers to these questions.

Kitch argues that the reasonable security precaution requirement is in place to provide an

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of information protected under trade secret law, explaining why trade secret protection is offered. Kitch, *Valuable Information*, *supra* note 5, at 714. *But See* Cheung, *supra* note 18, at 44-47 (examining the defects of trade secret protection regarding “(1) obstruction of the spread of new ideas which could otherwise be put to use through contractual agreements; and (2) the dissipation of economic rents”).

<sup>22</sup> See UNIF. TRADE SECRETS ACT §1 (4), 14 U.L.A. 537 (2005).

<sup>23</sup> Usually, property rights provide legal remedies regardless of the owner’s self-help measures against infringements. Likewise, patent law and copyright law do not require holders of these rights to take reasonable measures against infringements.

<sup>24</sup> *Rockwell Graphic System, Inc. v. Dev Industries*, 925 F.2d 174, 180 (7th Cir. 1991) (“If trade secrets are protected only if their owners take extravagant, productivity-impairing measures to maintain their secrecy, the incentive to invest resources in discovering more efficient methods of production will be reduced, and with it the amount of invention.”).

evidential effect for the existence of trade secrets in trade secret cases by giving notice to others, including employees.<sup>25</sup> In fact, with respect to courts' approach on the reasonable security precaution, he looks closely at *E.I. DuPont deNemours & Co. v. Christopher*<sup>26</sup> and seeks the justification for this requirement from the policy consideration in which trade secret law should not frustrate "the law's policy of free movement." He further argues that a trade secret owner's "overt protection," as required by the law, could assist in balancing conflicting interests between an employer and an employee.<sup>27</sup> He argues, based on this recognition, that the reasonable security precaution requirement can be achieved when there is "a reasonable probability that the secrets are in fact secret" and a notice related to trade secrets is given to employees.<sup>28</sup>

Friedman et al. suggest that the fencing cost "should be roughly proportional to the value of the secret to prospective appropriators, and hence should be low when the secret is of modest value."<sup>29</sup> Judge Posner, in turn, argues that, as a "guiding principle," the court should adopt "cost-benefit" analysis, and that the "marginal cost of those measures [should] equal [the] marginal expected economic loss in the event of misappropriation, that is, the value of the trade

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<sup>25</sup> Kitch, *Valuable Information*, *supra* note 5, at 698-99. *See also* Posner, *Trade Secret Misappropriation*, *supra* note 17, at 473 n.75 ("Security precautions serve to identify proprietary trade secrets, which, unlike tangibles or patents, do not have clearly delineated content or ownership. The evidentiary value of security precautions partially explains why the law requires the trade secret owner to protect himself but does not impose similar requirements on other property owners."). *But see* Robert G. Bone, *Trade Secrecy, Innovation, and the Requirement of Reasonable Secrecy Precautions* 16-17 (Boston U. Sch. of Law, Working Paper No. 09-40, Sept. 2009) (arguing that the "RSP requirement must be justified by something other than its evidentiary and notice benefits.").

<sup>26</sup> 431 F.2d 1012, 1016 (5th Cir. 1970).

<sup>27</sup> Kitch, *Valuable Information*, *supra* note 5, at 699.

<sup>28</sup> *Id.* 698-99 (explaining that courts require trade secret owners to invest in sufficient measures so that "there is a reasonable probability that the secrets are in fact secret," or "the employees know that confidentiality is claimed for the information involved, and so that the employer is not free to claim later that some information acquired by the employee is secret even though he was not notified of it at the time."). *See also* Note, *The Law of Trade Secrets: Toward a More Efficient Approach*, 57 VAND. L. REV. 1269, 1296 (2004) ("Imposing liability without regard to the actions of a victim, without concern for reasonable precautions, allows the innovator to avoid the inefficient and potentially costly undertaking of providing such precautions. . . . Requiring an innovator to take reasonable precautions to insure the secrecy of her idea is inefficient.") (footnote omitted).

<sup>29</sup> Friedman et al., *Economics of Trade Secret Law*, *supra* note 4, at 63.

secret to the owner multiplied by the decrease in the risk that the secret will be discovered by a competitor brought about by taking additional precautions.”<sup>30</sup> He further argues that a trade secret owner “will only be required to invest in such measures until the judicial remedy, with all of its concomitant social costs, becomes the cheaper means of protection.”<sup>31</sup>

### 2.3. Reverse Engineering

Unlike the holder of patent protection, which allows a patent holder to sue anyone who infringes the patent, regardless of the means undertaken by the infringer, the owner of a trade secret is allowed to secure a legal remedy only against a party engaged in *misappropriation*, which means improperly acquiring, disclosing, or using trade secrets. Generally, reverse engineering does not fall into the scope of “improper means” under trade secret law. As we have seen, the right to reverse engineer is well-perceived legal doctrine among courts and legal scholars.<sup>32</sup>

Likewise, law and economics scholars have supported reverse engineering as a suitable

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<sup>30</sup> Posner, *Trade Secret Misappropriation*, *supra* note 17, at 473.

<sup>31</sup> *Id.* at 474. With respect to the benefits of the cost-benefit analysis, Posner also argues that

[t]his cost-benefit framework not only has logical appeal, but also would reduce deadweight loss, encourage invention, and facilitate implementation of trade secret protection policies by firms. . . . [T]his cost-benefit framework, unlike the Fourth Amendment analogy, also avoids the risk that society will overprotect trade secrets by conflating causes of action designed to protect personal privacy with those designed to protect intellectual property. . . . Finally, this framework accounts for differences among firms.

*Id.* at 476-78.

<sup>32</sup> See Pamela Samuelson & Suzanne Scotchmer, *The Law and Economics of Reverse Engineering*, 111 YALE L.J. 1575, 1583 (2002) (explaining that “the legal right to reverse-engineer a trade secret is so well-established that courts and commentators have rarely perceived a need to explain the rationale for this doctrine.”).

way to improve social welfare.<sup>33</sup> From an economic perspective, scholars further argue that reverse engineering is permissible and desirable because it is more efficient from a social standpoint. Friedman et al., drawing an analogy between international law on espionage and trade secret law, argue that the social costs of forbidding reverse engineering of competitors' commercial secrets are higher than the social benefits of information sharing between firms through reverse engineering.<sup>34</sup> They note the difference between private costs—the trade secret owner's "expected loss from losing its trade secret and the costs of preventing the loss"—and social costs incurred by trade secret owners and argue that "reverse engineering will often generate knowledge about the product being reverse engineered that will make it possible to improve on it."<sup>35</sup> In this way, current trade secret law provides incentives for a potential injurer (a competitors to a trade secret owner) to choose reverse engineering over theft, a choice that may lead to investment or innovation.<sup>36</sup> Law and economics scholars also note that if reverse engineering were prohibited in trade secret law, a trade secret owner would have "a [*de facto*] perpetual patent law," and this would be in conflict with patent policy, which intends to grant a limited monopoly in exchange for disclosure of the patented information. In addition, restricting reverse engineering has anticompetitive effects and may impede further innovation.<sup>37</sup> The latter view was explicitly expressed in commentators' response to the adoption of the Economic Espionage Act (EEA) of 1996.<sup>38</sup> Scholars have criticized the EEA's lack of clarity on whether

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<sup>33</sup> See, e.g., Friedman et al., *Economics of Trade Secret Law*, *supra* note 4, at 71.

<sup>34</sup> *Id.* at 67. ("In the case of reverse engineering, then, the social cost-benefit calculus appears to favor denial of legal protection.")

<sup>35</sup> *Id.* at 70.

<sup>36</sup> *Id.* at 66-71.

<sup>37</sup> See, e.g., *Id.*; Samuelson & Scotchmer, *supra* note 32.

<sup>38</sup> See, e.g., James H.A. Pooley et al., *Understanding the Economic Espionage Act of 1996*, 5 TEX. INTELL. PROP. L.J. 177, 200 (1997); Spencer Simon, *The Economic Espionage Act of 1996*, 13 BERKELEY TECH. L.J. 305, 315-16 (1998); Rochelle Cooper Dreyfuss, *Trade Secrets: How Well Should We Be Allowed to Hide Them? The Economic*

reverse engineering can be raised as a defense under the regime of the Act,<sup>39</sup> a point on which the current trade secret law is much clearer. Scholars who criticize the EEA argue that the absence of a reverse-engineering defense, which has been allowed in the traditional regime of trade secret law, may stifle innovation. For example, Dreyfuss contends that in part because “the EEA allows developers to hide their trade secrets more effectively than before,” and in part because the EEA’s policy on reverse engineering discourages spillover use and increases “deadweight loss,” the EEA should be “carefully construed” such that the Act does not “allow people to hide secrets in ways that will make it impossible for others to hear, or learn, or know.”<sup>40</sup>

Samuelson and Scotchmer have assessed the social welfare effects of the rules governing reverse engineering in different industrial contexts, including that of traditional manufacturing and three information-based industries, and take as a premise that the different economic effects of reverse engineering depend on “a number of factors, including the purpose for which it is undertaken, the industrial context within which it occurs, how much it costs, how long it takes, whether licensing is a viable alternative, and how the reverse engineer uses information learned in the reverse engineering process.”<sup>41</sup> For the traditional manufacturing industry, their conclusion is analogous to the traditional view of law and economics scholars. They argue that the rule allowing reverse engineering is economically sound because it not only protects an innovator to some desirable degree because of “the costliness of reverse engineering [or] lead time due to difficulties of reverse engineering, [or both],”<sup>42</sup> but at the same time has “a

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*Espionage Act of 1996*, 9 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 1, 31-42 (1998); Craig L. Uhrich, *The Economic Espionage Act—Reverse Engineering and the Intellectual Property Public Policy*, 7 MICH. TELECOM. & L. REV. 147, 169-76 (2001).

<sup>39</sup> See Uhrich, *supra* note 40, at 169-76.

<sup>40</sup> Dreyfuss, *supra* note 40, at 32-44.

<sup>41</sup> Samuelson & Scotchmer, *supra* note 32, at 1585.

<sup>42</sup> *Id.* at 1582.



salutary effect on price competition and on the dissemination of know-how that can lead to new and improved products.”<sup>43</sup> Further, they argue that technological advances could change “the economic calculus of reverse engineering rules” by illustrating legal rules regulating reverse engineering in the semiconductor chip industry,<sup>44</sup> the computer software industry,<sup>45</sup> and markets where digital content is technically protected,<sup>46</sup> as well as by assessing the economic effects of the rules in these areas.<sup>47</sup> They conclude that policymakers should contemplate “the specific characteristics of the industry, a specific threat to that industry, and the economic effects of the restriction” when they intend to place restrictions on reverse engineering in an industry.<sup>48</sup>

## 2.4. Postemployment Covenants Not to Compete

As we have seen, legal issues concerning covenants not to compete may be a way to balance conflicting interests between employers, who seek the legal protection of their

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<sup>43</sup> *Id.* at 1590. To assess the social welfare effects of the rule allowing reverse engineering in the traditional manufacturing sector, they relied on the four criteria: (1) “incentives to innovate,” (2) “incentives to engage in follow-on innovation,” (3) “prices,” and (4) “socially wasteful expenditure of resources.” *Id.* at 1588.

<sup>44</sup> The authors argue that the enactment of the SCPA increases the “incentives to invest in innovative chip design” and “incentives to invest in follow-on innovation.” In addition, they argue that prices will be increased to some degree to enable innovators to recoup their costs, including socially wasteful costs, which, to some extent, can be avoidable by licensing. *Id.* at 1604-05.

<sup>45</sup> *Id.* at 1613-26 (arguing that the rule allowing reverse engineering for the purpose of interoperability is economically good).

<sup>46</sup> *Id.* at 1637-49 (arguing that the DMCA’s “anticircumvention rules go further than necessary to accomplish the goal of protecting digital content, causing collateral harm that could be avoided. In particular, the rules may unduly impinge on fair and other noninfringing uses of digital content, on competition within the content industry, on competition in the market for technical measures, and on encryption and computer security research.”).

<sup>47</sup> *Id.* at 1595-49.

<sup>48</sup> *Id.* at 1663. In addition to the simplest way for regulating reverse engineering policy (i.e., making it legal or illegal), they suggest “five more nuanced” policy considerations: “[1] regulating a particular means of reverse engineering, [2] establishing a breadth requirement for subsequent products, [3] using purpose- and necessity-based requirements for judging the legitimacy of reverse engineering, [4] regulating reverse engineering tools, [5] restricting publication of information discovered by a reverse engineer.” (footnote omitted). *Id.* at 1652-59.

investments in human capital, and employees, who lack bargaining power as they pursue their livelihood.<sup>49</sup> In addition, a policy consideration regarding the potential anticompetitive effect has been often taken into account in deciding reasonableness.<sup>50</sup> The law and economics perspective, however, has primarily focused on *ex ante* incentives to invest in human capital and *ex post* effects of labor mobility on covenants not to compete.<sup>51</sup>

On the one hand, scholars have focused on employers' incentive to invest in human capital at efficient levels.<sup>52</sup> Rubin and Shedd, drawing on Becker's model of general and specific human capital,<sup>53</sup> explains that if covenants not to compete were not enforceable, firms' incentive to invest in human capital would be reduced because workers with an increased marginal product of their human capital have an incentive to violate the contract and move to a more highly valued use.<sup>54</sup> In addition, they observe that in such cases, firms would spend their resources

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<sup>49</sup> See Mark A. Glick, Darren Bush & Jonathan Q. Hafen, *The Law and Economics of Post-employment Covenants: A Unified Framework*, 11 GEO. MASON L. REV. 357 (2002). See, e.g., *Comprehensive Technologies Int'l, Inc. v. Software Artisans, Inc.*, 3 F.3d 730, 739-40 (4th Cir. 1993).

<sup>50</sup> See Chapter II. 3.

<sup>51</sup> See Eric A. Posner et al., *Investing in Human Capital: The Efficiency of Covenants Not to Compete* 1-2 (Univ. of Va., John M. Olin Program in Law and Econ. Working Paper No. 11, 2004) [hereinafter Posner et al., *Human Capital*].

<sup>52</sup> See, e.g., Maureen B. Callahan, Comment, *Post-employment Restraint Agreements: A Reassessment*, 52 U. CHI. L. REV. 703, 727 (1985); TREBILCOCK, *supra* note 5, at 119-54; Friedman et al., *Economics of Trade Secret Law*, *supra* note 4, at 67; Paul H. Rubin & Peter Shedd, *Human Capital and Covenants Not to Compete*, 10 J. LEGAL STUD. 93, 97 (1981); Gillian Lester, *Restrictive Covenants, Employee Training, and the Limits of Transaction-Cost Analysis*, 76 IND. L. J. 49, 71-76 (2001).

<sup>53</sup> See GARY S. BECKER, HUMAN CAPITAL (3d ed. 1993). With respect to on-the-job training, Becker distinguishes "general training" from "specific training." He explains the conceptual differences as follows:

General training is useful in many firms besides those providing it; for example, a machinist trained in the army finds his skills of value in steel and aircraft firms, and a doctor trained (interned) at one hospital finds his skills useful at other hospitals. . . . Training that increases productivity more in firms providing it will be called specific training. Completely specific training can be defined as training that has no effect on the productivity of trainees that would be useful in other firms.

*Id.* at 33-40.

<sup>54</sup> Rubin & Shedd, *supra* note 52, at 97. However, with regard to Becker's original model of human capital, Rubin and Shedd explain as follows:

In the model of human capital proposed by Gary Becker, there is no need for covenants ancillary

inefficiently as they seek to protect valuable information.<sup>55</sup> Thus, they argue that “[covenants not to compete] are needed to lead to efficient levels of investment in training when the person receiving training is unable to pay for the human capital by accepting reduced wages [such as some types of training involving trade secrets].”<sup>56</sup> Similarly, Callahan, who has analyzed and criticized modern judicial rationales (i.e. the “restraint-of-trade rationale,” the “employee-protection rationale,” and the “loss-to-society rationale”) that courts have adopted in cases of covenants not to compete,<sup>57</sup> also focuses on the positive effect of covenants not to compete on employers’ incentives to invest in “confidential business information” and “investment in training.”<sup>58</sup> Some law and economics scholars who appear to consider mainly the incentives for employers to invest in human capital have offered suggestions regarding to what extent covenants not to compete should be enforced in relevant cases. For example, Glick, Bush, and Hafen have analyzed covenants not to compete that are based on a standard law and economics analysis of contract law. They argue that “[post-employment] covenants not to compete should not be enforced only when some type of market failure occurs,” and explain that these types of

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to labor contracts banning employees from competing with employers after termination of employment. If human capital is general, workers will pay for training and employers will be indifferent to the future use of this capital. If training is specific the training will be useful only in the firm providing the training and so workers will be unable to use this training elsewhere.

*Id.* at 109.

<sup>55</sup> *Id.* at 97. Friedman, Landes, and Posner also point out the effect of nonenforceability of covenants not to compete as follows:

If the law refuse to enforce contracts in which employees promise not to spill the employers’ trade secrets, employers may be led to reorganize their businesses in inefficient forms—perhaps by splitting up tasks among more employees so that each knows less, or by bringing in family members (even though they may be less competent) as employees, counting on them to be loyal out of altruism or because the family setting often enables effective, informal retaliation against the disloyal; for members of a family are in an ongoing relationship, unlike the employer and an unrelated former employee.

Friedman et al., *Economics of Trade Secret Law*, *supra* note 4, at 67.

<sup>56</sup> Rubin & Shedd, *supra* note 52, at 99.

<sup>57</sup> For the analyses of these rationales, see Callahan, *supra* note 52, at 712-25.

<sup>58</sup> *Id.* at 727.

failures are “(a) imperfect (including asymmetric) information; (b) constrained choice; and (c) externalities.”<sup>59</sup> ..Posner, Triantis, and Triantis maintain that “the courts should expand the recognized interests to include both specific and general training”; they further argue that covenants not to compete could be “a new and relatively simple solution to the dual optimization” of “*ex post* performance outcomes [with regard to labor mobility] and *ex ante* investment [with regard to human capital].”<sup>60</sup>

On the other hand, as the economy has become more and more knowledge-based and the value of human capital has become a more important determinant of innovation in the economy,<sup>61</sup> other scholars have turned their attention<sup>61</sup> to the positive effect of knowledge diffusion on innovations resulting from labor mobility.<sup>62</sup> For example, Saxenian’s comparative

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<sup>59</sup> Glick et al., *supra* note 49. They further argue that

Under the first two types, the effects are limited to the parties to the contract; under the third types, the impact is on the public. For the first two types, standard contract defenses are indicated. For the third type, restraint of trade and the rule-of-reason as originally applied in common law and implemented in the Sherman Act is the relevant approach. While the latter has seldom been applied to post-employment covenants until now, the rising importance of high-technology industries and the concomitant emphasis on innovation make this approach increasingly attractive and relevant for assessing the appropriateness of post-employment covenants not to compete.

*Id.* at 418.

<sup>60</sup> Posner et al., *Human Capital*, *supra* note 51, at 24-26.

We found that, in each of the cases of no-renegotiation and costless renegotiation, CNCs may yield performance and investment incentives that are superior to those produced by the contract remedies of specific performance and liquidated damages (including zero damages). We also showed that, if renegotiation is costless, the parties have contracting incentives to draft CNCs with inefficiently broad scope that causes overinvestment. Given the plausibility of the assumption that renegotiation costs among workers and employers in the same industry are low, these two results provide support for cautious enforcement of CNCs.

*Id.* at 24.

<sup>61</sup> See Ronald J. Gilson, *The Legal Infrastructure of High Technology Industrial Districts: Silicon Valley, Route 128, and Covenants Not to Compete*, 74 N.Y.U. L. REV. 575, 585 (1999) [hereinafter Gilson, *Silicon Valley*] (“Tacit information associated with an employer’s technology is embedded in the human capital of its employees.”).

<sup>62</sup> See, e.g., Harlan M. Blake, *Employee Agreements Not to Compete*, 73 HARV. L. REV. 625, 627 (1960) (“postemployment restraints reduce both the economic mobility of employees and their personal freedom to follow their own interests. These restraints also diminish competition by intimidating potential competitors and by slowing down the dissemination of ideas, processes and methods.”); Kitch, *Valuable Information*, *supra* note 5, at 686 (contending that the strict enforcement of covenants not to compete does little to serve social welfare); ANNALEE SAXENIAN, *REGIONAL ADVANTAGE: CULTURE AND COMPETITION IN SILICON VALLEY AND ROUTE 128* (1994);

research on the influence of the local institutional and business culture on different economic achievements in the Silicon Valley and Route 128 region seems to have inspired further research focused on the policy effect of covenants not to compete.<sup>63</sup> In fact, she notes that one of the main reasons California's Silicon Valley achieved greater economic success and technological progress compared with the Route 128 belt outside Boston, Massachusetts, involves the comparatively free flow of employees' information, knowledge, and skills among firms in the region, due to relatively less importance in employment contracts on the disclosure of such valuable information to contracting parties.<sup>64</sup> Saxenian concludes that policymakers should consider the relationship between the flow of information and innovation when they establish policies to boost a regional economy.<sup>65</sup>

In recent years, legal scholars have focused particularly on the relationship between the legal policy of covenants not to compete and innovation resulting from positive knowledge spillover between firms in regions with high labor mobility. For example, Gilson has examined the role of the law of covenants not to compete in high-technology industrial districts by

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Edmund Kitch, *The Expansion of Trade Secrecy Protection and the Mobility of Management Employees: A New Problem for the Law*, 47 S.C. L. REV. 659 (1996) (discussing the probability of restraint of new class employee's mobility due to the Restatement (Third) of Unfair Competition expanding trade secret protection); Gilson, *Silicon Valley*, *supra* note 61; ALAN HYDE, *WORKING IN SILICON VALLEY: ECONOMIC AND LEGAL ANALYSIS OF A HIGH-VELOCITY LABOR MARKET* (2003).

<sup>63</sup> SAXENIAN, *supra* note 62. For example, Saxenian analyzes business organizations in the two regions and explains that "Route 128's technology firms remained stable, formal, and centralized organizations compared with the loosely linked confederations of engineering teams in emerging Silicon Valley." *Id.* at 78.

<sup>64</sup> Saxenian states:

This decentralized and fluid environment accelerated the diffusion of technological capabilities and know-how within the region. Departing employees were typically required to sign nondisclosure statements that prevented them from revealing company secrets; however, much of the useful knowledge in the industry grew out of the experience of developing technology. When engineers moved between companies, they took with them the knowledge, skills, and experience acquired at their previous jobs. *Id.* at 37. While nondisclosure agreements and contracts were normally signed in these alliances, few believed that they really mattered, especially in an environment of high employee turnover like that in Silicon Valley. *Id.* at 149.

<sup>65</sup> *Id.* at 161-68.

comparing the laws in California’s Silicon Valley and Massachusetts’s Route 128 region. In his comparison, he notes the importance of “informal transfer of tacit knowledge” for “technological externalities” as a key factor that facilitates Silicon Valley’s continued success in the second-stage agglomeration economy.<sup>66</sup> He then focuses on the influence of different legal infrastructures in the two regions and concludes that the difference in laws regulating postemployment covenants not to compete generates “an initial condition” that could lead to different employment patterns, different patterns of industrial organization, and different business cultures in the two regions that Saxenian identifies.<sup>67</sup> In addition, he offers some cautionary notes. One is that the use of the inevitable disclosure doctrine in California may “pose a serious threat to the interemployer spillover of proprietary tacit knowledge that allows Silicon Valley to reset its product cycle repeatedly.”<sup>68</sup> The final cautionary note he provides is that policymakers should consider the business culture and industrial organization in a given area when they want to adopt a California-like legal infrastructure to affect positive knowledge spillover.<sup>69</sup> Hyde, in comparing trade secret law and the law of covenants not to compete in the Silicon Valley and Route 128 areas, acknowledges the plausibility that a legal policy banning covenants not to compete may facilitate labor mobility in a given area, and contends that the

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<sup>66</sup> Gilson, *Silicon Valley*, *supra* note 61, at 580-94 (“The second-stage agglomeration economy results from intercompany, intradistrict knowledge spillovers that cause the entire district to function as an innovation laboratory. These spillovers result from the pattern of extreme employee mobility characteristic of Silicon Valley and absent in Route 128.”). Gilson uses the term of “tacit knowledge” as “the skill or expertise, as opposed to easily codifiable information, that employees acquire through experience.” *Id.* at 577 n.10.

<sup>67</sup> Gilson states that Massachusetts law, which allows reasonable post-employment covenants not to compete to be enforced, “encourage[s] an employee to stay in her current job,” and “[t]he resulting dynamic would favor long-term career patterns, vertical integration, and ultimately, internal rather than districtwide innovation. The initial condition—a legal infrastructure that impedes employee mobility—generates a complementary business culture and institutions that, once established, support a self-enforcing equilibrium.” Likewise, he explains that California law, which bans covenants not to compete, leads employees to “adopt a different strategy, one of cooperation and competition, that generated a dynamic process leading to Silicon Valley’s characteristic employee career pattern, lack of vertical integration, knowledge spillovers, and business culture.” *Id.* at 603- 09.

<sup>68</sup> *Id.* at 626.

<sup>69</sup> *Id.* at 627-29.

increased labor mobility plays a significant role in diffusing the knowledge embodied in human capital among firms in a “high-velocity” labor market.<sup>70</sup> Similarly, Landes and Posner state that “the unenforceability of employee covenants not to compete” creates an “informal pooling of knowledge,” and that this is more desirable from an efficiency standpoint than “the greater internalization of [a] new technological idea,” citing the results of Saxenian’s research and explaining the high cost of “negotiation and enforcement of licenses for the use of valuable confidential information.”<sup>71</sup> The above economic arguments are supported by recent empirical research that has examined the relationship between the enforceability of covenants not to compete and labor mobility.<sup>72</sup>

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<sup>70</sup> HYDE, *supra* note 62. Hyde further notes trade secret law as one of other factors affecting the success of Silicon Valley.

<sup>71</sup> LANDES & POSNER, *Economic Structure*, *supra* note 1, at 365-66.

<sup>72</sup> See, e.g., Matt Marx, Deborah Strumsky, & Lee Fleming, *Mobility Skills, and the Michigan Non-compete Experiment*, 55 MGMT. SCI. 875 (2009) (examining Michigan’s inadvertent reversal of covenants not to compete enforcement and its effect, and finding the enforcement of covenants not to compete reduced labor mobility); Mark J. Garmaise, *Ties that Truly Bind: Noncompetition Agreements, Executive Compensation, and Firm Investment*, J. LAW ECON. ORGAN. 1 (Nov. 2009), available at <http://jleo.oxfordjournals.org/cgi/content/full/ewp033v1?maxtoshow=&HITS=10&hits=10&RESULTFORMAT=&fulltext=ties+that+truly+bind&searchid=1&FIRSTINDEX=0&resourcetype=HWCIT>. Garmaise also analyzes the effect of covenants not to compete by using “time-series and cross-sectional variation in noncompetition enforceability across the states of the United States.” He finds that “enforceability strongly reduces executive mobility, particularly decreasing the likelihood that a firm will experience a within-industry managerial transfer (either in or out).” *Id.* at 3.

## **CHAPTER VI. IMPACT OF TRADE SECRET LAW IN JAPAN AND KOREA**

This chapter examines the practical impact of trade secret law and relevant factors in the areas of companies' strategic choice of intellectual property, the role of covenants not to compete, and the role of the legal system in supporting the implementation of trade secret law. For this purpose, the first two sections of this chapter focus specifically on substitutes for trade secret law arising from different intellectual property policies and the business culture relating to human capital before trade secret law was adopted in these countries. After identifying these substitutes, the chapter then discusses, based on the economic theories of trade secret law examined in the previous chapter, how the role of these alternative solutions in addressing the legal problems associated with trade secrets has been eroding in recent years.

The first section looks at Japanese and Korean firms' reliance on trade secret protection, which shows that despite the weak impact of the law in the first stage of implementation, in recent years, trade secret protection has become a significant way Japanese and Korean firms protect their valuable information. It further explores the role of and changes in second-tier patent protection (i.e., utility models) as substitutes for trade secret protection and their somewhat different stories in the two countries in recent years. The second section examines the increasing tendency for Japanese and Korean firms to rely on postemployment contractual measures to protect themselves from unintended loss of valuable information and human capital. It further examines how the traditional lifetime employment system, as one of the main factors affecting firms' increasing reliance contractual measures to protect valuable information, had played a significant role in substituting for postemployment covenants not to compete, and how the role of informal mechanisms that had supported the practice of lifetime employment have decreased substantially since the recent economic crises in Japan and Korea. The third section



explores the role of the legal system in supporting the implementation of trade secret law. It begins with some features of actions taken by Japanese and Korean firms after incidents relating to the loss of proprietary information. The remaining part of the section examines relevant factors affecting these distinguishing features, with a focus on defects in procedural law in Japan and Korea.

## **1. The Choice of Intellectual Property Protection in Enterprises in Japan and Korea**

### **1.1. Use of Trade Secrets by Firms in Japan and Korea**

In the United States, the doctrine of trade secret protection has developed based on courts' recognition of the importance of corporate control over valuable information, and trade secrets are currently said to have a significant role in providing firms with the incentive to protect their inventions and innovations. Indeed, several empirical works have shown that U.S. firms rely more on secrecy as a primary means of protecting their innovations than on the patent regime.<sup>1</sup> As observed earlier, however, the adoption of trade secret law in the early 1990s in Japan and Korea was not aimed primarily at the efficient legal protection of domestic innovators. In part because of this background, trade secret law does not appear to have had a profound impact on domestic firms' strategic choice of intellectual property mechanisms to protect their innovations. For example, comparative survey research conducted by Cohen et al. in 1994, four

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<sup>1</sup> See, e.g., Wesley M. Cohen et al., *Protecting Their Intellectual Assets: Appropriability Conditions and Why U.S. Manufacturing Firms Patent (or Not)* (Nat'l Bureau of Econ. Res. Working Paper, No. 7552, 2000) [hereinafter Cohel et al., *Intellectual Assets*]; Richard C. Levin et al., *Appropriating the Returns from Industrial Research and Development*, 1987 BROOKINGS PAPERS ON ECON. ACTIVITY 783, 794-95 (1987). See also Foreign Protection of Intellectual Property Rights and the Effect on U.S. Industry and Trade 35 (USITC Pub. 2065, Investigation No. 332-245, Feb. 1988), available at 1988 ITC LEXIS 21.

years after the adoption of trade secret law in Japan, revealed differences between the United States and Japan in the effectiveness of appropriability mechanisms used.<sup>2</sup> The research demonstrated that U.S. firms did not report patent protection as one of the most important ways they appropriate returns from their innovations; rather, the authors concluded that “secrecy is more central to the appropriability strategies of U.S. firms” in the manufacturing sector.<sup>3</sup> In fact, for product innovation, U.S. firms relied on lead time (51.8%) and secrecy (51.4%), followed by patents (35.7%). For process innovation, the firms preferred secrecy to patents, with secrecy (52.7%) being the preferred mechanism, followed by lead time (38.0%) and patents (23.9%).<sup>4</sup> By contrast, the study revealed that Japanese firms preferred patents to trade secrecy for protecting their product innovations, with lead time (40.7%) being the preferred strategy, followed by patents (37.8%) and secrecy (25.6%). On the other hand, for protecting process innovations, Japanese firms preferred secrecy to patents, although the difference was slight. Japanese firms relied on secrecy (28.9%) and lead time (28.2%), followed by patents (24.8%).<sup>5</sup> The results implied that trade secret protection was not central to the appropriability strategies of Japanese firms, despite the fact that about three years had passed since the law had been implemented in Japan. In particular, Japanese firms showed a trend of preferring patent protection to secrecy for product innovation.

Trade secret law in Japan and Korea, however, has undergone many changes in the two

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<sup>2</sup> Wesley M. Cohen et al., *R&D Spillovers, Patents and the Incentive to Innovate in Japan and the United States*, 31 RES. POL'Y 1349 (2002) [hereinafter Cohen et al., *R&D Spillover*].

<sup>3</sup> *Id.* at 1352-55. The question on the survey asked respondent companies “to estimate the percent of their product and process innovations for which patents, secrecy, and complementary manufacturing sales and service, and complementary manufacturing facilities and know-how were ‘effective’ in protecting the ‘competitive advantage’ from those innovations,” and “[t]he response categories were 0–10%, 11–40%, 41–60%, 61–90%, and 91–100%.” *Id.* at 1353.

<sup>4</sup> *Id.* at 1354 fig.3.

<sup>5</sup> *Id.*

decades since its adoption and is in the midst of changes even at this point.<sup>6</sup> In addition, a series of subsequent changes strengthening the law in Japan and Korea since its adoption have been motivated by internal factors based on a change in innovation policy aiming at providing domestic innovators with a greater incentive to invest in valuable information.<sup>7</sup> This raises the issue of the practical impact on Japanese and Korean firms of adopting trade secret laws, and in recent years, how Japanese and Korean firms have come to rely on trade secret protection.

Two surveys conducted in the early and mid-2000s, the Japanese National Innovation Survey 2003 (J-NIS 2003)<sup>8</sup> and the Korean Innovation Survey (KIS 2005),<sup>9</sup> which examined the innovation-related activities of Japanese and Korean firms, revealed the strong impact of trade secret law on firms in the two countries. Presented in Table 1 are results of the J-NIS 2003 and the KIS 2005 showing how respondents evaluated the effectiveness or importance of different appropriability mechanisms.<sup>10</sup> The table provides the percentages of product and process

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<sup>6</sup> For example, as observed earlier, the Japanese UCPA was amended in 2009 to enlarge the subjective requirement of criminal sanctions and the scope of acts subject to criminal sanctions by criminalizing an act of fraudulent taking of a trade secret by a person to whom the trade secret had been disclosed. The amended Japanese UCPA will become effective on Oct. 29, 2010. See Fusei kyōsō bōshihō [Unfair Competition Prevention Act], Law No. 47 of 1993 (as amended by Law No. 30 of 2009). Currently, the Korean government is also considering improving the procedural aspects to support the substantive law of trade secrets.

<sup>7</sup> See Chapter III and IV.

<sup>8</sup> NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY POLICY, ZENKOKU INOBESHON CHŌSA TOUKEI HŌKOKU [STATISTICS ON INNOVATION IN JAPAN: REPORT ON THE JAPANESE NATIONAL INNOVATION SURVEY 2003] (Dec. 2004) (Japan) [hereinafter JIS-2003].

<sup>9</sup> SCIENCE AND TECHNOLOGY POLICY INSTITUTE, 2005 NYŌNDO HAN'KUK ŪI KISUL HYŌKSIN CHOSA [REPORT ON THE KOREAN INNOVATION SURVEY 2005: MANUFACTURING SECTOR] (Dec. 2005) (Korea) [hereinafter KIS 2005]. The Korean Innovation Survey is a nationally representative study of innovation activities in Korean enterprises and is approved by the Korean National Statistical Office under the Statistical Act of Korea. The data are collected on a three-year basis. The KIS 2005 covered the observation from the beginning of 2002 to the end of 2004. To measure the importance of appropriability mechanisms, the survey asked responding firms to evaluate the importance of intellectual property rights that they had used. *Id.* at 603.

<sup>10</sup> In the J-NIS 2003, the respondents was asked to evaluate about how much the available mechanisms were effective in ensuring a profit from innovation activities during the period from 1999 to 2001. In the question, respondents were asked to give a rating of high, medium, or low depending on the importance of each mechanism. JIS-2003, *supra* note 8, at 1[en]-14. In the KIS 2005, to measure the importance of appropriability mechanisms, the survey asked responding firms to evaluate the importance of intellectual property rights that they had used. In the question, respondents were asked to evaluate each method on a 1-to-5 scale ranging from 1 (least important) to 5 (most important). KIS 2005, *supra* note 9, at 603. It should be noted that the J-NIS 2003 and the KIS 2005 are

innovations for which each appropriability mechanism was judged to be “highly effective” on the JIS-2003 and was judged to be either “very important” or “important” on the KIS 2005.

TABLE 1  
EFFECTIVENESS OF PATENTS AND TRADE SECRECY IN THE MANUFACTURING SECTOR

Country	Innovation type	Size	Patents, %	Secrecy, %	Lead time advantage, %	Complexity of design, %	Source
Japan	Product innovation	Large	40	40	23	14	J-NIS 2003
		Medium	21	23	17	8	
		Small	17	28	21	12	
		Total	21	28	20	11	
	Process innovation	Large	25	38	21	12	
		Medium	12	19	18	7	
		Small	7	18	20	7	
		Total	11	21	19	8	
Korea	Product innovation	Large	56	40	28	9	KIS 2005
		Medium	35	28	27	4	
		Small	35	23	48	27	
		Total	36	26	29	6	
	Process innovation	Large	28	33	30	7	
		Medium	13	18	15	2	
		Small	14	13	15	4	
		Total	14	16	16	3	

The results of the J-NIS 2003 show that Japanese firms’ reliance on trade secrets to protect the competitive advantage gained from their innovations has increased dramatically compared with the results of the study by Cohen et al. in 1994. For both product and process

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surveys on innovation activities by Korean and Japanese enterprises. The surveys are based on *the Oslo Manual*, which gives methodological “guidelines for collecting and interpreting innovation data.” Thus, these ensure comparability across countries. See OECD, OSLO MANUAL: GUIDELINES FOR COLLECTING AND INTERPRETING INNOVATION DATA (3rd ed. 2005).

innovation, Japanese firms reported that secrecy was the most effective mechanism for protecting their inventions and innovations. In fact, for process innovation, Japanese firms reported that trade secret protection (21%) was almost twice as effective as patent protection (11%). In particular, for product innovation, Japanese firms' reliance on trade secret protection has increased remarkably (patent, 21% vs. secrecy, 28%). In other words, the J-NIS 2003 demonstrated that secrecy has become a central mechanism in Japanese firms' strategy of appropriating rent for their innovations.

Trade secret law has also had a relatively strong impact on Korean firms' strategic choice of appropriability mechanisms. For process innovation, Korean firms appear to prefer secrecy (16%) to patent protection (14%), a pattern similar to that of Japanese firms for process innovation. For product innovation, however, patent protection (patent, 36% vs. secrecy, 26%) is more likely to be a central mechanism in Korean firms' strategy of appropriating rent for their product innovations. In short, the J-NIS 2003 showed a pattern in Japanese firms' strategic choice of intellectual property rights or appropriability mechanisms similar to that of U.S. firms. On the other hand, the KIS 2005 demonstrated that Korean firms' strategic choice for product innovation was somewhat different from the choices of U.S. and Japanese firms; the KIS 2005 results appeared to show a response similar to that of Japanese firms reported by Cohen et al. in 1994. In this context, the adoption of trade secret law appears to have had a stronger impact on the manufacturing sector in Japan than in Korea, especially for protecting firms' product innovations and inventions.

In general, firms use a variety of mechanisms, including informal mechanisms (e.g., lead time or trade secrets) and formal mechanisms (e.g., patents) to protect their inventions and innovations. The strategies used by firms to protect their innovations through intellectual

property rights are determined by various factors, such as the nature of the innovation and “the nature of intensity of competition within an industry.”<sup>11</sup> This may also be the case for trade secret protection by firms. As observed in economic theories of trade secret law, firms’ reliance on trade secret protection is different from their reliance on patent protection because of the supplementary nature and broader scope of trade secret protection. Indeed, the J-NIS 2003 and KIS 2005 demonstrated that the nature of the innovation was closely related to firms’ use of trade secrets and revealed that trade secrecy was more suited to process innovations (see Table 1) because maintaining secrecy is likely to be easier and more desirable for process innovations.<sup>12</sup> This is also consistent with empirical work conducted in the United States.<sup>13</sup>

In addition, firms’ strategies for trade secret protection may be affected by rule making regarding reverse engineering. In fact, as observed, the advent of information-intensive industries, such as the semiconductor, computer program, and electronic commerce industries in the United States, led to changes in rule making with respect to reverse engineering, in which reverse engineering was restricted to some degree in industries that traditionally permitted competitors to reverse engineer, make, and sell identical or nearly identical products.<sup>14</sup> In this context, trade secret protection was strengthened through restrictions on reverse engineering.<sup>15</sup>

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<sup>11</sup> In fact, firms’ strategies regarding the use of intellectual property are affected by various factors, such as “the technology itself,” “the complexity of the product,” “the nature of the innovation,” “the nature of the production process,” “the nature of intensity of competition within an industry,” and so on. Cohel et al., *Intellectual Assets*, *supra* note 1, at 8 n.18.

<sup>12</sup> Levin et al., *supra* note 1, at 794-95.

<sup>13</sup> See, e.g., *id.* (“For new processes . . . patents were generally rated the least effective of the mechanisms of appropriation. . . . Secrecy . . . was still considered more effective than patents in protecting processes. . . . Patents for products were typically considered more effective than those for processes, and secrecy was considered less effective in protecting products than processes.”), available at <http://cowles.econ.yale.edu/P/cp/p07a/p0714.pdf> (last visited Mar. 29, 2010).

<sup>14</sup> See Chapter II. 1.1.

<sup>15</sup> See Pamela Samuelson & Suzanne Scotchmer, *The Law and Economics of Reverse Engineering*, 111 YALE L. J. 1575, 1583 (2002).

Japanese and Korean firms in these industries also enjoyed the enhanced trade secret protection provided by the relevant legislation, as in the United States.<sup>16</sup> In the industrial sectors, in which the life cycle of new technologies is generally short, the J-NIS 2003 and the KIS 2005 demonstrated that the effectiveness or importance of trade secrecy in protecting firms' innovations was higher.<sup>17</sup> In particular, it is very interesting that Korean firms in these sectors reported that trade secret protection was the most important measure in protecting product innovation, a response different from that in other industrial sectors, where the importance of

<sup>16</sup> Japan enacted the Semiconductor Chip Layout Protection Act, and amended the Copyright Act to include provisions regarding computer program protection, and to incorporate provisions on reverse engineering of technically protected digital contents. See Handōtaisyūsekikairono kairohaichini kansuru hōritsu [Semiconductor Chip Layout Protection Act], Law No. 43 of 1985. For an overview of copyright protection of semiconductors in Japan, see Kanji Ishizumi, *Copyright Protection of Computer Programs and Semiconductors in Japan*, 2 SOFTWARE L. J. 305 (1988); Judith J Welch & Wayne L. Anderson, *Copyright Protection of Computer software in Japan*, 11 COMPUTER J. L. 287 (1991) (“reverse engineering is generally a permissible or encouraged method of development in an industry. However, the Copyright Law does not specifically provide for this to be authorized use. If the law is literally interpreted, it would prohibit such reproduction and adaptation.”); Chosakukenhō [Copyright Act], Law No. 48 of 1970, art 120-2 (Japan) (“A person with respect to whom any of the following items applies shall be punishable by imprisonment with work for a term not more than three years or by a fine of not more than three million Yen, or by both: (i) a person who either: [(a)] [(A)] transfers to the public the ownership of, or rents to the public, [(B)] manufactures, imports or possesses for transfer of ownership or rental to the public, or [(C)] offers for use by the public, a device the sole function of which is to circumvent technological protection measures (including a set of parts [of such a device] capable of being easily assembled) or reproductions of a computer program the sole function of which is to circumvent technological protection measures, or [(b)] transmits to the public, or makes transmittable, the aforementioned computer program.”). Korea also enacted “the Semiconductor Chip Layout Protection Act,” “the Computer Program Protection Act,” and the Copyright Act, which included measures similar to those under the Digital Millennium Copyright Act to prohibit circumvention of technical measures for the protection of copyrighted works. See Pandoch’e chipchōk hoero ūi paech’i sōlgye e kwanhan pōpnyul [Semiconductor Chip Layout Protection Act], Law No. 4526, 1992 (S. Korea); K’om’pyut’ō p’ūrogūraem pohopōp [Computer Program Protection Act], Law No. 3920, 1986 (S. Korea). The Computer Program Protection Act was repealed by Law. No. 9625, 2009, and the relevant provisions were incorporated into the Copyright Act; Chōjakkwōnpōp [Copyright Act], Law 6881, 2003, art. 92, para. 2. (S. Korea) (“(2) Any act of providing, producing, importing, transferring, lending, or interactively transmitting technologies, services, products, devices, or significant parts thereof for the primary purpose of neutralizing technological protection measures for copyrights or other rights protected pursuant to this Act such as elimination, modification or bypassing thereof without legitimate rights shall be deemed infringement of copyrights or other rights protected in accordance with this Act.”).

<sup>17</sup> Raw data from the J-NIS 2002 and the KIS 2005 are summarized in the following table, which represents the effectiveness of appropriability mechanisms.

Country	Industrial sector	Product innovation, %		Process innovation, %	
		Patents	Secrecy	Patents	Secrecy
Japan	Computers, electronic parts and devices	19	60	10	28
Korea	Computers and office machinery	22	30	1	1

patent protection was higher than the importance of trade secret protection.<sup>18</sup> Indeed, the major emphasis of Japanese and Korean technology policies has currently shifted from imitation to original innovation. As mentioned earlier, industrial technology in Japan and Korea has reached a “technological frontier,” and the environment of national and international competition—in which trade secret protection with a lower cost could offer firms in these industries a competitive advantage more quickly—is greater than before.<sup>19</sup> Accordingly, the results of the J-NIS 2003 and KIS 2005 imply that trade secret protection has had a significant role in protecting product innovation as well as process innovation in these information-intensive industries, which have been emphasized for continued economic growth in the two Asian countries.

Economic theory and empirical works in the United States also suggest that trade secret protection is a more effective mechanism for SMEs with limited research intensity and access to capital for protection of their technological innovations.<sup>20</sup> The results of the J-NIS 2003 and KIS 2005 correlated with firm size, however, are not consistent with the theory and findings of empirical works in the United States, which demonstrate that, like patent protection, trade secret protection is a more useful or important mechanism for large-sized firms in Japan and Korea (Table 1). This may suggest that the incentive theory on the cost-effectiveness of trade secret protection does not directly apply to Japanese and Korean SMEs.

## **1.2. Role of Utility Models as a Partial Substitute for Trade Secret Protection**

As presented in Table 1, the J-NIS 2003 and KIS 2005 showed a difference in Japanese

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<sup>18</sup> *Id.*

<sup>19</sup> *See* Chapters III & IV.

<sup>20</sup> *See* Chapter V. 2.1. Incentive Theory.



and Korean firms' rates of reliance on trade secret protection in cases in which they protected their product innovations. What factors affected the difference between the countries? A variety of factors may have affected the difference, including patent law, trade secret law, technological capability, and industrial characteristics. From a comparative law perspective on intellectual property law, however, a great difference has been observed in the law and policy regarding utility models, which are referred to as a second-tier patent system, in Japan and Korea in recent years. This section briefly examines the role of utility models as substitutes for trade secret protection and the changes in utility models in these two Asian countries.

It is generally accepted that the importation and assimilation of foreign technology has played a crucial role in the rapid economic development of Japan and Korea.<sup>21</sup> The role of patent law in these countries, in being conducive to licensing and cross-licensing of patents and in promoting the diffusion of innovations and inventions in the process of assimilating a foreign technology, has also been examined and emphasized.<sup>22</sup> For example, Ordover noted that “[t]he Japanese patent system, combined with weak trade secret law, is designed to induce innovators to disclose strategic information sooner than does the American system.”<sup>23</sup> Under patent law in Japan and Korea, utility models also played a significant role until recently in supplementing the standard patent system. This raises the question of the economic function of utility models and

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<sup>21</sup> See, e.g., ALICE H. AMSDEN, *ASIA'S NEXT GIANT: SOUTH KOREAN AND LATE INDUSTRIALIZATION* (1989); TECHNOLOGICAL INDEPENDENCE: THE ASIAN EXPERIENCE 135-65 (Saneh Chamarik & Susantha Goonatilake eds., 1994); KongRae Lee, *Technological Learning and Entries of User Firms for Capital Goods in Korea*, in TECHNOLOGY, LEARNING AND INNOVATION: EXPERIENCES OF NEWLY INDUSTRIALIZING ECONOMIES (Linsu Kim & Richard R. Nelson eds., 2000).

<sup>22</sup> See, e.g., Janusz A. Ordover, *A Patent System for Both Diffusion and Exclusion*, 15 J. ECON. PERSP. 43 (1991); Takanobu Nakajima & Koichi Hamada, *Issues on Japan's Intellectual Product*, 18 MANAGERIAL & DECISION ECONOMICS 141, 145-46 (1997); Keith E. Maskus & Christine McDaniel, *Impacts of the Japanese Patent System on Productivity Growth*, 11 JAPAN & WORLD ECON. 557 (1999); Nagesh Kumar, *Intellectual Property Rights, Technology and Economic Developments: Experience of Asian Countries* 23-25 (Comm'n on Intell. Prop. Rts., Study Paper No. 1b, 2002).

<sup>23</sup> Ordover, *supra* note 22, at 45.

how the utility model system worked as a substitute for trade secret protection.

Japan and Korea enacted utility model laws and implemented a utility model system. Japan enacted the first utility model law in 1905 to “protect ever-increasing new technical ideas put forward by Japanese people which were not fully qualified for patent protection,” and the law was influenced by the German law.<sup>24</sup> Before 1959, the utility model law and patent law were able to provide legal protection for the same invention.<sup>25</sup> Since 1959, the new Japanese Utility Model Act has had a role separate from that of the Japanese Patent Act.<sup>26</sup> Korea adopted its first utility model system in 1909, during the period of Japanese rule of the Korean peninsula.<sup>27</sup> The Korean government enacted the new Korean Utility Model Act in 1961, modeled after the Japanese Utility Model Act of 1959.<sup>28</sup> Even though both patent law and utility model law offered legal protection for the creation of technical ideas using the rules of nature, the scope of protection available under utility model law was different from that under patent law in several respects.<sup>29</sup> The greatest difference was the subject of protection, because utility model law protected only practical devices that related to the shape or structure of an article or a combination of articles; thus, process innovations (e.g., a method) could not become the subject of registration in a utility model.<sup>30</sup> If the relevant process was completed successfully, an

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<sup>24</sup> Doi explains the background of the adoption of the utility model system in Japan as follows:

In the early 20th century, Japan was far behind the industrialized countries of the western world in the progress of technology, and hence, there was a keen need to protect small inventions of Japanese nationals, which regular patents were available for inventors of industrialized countries.

TERUO DOI, *THE INTELLECTUAL PROPERTY LAW OF JAPAN* 68 (1980).

<sup>25</sup> In addition, “[t]he novelty requirement was limited to Japan.” Christopher Heath, *Japan*, in *INTELLECTUAL PROPERTY LAW IN ASIA* (Christopher Heath ed. 2003).

<sup>26</sup> *Jitsuyōshinanhō* [Utility Model Act], Law No. 123 of 1959 (Japan).

<sup>27</sup> See SUNHEE YOON, *CHIJŌK CHAESANKWŌNPŎP* [INTELLECTUAL PROPERTY LAW] 182 (8th ed. 2006) (S. Korea).

<sup>28</sup> See *Silyongsinanpōp* [Utility Model Act], Law No. 952, 1961 (S. Korea).

<sup>29</sup> For an overview of the Japanese Utility Model Act of 1959, see DOI, *supra* note 24, at 68-85.

<sup>30</sup> See *id.* at 69; *T’ūkhöpōp* [Patent Act], Act No9381, 2009, art. 2. (S. Korea).

inventor could gain the right to exclude others from making, selling, or using the product, as under patent protection.<sup>31</sup>

As a generic term, a utility model system refers to “a second-tier patent system, offering a cheap, no-examination protection regime for technical inventions which would not usually fulfill the strict patentability criteria.”<sup>32</sup> The theoretical rationale for a utility model of intellectual property protection is that “most social welfare-enhancing inventions are cumulative in nature and that a great deal of them are sub-patentable in the sense that the novelty and inventive step requirements are too high for the patent system to accommodate them.”<sup>33</sup> The utility model system is also said to be a better intellectual property institution for firms in developing countries that import large amounts of foreign intellectual property, in the forms of goods and services, and that need to adapt these goods and services through reverse engineering for local innovation.<sup>34</sup> Furthermore, a utility model system helps SMEs that would otherwise have difficulty accessing standard patent systems because of their limited financial capabilities.<sup>35</sup>

Because of the features and functions of utility model protection, utility models in Japan

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<sup>31</sup> DOI, *supra* note 24, at 76-77; Siryong sinan pōp [Utility Model Act], Law No. 9371, 2009, art. 23 (“The owner of a utility model right has an exclusive right to work the registered utility.”) (S. Korea).

<sup>32</sup> Uma Suthersanen, *Utility Models and Innovation in Developing Countries 1* (UNCTAD-ICTSD Project on IPRs and Sustainable Dev., Issue Paper No. 13, 2006).

<sup>33</sup> GRAHAM DUTFIELD & UMA SUTHERSANEN. GLOBAL INTELLECTUAL PROPERTY LAW 178 (2008); Suthersanen, *supra* note 32, at 1-9.

<sup>34</sup> Suthersanen, *supra* note 32, at 6-9.

<sup>35</sup> In 2001, Australia adopted an “Innovation Patent” system, which is a form of utility model system. The primary purpose of the system was “to stimulate innovation among small to medium business and local industry.” The Innovation Patent, [http://www.ipaustralia.gov.au/patents/what\\_innovation.shtml](http://www.ipaustralia.gov.au/patents/what_innovation.shtml) (last visited July 2, 2009). *See also* Proposal for a European Parliament and Council Directive Approximating the Legal Arrangements for the Protection of Inventions by Utility Model, at 12, COM (97) 691 final (Dec. 12, 1997) (“Cost is also a decisive factor in the case of inventions the commercial success of which is uncertain. This is especially true in the case of SMEs, which tend not to have enough information on markets to be able to gauge the sales prospects of new products, whereas big companies can make use of tried and tested planning and forecasting machinery to help them limit the risk of failure.”). For these reasons, about 60 countries currently operate under the utility model system. *See* WIPO, Where Can Utility Models Be Acquired?, [http://www.wipo.int/sme/en/ip\\_business/utility\\_models/where.htm](http://www.wipo.int/sme/en/ip_business/utility_models/where.htm) (last visited Mar. 29, 2010). On the other hand, some scholars deny the cost-effective aspect of utility model systems. *See, e.g.*, Mark D. Janis, *Second Tier Patent Protection*, 40 HARV. INT’L L.J. 151, 178-88 (1999) (arguing that enforcement costs and attorney fees present obstacles to utility model systems).

and Korea appear to have been partial substitutes for trade secret protection that supplemented the standard patent system, especially in cases in which the cost of patent protection was high compared with the value of the information at stake or when the invention was subpatentable.<sup>36</sup> As Reichman observed of the general function of the utility model system in Japan and Korea, the system seemed as though it “did not unduly discourage competition from building on an innovator’s contributions” and “permitted an improver to capture the economic value of this improvement” during the process of learning to acquire, use, and improve foreign technologies.<sup>37</sup> The utility model system has enabled Japan and Korea, as well as other East Asian countries, such as Taiwan, to facilitate firm-level technological learning.<sup>38</sup> In other words, it has provided a more favorable legal environment for Japanese and Korean firms seeking to protect a subpatentable or incremental innovation through reverse engineering or duplicative imitation of a foreign technology.<sup>39</sup> Furthermore, utility model protection in Japan and Korea played a significant role in diffusing new technologies into the economies of the two countries by virtue of the utility model procedures, such as “pre-grant disclosure, single-claim requirement, first-to-file, and lengthy pendency periods.”<sup>40</sup>

As the Japanese and Korean economies have grown and the levels of technology in products have increased, utility models have become less attractive mechanisms than patent

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<sup>36</sup> See Chapter Chapter V. 2-1. In a separate unpublished paper, I statistically examined the relationship between firms’ preference for trade secret protection and firms’ preference for utility model protection based on raw data from the KIS 2005. The results showed the two means were negatively associated.

<sup>37</sup> Jerome. H. Reichman, *Legal Hybrids Between the Patent and Copyright Paradigms*, 94 COLUM. L. REV. 2432, 2458-59 (1994).

<sup>38</sup> Kumar, *supra* note 22, at 23-25.

<sup>39</sup> Indeed, statistics maintained by the Korean Intellectual Property Office show that Korean nationals use utility models more heavily than foreigners: between 1947 and 2007, there were 941,972 utility model applications, and only 2.4% of those applying came from foreign countries. Korean Intellectual Property Office Statistics, <http://www.kipo.go.kr/en/> (last visited July 1, 2009).

<sup>40</sup> See Maskus & McDaniel, *supra* note 22.

protection to protect their product innovations. In addition, the substantive examination registration system under the utility model procedures is now considered unnecessary, to reduce the workload of patent examination and enable earlier commercialization of registered products with a short life cycle. This change in the environment led the Japanese government to revise the utility model law in 1994 to allow early registration without substantive examination.<sup>41</sup> In addition, as in Japan, Korea adopted a nonsubstantive examination registration system in 1998 and implemented it until 2006.<sup>42</sup>

However, the importance of the utility model as a means to protect innovation in Japan and Korea appears to have been different in recent years. Indeed, the yearly number of applications for utility models—which can be used as a proxy for the effectiveness or importance of utility models in protecting innovations—shows different trends in the two countries. Since the 1980s, the number of utility model applications in Japan has decreased steadily, and the rate of decrease has intensified since 1994, when the Japanese government introduced the new system without the substantive examination. On the other hand, the number of utility model applications in Korea did not decrease dramatically until recently, regardless of the adoption of new procedures for obtaining utility model rights in 1996.

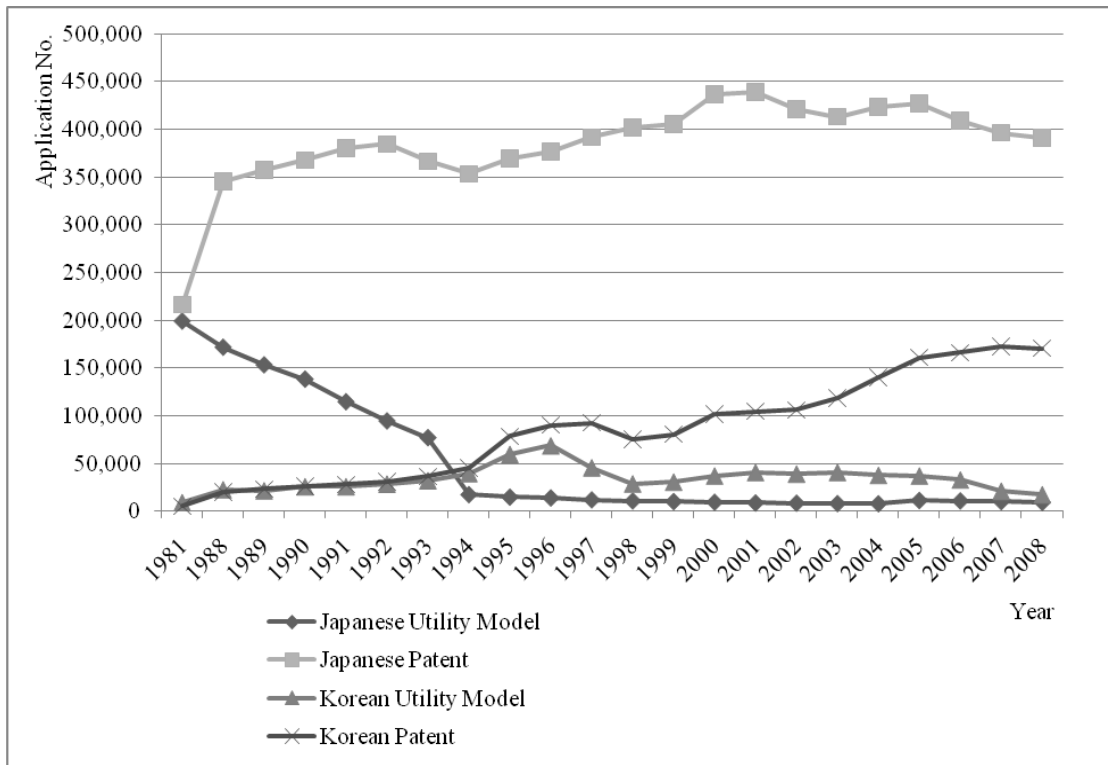
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<sup>41</sup>For an overview of current procedures for obtaining utility model rights in Japan, see Japan Patent Office, [http://www.jpo.go.jp/cgi/linke.cgi?url=/tetuzuki\\_e/t\\_gaiyo\\_e/model.htm](http://www.jpo.go.jp/cgi/linke.cgi?url=/tetuzuki_e/t_gaiyo_e/model.htm) (last visited May 3, 2010).

<sup>42</sup>The revised utility model law provided for the dual application system, where firms were allowed to file both patent applications and utility model applications using the same underlying invention. *Siryong sinan pōp* [Utility Model Act], Law No. 5577, 1998 (came into effect on July 1, 1999), art. 17 (S. Korea).

FIGURE 1

UTILITY MODEL APPLICATIONS AND PATENT APPLICATIONS IN JAPAN AND KOREA<sup>43</sup>



In this context, we may assume that utility models in Japan have not played a significant role in substituting for trade secret protection in recent years. On the other hand, utility models in Korea have played a relatively significant role in substituting for trade secret protection until recently. In other words, in the case of trade secrets, as in the United States and Japan, trade secret law in Korea can supplement the patent system, but it is not likely to affect Korean firms significantly, at least not when they intend to protect their product innovations under the Korean patent and utility model system. Thus, this may suggest that the different reliance of Japanese and Korean firms on trade secret protection for product innovations is attributable to differences in the effectiveness of utility model protection in the two countries. However, the number of

<sup>43</sup> Source: Suthersanen, *supra* note 32, at 18, Statistics of the Japan Patent Office, and Statistics of the Korean Intellectual Property Office.

utility model applications has decreased rapidly since the Korean government revived the substantive examination under the utility model regime in 2006.<sup>44</sup> It is likely that the role of utility models as a substitute for trade secret protection in Korea will decrease in the future, as it has in Japan.

### **1.3. Summary**

The assimilation of imported foreign technology and the diffusion of this technology in domestic industries have been critical to the rapid economic growth seen in Japan and Korea, which wanted to catch up to Western countries. Patent systems with pregrant disclosure, a single-claim requirement, and first-to-file provisions in Japan and Korea played a significant role in diffusing domestic technical innovations and inventions. During the period of rapid economic growth in particular, the utility model system as a supplement for the patent system also played an important role not only in allowing a domestic improver of an imported foreign technology an incentive to capture the economic value of that information, but also in diffusing these local innovations throughout the economies. In addition, in cases in which the cost of patent protection was high compared with the value of the invention or when the invention was subpatentable, the utility model system provided the improver with a strong incentive to protect the inventions under a system conferring an exclusive right, and under those circumstances, the

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<sup>44</sup> In 2006, the Korean government revived the substantive examination under the utility model regime, in part because the government recognized the above problems, and in part because the average period of patent examination was shortened to about ten months in 2006. The current utility model law abolished the dual application system and revived the conversion system, in which “[a] patent applicant may convert a patent application to an application for utility model registration within the scope of matters stated in the description or drawing initially attached to the patent application,” and vice versa. *Siryong sinan pōp* [Utility Model Act], Law No 9371, 2009, art. 10 (S. Korea).

utility model system appears to have worked as a partial substitute for trade secret protection. In this context, trade secret protection, which has a much more limited function in relation to technology disclosure compared with a patent system, was not an attractive intellectual property mechanism for the Japanese and Korean governments. Although there were some differences between Japan and Korea as their industrial technological capabilities increased, the original role intended for the utility model system, that is, to supplement the standard patent system, has been drastically weakened. On the other hand, as information-intensive industries with technologies with a short life cycle have gained importance in Japan and Korea, trade secret protection appears to have become a central mechanism for protecting the innovations of Japanese and Korean firms. In addition, the Japanese and Korean governments have made these industries strategic to their continued economic growth. Accordingly, legal policies on trade secret protection have become key industrial policies in the Japanese and Korean economies in recent years.

## **2. Postemployment Restraints in Japan and Korea**

### **2.1. Use of Postemployment Contracts**

Regarding the practical use of covenants not to compete as supplements to trade secret law in Japan and Korea, despite the prominence of covenants not to compete in the United States, until recently, covenants not to compete have not been a prominent legal and social issue in Japan and Korea.<sup>45</sup> In fact, several surveys conducted in Japan showed that, until recently,

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<sup>45</sup> See Chapter III. 3 & IV. 3; Norman D. Bishara, *Covenants Not to Compete in a Knowledge Economy: Balancing Innovation from Employee Mobility Against Legal Protection for Human Capital Investment*, 27 BERKELEY J. EMP.



Japanese employers did not rely much on postemployment contracts, including covenants not to compete, as a means of restraining postemployment relations. For example, a survey conducted by the Japanese Institute of Intellectual Property revealed that only 6% of responding firms imposed “some kind of obligation on the competition for their employees.”<sup>46</sup> Another survey, conducted by the Japan Institute for Labor Policy and Training in 2004, showed a similar reluctance to rely on covenants not to compete.<sup>47</sup> Indeed, the survey revealed that only 3.7% of Japanese employers sought to protect valuable information through contractual measures that imposed a duty of noncompetition.<sup>48</sup> These employers relied relatively more on the duty of confidentiality (33.7%).<sup>49</sup> These duties were imposed mainly by work rules (*shugyo kisoku*; 47.9%), which have primarily regulated employment relationships in Japan.<sup>50</sup> Interestingly, 57%

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& LAB. L. 287, 289 (2006); Peter J. Whitmore, *A Statistical Analysis of Noncompetition Clauses in Employment Contracts*, 15 J. CORP. L. 483, 489; Kwon-Chul Shin, *Külloja üi kyöngöpp kümji üimu* [Employee’s Duty of Non-Competition], 18 NODONGPÖP YÖN’GU [LABOR LAW STUDIES] 221, 223 (2005) (S. Korea); Takashi Araki, *Legal Issues of Employee Loyalty in Japan*, 20 COMP. LAB. L. & POL’Y J. 267, 267 (1999) [hereinafter Araki, *Employee Loyalty*]; Mikako Ogawa, Note, *Noncompete Covenants in Japanese Employment Contracts: Recent Developments*, 22 HASTING INT’L & COMP. L. REV. 341, 342 (1998-1999).

<sup>46</sup> Hideo Nakoshi, *New Japanese Trade Secret Act*, 75 J. PAT. & TRADEMARK OFF. SOC’Y 631, 633 (1993) (citing a survey result conducted by the Institute of Intellectual Property in 1989).

<sup>47</sup> THE JAPAN INSTITUTE FOR LABOR POLICY AND TRAINING, JÜGYÖIN KANKEI NO WAKUGUMI TO SAIYÖ TAISHOKU NI KANSURU JITTAI CHÖSA: RÖDÖ KEIYAKU WO MEGURU JITTAI NI KANSURU CHÖSA (1) [FACT-FINDING SURVEY ON EMPLOYMENT STRUCTURE, HIRING AND TERMINATION CONCERNING EMPLOYMENT CONTRACTS] 95 (May 17, 2005) (2765 firms of 10,000 surveyed responded), available at [http://www.jil.go.jp/institute/research/documents/004/research004\\_5\\_3.pdf](http://www.jil.go.jp/institute/research/documents/004/research004_5_3.pdf) (last visited Oct 12, 2010).

<sup>48</sup> *Id.*

<sup>49</sup> *Id.* Although larger firms tend to rely more on covenants not to compete and nondisclosure agreements, only 16.3% of large firms with more than 1000 employees responded that they impose a duty of noncompetition on departing employees. The following results are based only on responses by firms reporting that they imposed a duty of confidentiality or a duty of noncompetition.

No. of employees	Fewer than 50, %	50–99, %	100–299, %	300–999, %	More than 1000, %
Duty of confidentiality	30.6	42.9	45.5	57.8	72.1
Duty of noncompetition	3.0	5.7	5.9	9.6	16.3

*Id.* at 96.

<sup>50</sup> *Id.* at 98. For general legal information regarding work rules in Japan, see KAZUO SUGENO, JAPANESE EMPLOYMENT AND LABOR LAW 110-28 (2002).

of responding companies did not impose any duties on departing employees.<sup>51</sup> However, according to a recent survey, Japanese firms' reliance on postemployment contracts, which are intended to restrict competition from employees after their employment relationship has terminated, appears to have increased gradually in recent years. The survey, which was conducted by the Japan Intellectual Property Association (JIPA) in 2008, demonstrated that Japanese firms' propensity for covenants not to compete had increased compared with results of a survey conducted by the JIPA in 1995.<sup>52</sup> In responding to a question asking the firms surveyed whether they required departing employees to sign a nondisclosure agreement, 52.7% of the responding firms reported that they required all departing employees to sign a nondisclosure agreement.<sup>53</sup> Interestingly, 56.2% of the firms requiring employees to sign a nondisclosure agreement reported that they imposed the duty of noncompetition on departing employees.<sup>54</sup> The JIPA survey report noted that the response rate regarding covenants not to compete had increased dramatically compared with the response rate (9.2%) in the 1995 JIPA survey report.<sup>55</sup> Likewise, Korean firms showed an increasing tendency to rely more on contractual measures to protect themselves from unauthorized disclosure of trade secrets or other valuable information by former employees. In fact, surveys on the management of industrial secrets in enterprise laboratories demonstrated that the tendency for Korean firms to rely on postemployment contracts had increased from 37.8% in 2003 to 48.1% in 2006.<sup>56</sup> Furthermore, even in SMEs, this tendency to

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<sup>51</sup> THE JAPAN INSTITUTE FOR LABOR POLICY AND TRAINING, *supra* note 47, at 95.

<sup>52</sup> JAPAN INTELLECTUAL PROPERTY ASSOCIATION, EIGYŌHIMITSUKANRINI OKERU ANKETO CHOSAHOKOKUSHO [SURVEY REPORT ON TRADE SECRET MANAGEMENT] (2008).

<sup>53</sup> *Id.* at 129.

<sup>54</sup> *Id.* at 134.

<sup>55</sup> *Id.* at 135. The survey report also pointed out that given Japanese courts' strict interpretation of covenants not to compete, the increased rate of Japanese firms' reliance on covenants not to compete is surprising. *Id.*

<sup>56</sup> These surveys did not differentiate between confidentiality agreements and covenants not to compete:

rely on contractual measures appears to have increased in recent years.<sup>57</sup>

## 2.2. Role of Lifetime Employment and Relation to Trade Secret Protection

Regarding what has made Japanese and Korean firms resort increasingly more to contractual measures to protect their trade secrets or valuable information, until recently, postemployment covenants not to compete had not received much attention in Japanese and Korean society, allegedly because of the traditional practice of lifetime employment.<sup>58</sup> As observed earlier, the Japanese and Korean governments have dramatically strengthened trade secret law, and they have attributed the enhancement of trade secret protection to social and economic changes.<sup>59</sup> In particular, the demise of the practice of traditional lifetime employment since the economic slowdown in Japan and the financial crisis in the 1990s in Korea has been presented by Japanese and Korean legal scholars and commentators as one of the most important

Survey	Total, %	Large firms, %	SMEs, %	Venture firms, %
2003	37.8	61.4	33.5	36.5
2006	48.1	73.4	38.6	44.9

KOREA INDUSTRIAL TECHNOLOGY ASSOCIATION, KIÖP YÖN'GUSO SANÖPKIMIL KWALLI SILT'AE [FACT-FINDING SURVEY ON THE MANAGEMENT OF INDUSTRIAL SECRETS OF ENTERPRISE LABORATORIES] 50 (June 2006). KOREA INDUSTRIAL TECHNOLOGY ASSOCIATION, KIÖP YÖN'GUSO SANÖPKIMIL KWALLI SILT'AE [FACT-FINDING SURVEY ON THE MANAGEMENT OF INDUSTRIAL SECRETS OF ENTERPRISE LABORATORIES] 51 (Dec. 2003).

<sup>57</sup> SMALL AND MEDIUM BUREAU ADMINISTRATION, CHUNGSO KIÖP SANÖP KIMIL GWALLI SILT'AE CHOSA [A REPORT ON THE CURRENT STATUS OF SMES' MANAGEMENT OF INDUSTRIAL CONFIDENTIAL INFORMATION] 48 (Dec. 2009) (showing the increasing reliance by Korean SMEs on contractual measures, from 48.0% in 2007 to 50.1% in 2009).

<sup>58</sup> See Araki, *Employee Loyalty*, *supra* note 45, at 267; Seong-Ho Lee, *Külloja e taehan kyöngöp kümji yakchöng üi hyoryök kwa chönjik kümji kachöbun üi hyoryök yöbu* [Effects of Covenants Not to Compete and Injunctive Relief], 62 JÖSÜTISÜ [JUSTICE] 84, 84 (2001) (S. Korea); Shin, *supra* note 45, at 223; Jae-Yong Lee, *Yöngöpimil üi pohowa toejik külloja üi kyöngöp kümji üimu* [Protection of Trade Secrets and Covenants-Not-to-Compete of Retired Employees], 15 PÖPHAKYÖN'GU [LAW REVIEW] 115, 116 (2005) (S. Korea).

<sup>59</sup> See Chapter III. and IV.

reasons for the drastic changes in trade secret law in the two countries in recent years.<sup>60</sup> The above statement appears to suggest that the lifetime employment system had, to some extent, worked as a substitute for trade secret law and postemployment contracts not to compete in Japan and Korea, and in recent years, the system has lost its function as a substitute for trade secret law and postemployment contracts as it has eroded in the two countries.

In the United States, because of labor relations and practices in which employment was typically at will, an employer had an incentive to invest in human capital at an efficient level; thus, the employing firm had an incentive to reduce its cost of investment in human capital by dismissing employees during business downturns. On the other hand, an employee with an increased marginal product of human capital had an incentive to move to another firm that was willing to pay higher wages, in part because of the active external labor market in the United States.<sup>61</sup> In this vein, trade secret law and the law of postemployment contracts were said to play a significant role in encouraging an employer's incentive to invest in confidential information as well as human capital.<sup>62</sup> However, Japan and Korea did not have trade secret laws until the early 1990s, and until recently, firms in these countries had not relied routinely on postemployment contracts to protect confidential information and their investment in human capital. Given the above scenario in the United States, one may wonder how the practice of lifetime employment and complementary factors worked to support firms' incentive to invest in confidential information and human capital in Japan and Korea. In other words, one may wonder how it was possible for lifetime employment to work as a substitute for postemployment contracts in labor

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<sup>60</sup> See Araki, *Employee Loyalty*, *supra* note 45.

<sup>61</sup> See Paul H. Rubin & Peter Shedd, *Human Capital and Covenants Not to Compete*, 10 J. LEGAL STUD. 93, 97 (1981).

<sup>62</sup> See Chapter V. 2.4.

practices in Japan and Korea, as well as how lifetime employment has changed in recent years and why.

Because of the dramatic economic success of these countries after World War II, many scholars have developed various theories, such as cultural, control, economic, and motivational theories, on lifetime employment in these countries, especially Japan, to explain the origin and effects of the practice.<sup>63</sup> Nevertheless, they generally agree on the common view that lifetime employment was recognized as an important concept in labor relations in the two Asian countries.<sup>64</sup> Under the practice of lifetime employment in Japan and Korea, the typical relationship of a firm with its employees can be summarized briefly as follows. Newly recruited graduates as regular employees “[were] typically trained by experiencing different types of work

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<sup>63</sup> See Jeremiah J. Sullivan and Richard B. Peterson, *A Test of Theories Underlying the Japanese Lifetime Employment System*, 22 J. INT’L BUS. STUD. 79, 82-85 (1991) (summarizing cultural, control, economic, and motivational theories); JAMES C. ABGLEN, *THE JAPANESE FACTORY: ASPECTS OF ITS SOCIAL ORGANIZATION* 11 (1958); Geert Hofstede, *The Cultural Relativity of Organizational Practices and Theories*, 14 J. INT’L BUS. STUD. 75, 80 (1983) (showing and placing 50 countries examined including Korea, the United States, and Japan on individualist-collectivist scale); see also Hak-Chong Lee, *Transformation of Employment Practices in Korean Business*, 28 INT’L. STUD. OF MGMT. ORG. 26, 27-28 (Winter 1998-1999) (explaining traditional Korean culture).

<sup>64</sup> See MASAHIKO AOKI, *INFORMATION, INCENTIVES, AND BARGAINING IN THE JAPANESE ECONOMY* (1988); RONALD PHILIP DORE, *BRITISH FACTORY, JAPANESE FACTORY: THE ORIGINS OF NATIONAL DIVERSITY IN INDUSTRIAL RELATIONS* (1973). In addition, there have been many recent studies on the origin and development of the lifetime employment system in Japan from diverse perspectives. See, e.g., Ronald J. Gilson & Mark J. Roe, *Lifetime Employment: Labor Peace and the Evolution of Japanese Corporate Governance*, 99 COLUM. L. REV. 508, 516-28 (1999) (focusing on political deals in explaining the development of lifetime employment in Japan); Chiaki Moriguchi & Hiroshi Ono, *Japanese Lifetime Employment: A Century’s Perspective* 1-22 (The Eur. Inst. of Japanese Stud., Working Paper No. 205, Sep 2004), available at <http://swopec.hhs.se/eijswp/papers/eijswp0205.pdf> (last visited April 2010) (explaining lifetime employment in Japan as a “cluster of human resource management” interacting with “macro-level legal, political, and social institutions”); DAVID COATES, *MODELS OF CAPITALISM: GROWTH AND STAGNATION IN THE MODERN ERA* 127 (2001) (mentioning Japanese cultural factors). For a brief examination of the development of lifetime employment in Korea, see Brett M. Kitt, Note, *Downsizing Korea? The Difficult Demise of Lifetime Employment and the Prospects for Further Reform*, 34 Law & Pol’y Int’l Bus. 537, 539-44 (2003) (explaining several factors, including cultural, economic, and political factors, related to the development of lifetime employment in Korea). However, it should be noted that lifetime employment was not widely used in entire firms in Japan and Korea. Mostly male core employees in large firms worked under the practice. See Leon Wolff, *The Death of Lifetime Employment in Japan?*, in *CORPORATE GOVERNANCE IN THE 21ST CENTURY: JAPAN’S GRADUAL TRANSFORMATION* (Luke Nottage, Leon Wolff, and Kent Anderson eds. 2008); June Park, *The Political Origin of Employment Protection: A Comparative Study of the United States, Germany, and South Korea* 163 (2007) (unpublished Ph.D. dissertation, University of Pittsburgh) [hereinafter Park, *Employment Protection*].

in several departments[, especially within a large firm] or corporate group.”<sup>65</sup> The firm not only provided a compensation system based on seniority, but also refrained from laying off the employees, even during economic downturns, and instead used “alternative ways to reduce labor costs” during the time period, such as a “hiring freeze, intra- and inter-firm transfer, [or] voluntary retirement.”<sup>66</sup> Accordingly, the employees with corporate loyalty tended to remain with the same firms for many years, or until they reached the mandatory retirement age.<sup>67</sup>

In short, employers guaranteed their employees lifetime employment, and the employees in turn promised not to leave for many years, or until their retirement. Thus, under the practice of lifetime employment, because of the employees’ promise not to leave, the firms may have had an incentive to invest in human capital (e.g., on-the-job training) and to maintain confidential information without worrying about a potential loss of return on their investment. Similarly, because of the employers’ promise of lifetime employment and the compensation system, including a “seniority wage system, internal promotion, bonuses, [and] corporate pensions,” employees may have had an incentive to “exert effort, acquire desirable human capital, and remain” with the same firm.<sup>68</sup> This model seems to show the cooperation between employers and employees in the absence of trade secret law or postemployment covenants not to compete that encouraged cooperation among people.<sup>69</sup> This raises the question of what factors supported

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<sup>65</sup> Thomas Bredgaard & Flemming Larsen, *Comparing Flexicurity in Denmark and Japan* 20 (Japan Inst. for Labour Policy and Training, Research Report of the Foreign Researcher Invitation Program of the, 2007), available at [http://www.jil.go.jp/profile/documents/Denmark\\_final.pdf](http://www.jil.go.jp/profile/documents/Denmark_final.pdf) (last visited Jan. 15, 2009); SUGENO, *supra* note 50, at 75.

<sup>66</sup> Moriguchi & Ono, *supra* note 64, at 5. *See id.* at 13 (“by the early 1960s, . . . it was common for Japanese employers to circumvent dismissals by using other means, such as reduction of working hours, relocation of regular employees, separation of non-regular employees, and the suspension of hiring new workers.”).

<sup>67</sup> SUGENO, *supra* note 50, at 75.

<sup>68</sup> Moriguchi & Ono, *supra* note 64, at 5.

<sup>69</sup> For a general economic theory of contracts, see ROBERT COOTER AND THOMAS ULEN, *LAW AND ECONOMICS* 195-236 (4th ed. 2004). *See also* ERIC A. POSNER, *LAW AND SOCIAL NORM* 11-35 (2000) (stating “a model of cooperation and the production of social norms”); ROBERT C. ELLICKSON, *ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES* (1991) (demonstrating people’s cooperation in the absence of law).

the lifetime employment practice in these countries. Taking a closer look at the practice may allow us to discover internal and external factors that gave each party an incentive to support the practice. This section briefly examines these factors and their changes in response to recent socioeconomic changes in Japan and Korea.

### 2.2.1. Japan

In Japan, in principle, an employment contract without a fixed period has been governed by section 1 of Article 627 of the Japanese Civil Code. Under the Article, either party can terminate the contract at any time with two weeks' advance notice based on the freedom of contracts, which includes the freedom of dismissal.<sup>70</sup> Based on the recognition of unequal bargaining power between the two parties in an employment contract, the Labor Standards Act of 1947 included some provisions restricting the dismissal of employees under certain circumstances, and it extended the advance notice period to thirty days.<sup>71</sup> Except for these provisions in the Labor Standards Act, as mentioned, the dismissal of employees in an employment contract was governed by the Japanese Civil Code.<sup>72</sup> Thus, an employer had the

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<sup>70</sup> Minpō [Civil Code], Law No. 89 of 1896, art. 627, para. 1 (Japan) (“If the parties have not specified the term of employment, either party may request to terminate at any time. In such cases, employment shall terminate on the expiration of two weeks from the day of the request to terminate.”); SUGENO, *supra* note 50, at 473.

<sup>71</sup> See Rōdōkijūhō, Law No. 49 of 1947, art. 19, para. 1 (Japan) (“An employer shall not dismiss a worker during a period of absence from work for medical treatment with respect to injuries or illnesses suffered in the course of employment nor within 30 days thereafter, and shall not dismiss a woman during a period of absence from work before and after childbirth in accordance with the provisions of Article 65 nor within 30 days thereafter.”); Rōdōkijūhō, Law No. 49 of 1947, art. 20, para. 1 (Japan) (“In the event that an employer wishes to dismiss a worker, the employer shall provide at least 30 days advance notice.”); *see also* SUGENO, *supra* note 50, at 474-79.

<sup>72</sup> However, there was the Trade Union Act under which “dismissals of workers because they are union members or their having engaged in proper union activities are invalid as violations of the public policy contained in the guarantee of organizational and other rights in Article 28 of the Constitution.” *Id.* at 479.

right to terminate at any time unless the employer's dismissal violated work rules or the above statutory restrictions.

In practice, however, several external factors had buttressed lifetime employment in Japan. On the side of the employer, among other factors, such as the Japanese government-led employment stabilization measures, an important and relatively direct factor seemed to be the intervention of Japanese courts supporting the practice of lifetime employment.<sup>73</sup> Japanese courts restricted the abusive exercise of an employer's right to dismiss an employee under "the doctrine of abusive dismissal" developed through judicial precedents.<sup>74</sup> In 1975, in a case involving an employee who was dismissed from employment because the employee was dismissed from membership of a labor union under the union shop agreement, a lower court did not consider whether or not the dismissal from membership of the labor union was invalid when it judged whether the dismissal from employment was valid or not.<sup>75</sup> In the case, the Supreme Court of Japan stated that "it is fair to say that as the case may be, depending on whether the said removal from the register (or dismissal from membership) is valid or not, the said dismissal from employment should be judged invalid," and it further stated that "even when an employer exercises its right of dismissal, it will be void as an abuse of the right if it is not based on objectively reasonable grounds so that it cannot receive general social approval as a proper act."<sup>76</sup> Two years later, in 1977, the Court reaffirmed the doctrine with more clarity, stating

even where there are objective reasons for a dismissal, an employer does not always have the right to dismiss. If, under the specific circumstances of the case,

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<sup>73</sup> See Gilson & Roe, *supra* note 64, at 524-28 (presenting three more factors that buttressed lifetime employment in Japan).

<sup>74</sup> Ryo Kambayashi, *Dismissal Regulation in Japan* (Global COE Hi-Stat Discussion Paper Series No. 119, Mar. 2010), available at <http://gcoe.ier.hit-u.ac.jp/research/discussion/2008/pdf/gd09-119.pdf> (last visited April 26, 2010).

<sup>75</sup> Supreme Court of Japan, Judgment of April 25, 1975, Case No. Shōwa 43 (O) 499, *translated in* SUGENO, *supra* note 50, at 479-80.

<sup>76</sup> *Id.*



the dismissal is unduly unreasonable so that it cannot receive general social approval as a proper act, the dismissal will be void as an abuse of the right of dismissal.<sup>77</sup>

Accordingly, even if an employer in Japan could terminate an employment contract at any time, in most cases in which there was grounds for dismissal, the dismissal was restricted by the courts, which assessed strictly whether it was “objectively reasonable” and “socially acceptable.” In general, these reasonable grounds for dismissal could be divided into four or five types.<sup>78</sup> Among them, to assess the validity of a dismissal based on business necessity, which is a means of employment adjustment, the courts established four requirements:

First, the employer must provide a reasonable explanation to the court of the need to reduce the number of workers. Second, the dismissal must be the last resort to adjust labor input. Third, the selection of the person to be discharged should be proper. Fourth, the dismissal procedure should be reasonable.<sup>79</sup>

The courts placed more restrictions on the dismissal by imposing a burden of proof on the employer, who had to prove the dismissal was not an abuse of the right.<sup>80</sup> In this context, the courts in Japan appear to have developed the doctrine by focusing on labor security rather than labor flexibility, and as Japanese scholars have argued, this strict court

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<sup>77</sup> This case involved an employee, a newscaster, who failed to deliver the morning news twice in two weeks. The employer, a broadcasting company, dismissed the employee. The Supreme Court of Japan nullified the dismissal, reasoning that “the decision to dismiss [the employee] was somewhat overly severe, lacked reasonableness and was not without doubt as to its reasonableness. There is room to believe that it would not necessarily be approved as socially acceptable.” Supreme Court of Japan, Judgment of Jan. 31, 1977, 268 Rōdō Hanrei 17, *translated in* SUGENO, *supra* note 50, at 481.

<sup>78</sup> Sugeno explains these four types of reasonable grounds for dismissal: (1) “worker’s incompetence, or the worker’s lack, or loss, of the skills or qualifications required for performance of the worker’s job”; (2) worker’s engagement in “an act that violates a disciplinary rule”; (3) business necessity; (4) union demands based on a union-shop agreement. SUGENO, *supra* note 50, at 480.

<sup>79</sup> Tokyo High Court of Japan, Judgment of Oct. 29, 1979, Case No. Shōwa 51 (Ne) 1028, *translated in* Kambayashi, *supra* note 74, at 9-10.

<sup>80</sup> Kambayashi, *supra* note 74, at 10-14; SUGENO, *supra* note 50, at 486-89.

approach toward dismissal “reinforced [the evolving lifetime employment practice] and transformed expectations into social norms” in Japanese society.<sup>81</sup>

On the side of the employee, like the employer, no formal enforcement mechanism prohibited an employee from moving to another employer that offered a better paying job. However, an informal enforcement mechanism existed that discouraged the employee from having an incentive to leave. Because lifetime employment became a social norm in labor relations in Japanese society, firms, especially larger firms, had little incentive to dismiss their employees except in extremely difficult business situations.<sup>82</sup> Thus, in the case of dismissal by the firm, the employee was regarded as a person who was “disaffected” with the firm in the network of communication among firms.<sup>83</sup> Even in a case of voluntary resignation, the employee was “treated with suspicion by any subsequent employer, having proven that they could not be trusted.”<sup>84</sup> Based on empirical evidence, as Moriguchi and Ono pointed out, “[t]he stigma attached to job changers hampered their chances of reemployment and resulted in

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<sup>81</sup> Moriguchi & Ono, *supra* note 64, at 14; *see also* Gilson & Roe, *supra* note 64, at 525-26; Takashi Araki, *Changing Employment Practices, Corporate Governance, and the Role of Labor Law in Japan*, 28 COMP. LAB. L. & POL’Y J. 251, 253-54 (2007) [hereinafter Araki, *Corporate Governance*]; Wolff, *supra* note 64, at 75. For interpretations of these requirements by courts and leading cases in Japan, see Kambayashi, *supra* note 74, at 10-14; SUGENO, *supra* note 50, at 486-89.

<sup>82</sup> Sydney Crawcour, *The Japanese Employment System*, 4 J. JAPANESE STUD. 225, 240 (1978).

<sup>83</sup> *Id.* (“Regular workers were seldom dismissed, and then usually only in cases of disaffection or ‘subversion,’ but when dismissal did occur it was an industrial death sentence with consequences far more severe than they would be in many other industrial societies.”).

<sup>84</sup> Rosen & Usui, *The Social Structure of Japanese Intellectual Property Law*, 13 UCLA PAC. BASIN L.J. 32, 52-54 (1994). *See also* Jay Dratler, Jr., *Trade Secrets in the United States and Japan: A Comparison and Prognosis*, 14 YALE J. INT’L L. 68, 112 (1989) (“Due to these cultural factors, a Japanese contemplating misappropriation of trade secrets faces severe economic and social disincentives. He would exchange a guarantee of life-time employment, as well as the comfort and security of an interlocking web of good personal relations and cross-loyalties with coworkers, for a very uncertain future. Although there might be some immediate monetary advantage from the misappropriation, the employee would face suspicion and distrust even from his new coworkers and managers, both for the apostasy of leaving the womb of permanent employment and for the contemptible breach of former managers’ trust and former coworkers’ loyalty.”).

their wage loss.”<sup>85</sup> This norm against job changers in the external labor market may have been a factor related to the inflexibility of the labor market in Japan.<sup>86</sup>

However, the longest economic stagnation in Japanese history since the early 1990s changed the role of these enforcement mechanisms that had supported the practice of lifetime employment. On the one hand, in fact, the Japanese government and courts, to some extent, changed their traditional position on job security in the labor market based on the recognition of the importance of labor flexibility to economic development. Although the Japanese government has tried to maintain employment security,<sup>87</sup> the Japanese government and courts have taken several measures to enhance labor flexibility in the external, as well as the internal, labor market.<sup>88</sup> Nevertheless, the Japanese government and courts have not changed their position on the doctrine of abusive dismissal. Although, in a case involving employees dismissed for economic reasons, the Tokyo District Court appeared to limit the doctrine of abusive dismissal by shifting the burden of proof from employers to employees,<sup>89</sup> the original version of the doctrine

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<sup>85</sup> Moriguchi & Ono, *supra* note 64, at 17, n15 (“Empirical studies of the Japanese labor market have found a negative correlation between the number of job changes and earnings,” citing Takao Kato & Mark Rockel, Experiences, Credentials, and Compensation in the Japanese and U.S. Managerial Labor Markets: Evidence from New Micro Data, 6 J. JAPANESE & INT’L ECON. 30 (March 1992); Hiroshi Ono, *College Quality and Earnings in the Japanese Labor Market*, 43 INDUS. REL. 595 (2004).

<sup>86</sup> See Gilson & Roe, *supra* note 64, at 516-28 (noting the inactive external labor market as an important factor supporting the practice of lifetime employment).

<sup>87</sup> Moriguchi & Ono, *supra* note 64, at 21.

<sup>88</sup> The Japanese government and courts allowed employers to exploit adjustments in working conditions in the internal labor market for the purpose of relieving employers’ possible cost when they did not resort to economic dismissals. At the same time, as a measure to deregulate labor market regulations, the government revised the “Worker Dispatching Act” in 2003, which “was prohibited under the 1999 revision.” Araki, *Corporate Governance*, *supra* note 81, at 255-76.

<sup>89</sup> The Tokyo district courts stated “in principle, employers are free to dismiss employees. In [this] case, employees are charged with the burden of proof establishing [the] existence of certain facts that give rise to abuse of employers’ right of dismissal,” and held in favor of employers. Tokyo District Court of Japan, Decision of November 29, 1999, Case No. Heisei (Yo) 21087. A Japanese economist noted that the case “may represent a rational response to recent labor market changes and the fact that the focus of cases has shifted from collective disputes to individual disputes revolving around questions of financial compensation.” Kambayashi, *supra* note 74, at 17.

established by the Supreme Court of Japan was incorporated in the Labor Standards Act in 2003 after heated debate during the drafting of the amendment bill, especially on the matter related to shifting the burden of proof.<sup>90</sup>

On the other hand, although there has been disagreement about the downward trend in job security in Japan, recent surveys have supported the argument that Japanese firms have sustained less commitment to the lifetime employment of their employees compared with the period before the recent economic downturn.<sup>91</sup> For example, Ahmadjian and Robinson reported that an increasing number of Japanese firms downsized during the 1990s.<sup>92</sup> According to their research, “over 20 percent of all firms had downsized by 10 percent or more” by 1997, which was a large-scale downsizing.<sup>93</sup>

A more important change has been observed on the side of the employees. The unprecedented economic downturns have caused, to some degree, a decline in job security in Japanese society. As a logical result, this has also caused a decline in trusting relationships in the workplace.<sup>94</sup> In fact, the decline in employees’ trust in terms of their

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<sup>90</sup> See Kambayashi, *supra* note 74, at 17-18 (“In the original government proposal, . . . the burden of proof lay with employees who need[ed] to show that a dismissal was abusive.”).

<sup>91</sup> See Wolff, *supra* note 64, at 66-74.

<sup>92</sup> Christina L. Ahmadjian & Patricia Robinson, *Safety in Numbers: Downsizing and the Deinstitutionalization of Permanent Employment in Japan*, 46 ADMIN. SCI. Q. 622, 634 (2001).

<sup>93</sup> In addition, their research findings showed the rising number of Japanese firms’ downsizing:

In 1990, 5.9 percent of the firms in the sample reduced employment by 5 percent or more, while in 1997, 24 percent downsized by 5 percent or more. . . . In 1991, 10 percent of the firms in the sample reduced their employment by 5 percent or more. By 1997, over 50 percent of the firms had downsized at least once.

*Id.* at 634. The downward trend in job security has been supported by several recent researches. See Wolff, *supra* note 64, at 67-68; EeHwan Jung & Byung-you Cheon, *Economic Crisis and Changes in Employment Relations in Japan and Korea*, 46 ASIAN SURVEY 457, 461 (2006) (“the most representative survey on corporate restructuring conducted by Japan’s Ministry of Health, Labor, and Welfare (MHLW), shows that the percentage of companies that implemented workforce reduction (such as “honorary” retirement and layoffs) has increased since the late 1990s. From 1.3% in 1995 and 1.5% in 1996, this figure increased to 3.8% in 1999, 2.3% in 2000, 3.8% in 2001, and 4.5% in 2002. The figures from 1999 and after are about three times as high as those in the mid-1990s.”).

<sup>94</sup> Hyeong-ki Kwon, *Japanese Employment Relations in Transition*, 25 ECON. & INDUS. DEMOCRACY 325, 337

commitment to firms has been confirmed by many recent studies. For example, Kwon, relying on a comparative survey conducted in 1997, noted that “in terms of affective commitments, loyalty of American employees to their firms is higher than that of the Japanese, although Japanese employees have higher expectations of job continuance than that of US employees.”<sup>95</sup> The decline in employees’ loyalty to firms triggered by the decreased job security in Japan appears to have resulted in increasing mobility among midcareer employees. In this vein, the informal sanction against a job changer in the external labor market no longer seems to function properly in the same way it had before the economic downturns. Indeed, despite the existence of some barriers that made it difficult for midcareer job changers to seek new jobs, such as age limits on their recruitment and hiring,<sup>96</sup> according to the METI, the percentage of job changers in new employment in a given year has become increasingly larger since the early 1990s.<sup>97</sup> In addition, in a survey conducted by the METI in 2006, Japanese firms reported that technology leakage by persons related to business was the greatest potential risk factor associated with technology leakage, and former employees were specifically recognized as being the greatest risk factor among them.<sup>98</sup>

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(2004) (“Changes in the status of employees’ trusting commitments and work ethics are not simply the result of the social effects of *karoshi* (death due to extreme hard work), but are, more importantly, due to a ‘sense of betrayal’ that prevailed among workers during the process of industrial adjustments in the 1990s.”).

<sup>95</sup> *Id.* at 335-36.

<sup>96</sup> See Hiroshi Ono, *Japanese Labor Market Reform: Why Is It So Difficult?* (The Eur. Inst. of Japanese Stud., Working Paper No. 146, Apr. 2002), available at <http://swopec.hhs.se/eijswp/papers/eijswp0146.pdf> (last visited April 29, 2010).

<sup>97</sup> MINISTRY OF ECONOMY, INDUSTRY AND TRADE, WAGAKUNINIOKERU GIJTSURYŪSHUTSU OYABI KANRINO JITTAINI TSUITE [ACTUAL CONDITIONS OF TECHNOLOGY LEAKAGE AND MANAGEMENT IN JAPAN] 5 (June 2006) (Japan).

<sup>98</sup> *Id.* at 9.

### 2.2.2. Korea

In Korea, unlike in Japan, there has been a general provision restricting the right of employers to dismiss employees in the absence of just cause since the first enactment of the Labor Standards Act in 1953.<sup>99</sup> Because of the problem of weak enforcement by the Korean government, however, the general provision did not play an important role in protecting employees from dismissal before the 1987 democratization.<sup>100</sup> In that situation, in many cases, employees who worked at SMEs in labor-intensive and light industries did not have the benefit of lifetime employment.<sup>101</sup> To make matters worse, there was little judicial role in restricting abusive dismissals by employers until 1989, in part because of a lack of judicial independence under dictatorships. Unlike the employees at SMEs, employees working in large-sized firms, such as *chaebols* (a Korean form of business conglomerate), had been the primary beneficiaries of the lifetime employment practice.<sup>102</sup> Given the large share of Korean *chaebols* in the Korean economy, it may be fair to say that the practice of lifetime employment was an important feature of labor relations in

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<sup>99</sup> See Kŭllokijunpŏp[Labor Standards Act], Law No. 286, 1953, art. 27 (S. Korea) (“An employer shall, without justifiable cause, not dismiss, lay off, suspend, transfer a worker, reduce wages, or take other punitive measures against a worker.”). In addition, some restrictive provisions also apply under certain circumstances pursuant to the Act. For an overview of the history of Korean labor law, see Jennifer L. Porges, *The Development of Korean Labor Law and the Impact of the American System*, 12 COMP. LAB. L.J. 335 (1991).

<sup>100</sup> Park explains as follows:

the government did not enforce the law in the face of frequent violations on the employer’s side. Combined with the problem of weak enforcement, the employment protection provided by the law was largely decorative because the definition of “justifiable causes” for dismissal was left to administrative decrees but there were no government actions on this. Employers fired or threatened to fire workers if they joined labor unions despite the “justifiable causes” provision in the Labor Standards Act.

Park, Employment Protection, *supra* note 64, at 163.

<sup>101</sup> *Id.* at 163.

<sup>102</sup> See Adam Lee Sarosh Kuruvilla, *Changes in Employment Security in Asia*, 2 GLOBAL BUS. REV. 259, 265 (2001) (“employment security has been a norm for workers in large Korean enterprises.”); Park, Employment Protection, *supra* note 64, at 161.

Korea.<sup>103</sup> An important reason for the relative success of lifetime employment in large-sized firms may be due to the role of proactive government intervention in implementing the economic policy, in which the *chaebols* were intended to play a primary role in economic growth in Korea. For example, the Korean government provided *chaebols* with extremely generous financial support, even during the severe economic downturns in the 1970s, which led to the continuing expansion of *chaebols* in the subsequent decades.<sup>104</sup> Thus, *chaebols* did not have to be overly concerned about potential costs related to the inflexible use or adjustment of labor during business downturns and were able to develop the norm of lifetime employment, which induced a high level of employee commitment.<sup>105</sup> *Chaebols* promoted lifetime employment through the enhancement of job security, which was achieved by means of compensation systems and a mandatory retirement system based on age.<sup>106</sup> Under these circumstances, employees tended to show a greater loyalty to their company, and departing employees were considered losers because of their lack of sufficient job skills and expertise in their former work, or they were considered traitors who violated the presumptive social norm under which employees were expected to remain in a firm for many years, or until the mandatory retirement age. In fact, according to a survey in 1990, in response to a question asking whether it was desirable for an employee to move to another firm that

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<sup>103</sup> See Stephan Haggard & Chung-In Moon, *Institutions and Economic Policy: Theory and a Korean Case Study*, 42 *WORLD POLITICS* 210, 218 (1990) (“In 1973, the top fifty *chaebol* accounted for 32 percent of GDP. By 1980, the *chaebol* dominated the economy, accounting for 49 percent of GDP, 24 percent of total sales, 18 percent of manufacturing employment, and over half of Korea’s total exports.”).

<sup>104</sup> Park, *Employment Protection*, *supra* note 64, at 163.

<sup>105</sup> *Id.* at 180.

<sup>106</sup> See *id.* at 181 (“According to a survey conducted by the Korea Employers Federation, during 1987-1988, 93 percent of 622 firms implemented mandatory retirement at age 55. This survey also shows that 43.3 percent of the companies had a mandatory retirement system during the 1970s and 34.6 percent between 1980 and 1988. This indicates that Korean employers might have adopted the mandatory retirement system.”).

offered higher pay, 76.1% of the 796 employees surveyed reported that it was not desirable.<sup>107</sup> Furthermore, white-collar workers, in particular, “tended to be more loyal to their employers than blue-collar workers.”<sup>108</sup>

The political transition to democracy since 1987, which resulted in an active labor movement, was another important factor that led courts to reinforce the practice of lifetime employment.<sup>109</sup> In 1989, in response to labor activism, the Supreme Court of Korea established four requirements for the validity of employee dismissal based on business necessity, such as because of employee adjustments during business downturns, which were similar to the requirements in Japan. In cases involving employees who were being made redundant, the Court stated

[i]n [the] case of dismissal by reason of redundancy, first, managerial urgency is required to the extent that business management would be in danger without dismissals of employees. Second, all efforts, such as rationalization of management policy or style, freezing of new hiring, temporary suspension, or voluntary retirement were made to avoid such termination. Third, [a] reasonable and fair standard is required to select employees for the dismissal. In addition, prior to the dismissal, sincere consultation with [the] union or employees is required.<sup>110</sup>

Nevertheless, the courts’ application of these requirements, especially the scope of “managerial urgency,” was not consistent.<sup>111</sup> In the 1990s, however, with concern

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<sup>107</sup> Chang-Ui Kim, *Urinara kiŏp ũi chjongsin koyong e kwanhan yŏn’gu* [Lifetime Employment System in Korea], 13 NODONG KYONGJE NONJIB [LABOR ECONOMY REVIEW] 115, 130 (1990) (S. Korea).

<sup>108</sup> Park, Employment Protection, *supra* note 64, at 182.

<sup>109</sup> For an overview of the impact of the 1987 democratization movement on Korean labor law, see Porges, *supra* note 101, at 335, 352-358. *See also* Park, Employment Protection, *supra* note 64, at 193 (“union membership increased by more than 50 percent in two years after June 1987. While there were 1,433 labor disputes between 1980 and 1986, there occurred as many as 3,749 labor disputes in the year of 1987.”).

<sup>110</sup> Supreme Court of Korea, Judgment of May 23, 1989, Case No. 87daka2132.

<sup>111</sup> With regard to the interpretation of the first requirement, in some cases, the Court held that if business management would be in danger without dismissals of employees, the requirement was met. *See, e.g.*, Supreme Court of Korea, Judgment of Jan. 12, 1990, Case No. 88daka34094. However, in other cases, the Court recognized business necessities coming from technology innovation and structural changes in industry as justifiable reasons for economic dismissal. *See, e.g.*, Supreme Court of Korea, Judgment of Dec. 10, 1991, Case No. 91da8647.



regarding decreasing international competitiveness, in part because of the increasing industrial power of China and increased labor cost of Korean employees after the 1987 democratization, the Korean government amended the Labor Standards Act in December 1996 despite fierce opposition from workers.<sup>112</sup> In response to the 1996 amendment, workers in Korea went on a general strike.<sup>113</sup> The 1996 amendment was replaced by a subsequent amendment in March 1997 in a completely revised form.<sup>114</sup> In the amendment, a redundancy dismissal provision with the four requirements, which was established in a Supreme Court case in 1989, was legislated under Article 31 of the Act.<sup>115</sup>

The 1997 economic crisis, which was triggered by a financial crisis, affected the entire Korean society.<sup>116</sup> The financial crisis led the Korean government to request the International Monetary Fund for financial support, conditional on economic structural reform, which included reforming monetary policy, opening capital markets, restructuring the financial sector, reforming the reserve management and exchange rate policy,

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<sup>112</sup> The amendment bill was rushed through by the ruling party, *Sinhankukdang*, in December 26, 1996. The requirements for the validity of redundancy dismissal were incorporated into the Act, but the newly incorporated requirements were in favor of employers by clearly recognizing continuing managerial deterioration, corporate restructuring for productive improvement, technology innovation, and change of business type as examples for urgent managerial necessity. *Küllokijunpöp* [Labor Standards Act], Law No. 5245, 1996, art. 27 *bis* (S. Korea). As the legal protection of employees from abusive dismissal was weakened, as Park pointed out, it “threatened workers who had been accustomed to lifetime employment relationships as these workers were acutely concerned about their job security.” Park, *Employment Protection*, *supra* note 64, at 207.

<sup>113</sup> See *350,000 on Strike in South Korea as Unrest Spreads*, NEW YORK TIMES, Dec. 28, 1996, at 3, available at 1996 WLNR 4394977; *Thousands of South Korean Protest Law Parliament’s Secret Passage of a Bill That Reduces Organized Labor’s Power Spurred Fears of Layoffs and a Huge Strike*, ORLANDO SENTINEL, Dec. 28, 1996, at A6, available at, 1996 WLNR 5271179.

<sup>114</sup> *Küllokijunpöp* [Labor Standards Act], Law No. 5309, 1997 (S. Korea).

<sup>115</sup> *Id.* art. 31.

<sup>116</sup> See generally DONG-MYEON SHIN, SOCIAL AND ECONOMIC POLICIES IN KOREA 171-92 (2003); Won-duck Lee & Byung-you Cheon, *Flexibility in the Korean Labor Market*, in RECENT DEVELOPMENTS IN EMPLOYMENT RELATIONS AND LABOR MARKET IN KOREA 85-105 (Young-ki Choi ed. 2005).

restructuring the corporate sector, and reforming labor market and trade policy.<sup>117</sup> The International Monetary Fund thought it was necessary to make the labor market more flexible for efficient corporate restructuring.<sup>118</sup> In February 1998, the Korean government amended the Labor Standards Act to relieve employers of the cost associated with dismissals of employees. The 1998 amendment clearly included “transfer, merger, or acquisition of the business” as urgent managerial necessities and provided a legal basis for the corporate restructuring that occurred during the economic crisis.<sup>119</sup> In the process of corporate restructuring, a large number of firms, including *chaebols*, went bankrupt, and mergers and acquisitions took place between firms to survive.<sup>120</sup> During that time, collective dismissals and workforce reductions took place in the corporate, financial, public, and labor sectors.<sup>121</sup> *Chaebols* were not able to avoid such large-scale employee adjustments by means of collective dismissal, honorary retirement, or early retirement.<sup>122</sup> Lee and Cheon noted that “during the four years following the financial crisis, 28% of employees underwent involuntary job terminations generated by aggressive employment adjustment by employers.”<sup>123</sup> As a result, employees in Korea, especially those in large-

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<sup>117</sup> See A Letter of Intent of the government of Korea and Memorandum on the Economic Program of Korea (Dec. 3, 1997), at <http://www.imf.org/external/np/loi/120397.htm#memo> (last visited Oct. 12, 2010) (describing the policies the Korean government implemented for the economic structural reform).

<sup>118</sup> See *id.*

<sup>119</sup> Kŭllokijunpŏp [Labor Standards Act], Law No. 5510, 1998, art. 31, para. 1 (S. Korea) (“Where an employer wishes to dismiss a worker for managerial reasons, there must be an urgent managerial necessity. In this case, it shall be deemed that there is an urgent managerial necessity for the transfer, merger, or acquisition of the business in order to prevent managerial deterioration.”).

<sup>120</sup> See generally ECONOMIC CRISIS AND CORPORATE RESTRUCTURING IN KOREA: REFORMING THE CHAEBOL 127-306 (Stephan Haggard et al. eds., 2003).

<sup>121</sup> Lee & Cheon, *supra* note 116, at 86-87.

<sup>122</sup> *Id.* at 86.

<sup>123</sup> *Id.* at 89-90.

sized firms, may have felt serious job insecurity unlike anything they had experienced in the past.<sup>124</sup>

Under the harsh labor market environment that has evolved since the economic crisis, employees have inevitably changed their attitude toward, or perception of, work. On this point, research by two Korean sociologists provides insight:

[I]n reaction to all of these uncertainties and [the] harsher corporate environment, workers have become more realistic about their career and more self-centered: the thought of lifetime employment and blind loyalty has changed to one of “I work only as much as I am paid” or “the only things I can trust are myself and money.” Indeed, the fear of being laid off has inspired many Korean workers to be more concerned with making a lot of money in a short time.<sup>125</sup>

Under this circumstance, departing employees are no longer considered losers or traitors.

In addition, Korean firms’ hiring methods show a “decrease in the number of recently graduating students taken on annually” and an “increase in the number of experienced workers engaged.”<sup>126</sup> For example, in *chaebols*, the ratio of graduate student hiring to total hiring after the 1997 financial crisis decreased from 65.1% during the period between October 1995 and November 1996 to 32.8% during the period between October

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<sup>124</sup> Jung and Cheon summarize well Korean workers’ feeling about the large-scale layoffs:

It has not become socially understood that if a company is in difficulty, it has to let go some of its employees. In particular, middle-aged workers are facing greater employment instability because they get higher wages than younger workers under seniority-based pay systems. A recent survey by a Korean newspaper showed that Korean managerial workers believe their actual average retirement age is 47. This is the reason why words such as *saojeong* (literally, 45 retire) or *oryukdo* (literally, 56 thief) became common expressions.

Jung & Cheon, *supra* note 93, at 466.

<sup>125</sup> Gil-Sung Park & Andrew Eungi Kim, *Changes in Attitude Toward Work and Workers’ Identity in Korea*, 45 KOREA J. 36, 42 (Fall 2005). Park and Kim also describe Korean employees’ lower commitment to their work compared with that in other countries, citing TAYLOR NELSON SOFRES, *GOLBAL EMPLOYEE COMMITMENT REPORT* (2002) (“Korea ranked last in employee commitment to work, with just 36% of the respondents expressing their dedication to their work.”). *Id.* at 43. See also Andrew Eungi Kim and Innwon Park, *Changing Trends of Work in South Korea: The Rapid Growth of Underemployment and Job Insecurity*, 46 ASIAN SURVEY 437 (2006).

<sup>126</sup> Lee & Cheon, *supra* note 116, at 91.

2000 and October 2001.<sup>127</sup> This indicates that, to some extent, Korean firms have changed their business strategy toward human resource management, in which they “shifted their focus to the ‘external’ labor market hiring method, taking on experienced people only when they needed them.”<sup>128</sup>

In the external labor market, where labor mobility increased, departing employees became a great risk factor that could result in the loss of return on employers’ investment in human capital and confidential information. Indeed, recent surveys have demonstrated the great risk posed by former employees in cases involving technology leakage. In a 2006 survey by the Korean Industrial Technology Association, the firms surveyed reported that cases involving former employees accounted for 63.5% of all technology leakage cases.<sup>129</sup> Likewise, according to the Small and Medium Business Administration, 67% of industrial technology leakage cases were related to former employees.<sup>130</sup>

### **2.3. Summary**

Despite the different origins of lifetime employment and developments in the practice of lifetime employment in Japan and Korea, the practice as a social norm played a role in substituting for postemployment covenants not to compete in labor relations in these two Asian countries before the recent economic downturns. The practice was

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<sup>127</sup> *Id.* Table 4-3.

<sup>128</sup> Lee & Cheon, *supra* note 116, at 91.

<sup>129</sup> KOREA INDUSTRIAL TECHNOLOGY ASSOCIATION, KIÖP YÖN’GUSO SANÖPKIMIL KWALLI SILT’AE [FACT-FINDING SURVEY ON THE MANAGEMENT OF INDUSTRIAL SECRETS OF ENTERPRISE LABORATORIES] 57 (June 2006) (S. Korea).

<sup>130</sup> SMALL AND MEDIUM BUREAU ADMINISTRATION, CHUNGSOGIÖP SANÖPKIMIL GWALRI SILT’AE CHOSA [A REPORT ON THE CURRENT STATUS OF SMES’ MANAGEMENT OF INDUSTRIAL CONFIDENTIAL INFORMATION] 27 (Dec. 2009) (S. Korea).

supported by external factors surrounding the employment relationship, including active intervention by courts and governments on the side of employers and an informal enforcement mechanism on the side of employees. Thus, unlike the employees' counterparts in the United States, they had less incentive to move to competing firms for more highly valued use of their human capital. As a result, during the period of rapid economic growth in Japan and Korea, the practice permitted employers to assume a better position by investing efficiently in human capital and valuable information without paying the transaction and enforcement costs incurred by separate postemployment contracts, and without spending their resources inefficiently to protect valuable information against loss by employees. However, the recent economic downturns in Japan and the financial crisis in Korea resulted in weakening the role of lifetime employment as a partial substitute for postemployment covenants not to compete. More important, in the context of covenants not to compete, on the side of employees, the role of the informal enforcement mechanism supporting the practice of lifetime employment appears to have decreased substantially in recent years. This implies that the law of covenants not to compete is gaining importance as a new legal mechanism in the context of human capital management and trade secret protection in Japan and Korea.

### 3. Firms' Resorting to Trade Secret Law

#### 3.1. Trends in Trade Secret Misappropriation and Countermeasures by Firms

The adoption of trade secret law may have affected not only the intellectual property strategies of firms in Japan and Korea, but also their countermeasure strategies against trade secret misappropriation or industrial espionage. In particular, as observed, the initial adoption of trade secret law enabled firms to seek injunctive relief that was not available in cases of misappropriation of trade secrets before adoption of the law. Given the effectiveness of injunctive relief in trade secret-related cases, the enhancement of civil remedies may also have affected the litigation strategies of firms in these countries. Indeed, in the United States, civil remedies appeared to serve the interests of firms in responding to incidents associated with the loss of proprietary information better than criminal remedies.<sup>131</sup> Regarding the impact of the law on countermeasures used by firms, the law has affected the litigation activities of firms in Japan and Korea when they experience the loss of trade secrets. Despite the fact that the enhancement of civil remedies was presumed to have a relatively strong impact on firms' countermeasure

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<sup>131</sup> Based on a recent survey of 138 Fortune 1000 and other small- and mid-sized companies in the United States, 40% of the companies had experienced the loss of proprietary information during the survey period. ASIS FOUNDATION, TRENDS IN PROPRIETARY INFORMATION LOSS SURVEY REPORT 9 (Sep. 2002) [hereinafter 2002 ASIS REPORT]. The survey revealed that, of the 69 companies responding by mail in the survey, 58% "engaged in IP licensing negotiations," 48% "examined a competitor's product to determine potential infringement," and 42% "engaged in IP litigation (as plaintiff or defendant)." *Id.* at 17-18. In another recent survey by the ASIS Foundation in 2007, most responding U.S. firms reported "their organization: investigated the compromise, reassessed its security controls, and/or performed a formal damage assessment," and "smaller numbers of respondents reported that they revised their due diligence/risk-assessment process and/or brought civil action," in responding to the question "what action did your organization initiate or expect to initiate as a result of this compromise?" ASIS FOUNDATION, TRENDS IN PROPRIETARY INFORMATION LOSS SURVEY REPORT 1 (Aug. 2007) (emphasis added) [hereinafter 2007 ASIS REPORT]. Interestingly, "filing criminal complaints" fell into the category of "other responses," along with "withdrawal from the business transaction" and "filing a trade complaint." *Id.* at 9. See also Bruce P. Smith, *Hacking, Poaching, and Counterattacking: Digital Counterstrikes and the Contours of Self-Help*, 1 J.L. ECON. & POL'Y 171, 173 (2005) (pointing out "[o]ne in five stated that they had determined that civil—rather than criminal—remedies would best serve their interests" as a possible response when the respondents have computer security incidents); LAWRENCE A. GORDON ET AL., COMPUTER SECURITY INSTITUTE, 2004 CSI/FBI COMPUTER CRIME AND SECURITY SURVEY 14 (2004), at [http://i.cmpnet.com/gocsi/db\\_area/pdfs/fbi/FBI2004.pdf](http://i.cmpnet.com/gocsi/db_area/pdfs/fbi/FBI2004.pdf) (last visited April 4, 2010).

strategies in Japan and Korea, survey-based empirical works have demonstrated that the enhancement of civil remedies through the adoption of trade secret law has not had a great effect on firms' countermeasure strategies.

Recent surveys have shown that the risk associated with the loss of proprietary information has become a greater threat to firms in Japan and Korea in recent years. According to a survey conducted in 2001 by the JIPA and the Association of Corporate Legal Departments (ACLD), about 20% of respondents had encountered problems involving the misappropriation of trade secrets.<sup>132</sup> The rate of incidents reported in the survey had increased significantly compared with the low rate (6%) of trade secret-related incidents in a survey conducted by the Institute of Intellectual Property of Japan in 1989.<sup>133</sup> Data from Korea have also shown that firms are suffering from a loss of proprietary information. The survey by the Korean Industrial Technology Association in 2006 showed that 20.9% of respondents had suffered damage from unauthorized leaks of industrial secrets.<sup>134</sup> Likewise, in a survey by the Korean Chamber of Commerce and Industry (KCCI) in 2006, 20.5% of 400 respondents reported that they had suffered from unauthorized dissemination of industrial technology.<sup>135</sup> Notably, 55.0% of large enterprises that were rated the top 20 R & D investing corporations in Korea have suffered from technology leakage.<sup>136</sup> Despite the increased threat to information assets, however, firms do not

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<sup>132</sup> SANGYŌ KŌZŌ SHINGIKAI, CHITEKIZAISAN SEISAKUBUKAI, FUSEI KYŌSŌ BŌSHI SHŌIINKAI [INDUSTRIAL STRUCTURE COUNCIL, INTELLECTUAL PROPERTY POLICY COMMITTEE, SUBCOMMITTEE ON UNFAIR COMPETITION PREVENTION], FUSEI KYŌSŌ BŌSHIHŌ NO MINAOSHI NO HŌKŌSEI NI TSUITE [REPORT ON THE AMENDMENT OF THE UNFAIR COMPETITION PREVENTION ACT] 15 (Feb. 2003) (Japan) [hereinafter 2003 JAPANESE UCPA AMENDMENT REPORT] (citing the survey by the Japan Intellectual Property Association and the Association of Corporate Legal Departments).

<sup>133</sup> See Nakoshi, *supra* note 46, at 633.

<sup>134</sup> KOREA INDUSTRIAL TECHNOLOGY ASSOCIATION, KIŌP YŌN'GUSO SANŌPKIMIL KWALLI SILT'AE [FACT-FINDING SURVEY ON THE MANAGEMENT OF INDUSTRIAL SECRETS OF ENTERPRISE LABORATORIES] (June 2006) (S. Korea).

<sup>135</sup> THE KOREAN CHAMBER OF COMMERCE & INDUSTRY, KUNGNAEKIŌPŪI SANŌPKIMIL YUCH'UL SILT'AECHOSA [FACT-FINDING SURVEY ON INDUSTRIAL SECRET LEAKS OF DOMESTIC ENTERPRISES] 1 (July 7, 2006).

<sup>136</sup> *Id.* In a recent report by the Korean Small and Medium Business Administration, small and medium-sized

appear to be responding actively to trade secret-related incidents. For example, the survey by the KCCI demonstrated that only 43.9% of respondents took active measures in the wake of such incidents.<sup>137</sup> The victimized companies rarely resorted to any public countermeasures after the fact. The KCCI identified two main reasons for this inactivity: (1) enterprises had difficulties finding the actual offender; (2) and enterprises preferred to deal with these incidents within their enterprises because they did not want to lose their image and reputation, which could result in a drop in stock prices caused by the disclosure of the accidents.<sup>138</sup>

One interesting feature revealed by recent surveys may be that firms in Japan and Korea have mainly resorted to criminal rather than civil remedies. In fact, according to the 2001 survey by the JIPA and ACLD in Japan, despite the possible civil remedies for trade secret misappropriation since 1992, about 68% of the responding firms complained about the inefficiency of civil remedies under the Japanese Unfair Competition Prevention Act (UCPA).<sup>139</sup> Furthermore, about 80% of the respondents wanted to adopt criminal protections against the misappropriation of trade secrets.<sup>140</sup> Another survey by the METI, which examined the effect of the amendment to the Japanese UCPA in 2005, in which criminal sanctions were adopted against former officers or employees who offered to disclose trade secrets in breach of the duty of confidence or who received a request to use or disclose trade secrets while in office, also showed Japanese firms' propensity for criminal remedies.<sup>141</sup> The survey reported that 77% of responding

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enterprises reported a relatively low rate of unauthorized leaks of industrial secrets (15.3%). SMALL & MEDIUM BUSINESS ADMINISTRATION, 2008NYŌN SANŌP KIMIL KWALLI SILT'AE CHOSA [FACT-FINDING SURVEY ON MANAGEMENT OF INDUSTRIAL SECRETS] 1 (Aug. 2008).

<sup>137</sup> THE KOREAN CHAMBER OF COMMERCE & INDUSTRY, *supra* note 137, at 1.

<sup>138</sup> *Id.* at 2. See Chris A. Carr & Larry R. Gorman, *The Revictimization of Companies by the Stock Market Who Report Trade Secret Theft Under the Economic Espionage Act*, 57 BUS. LAW. 25 (2001).

<sup>139</sup> 2003 JAPANESE UCPA AMENDMENT REPORT, *supra* note 134, at 2-3.

<sup>140</sup> *Id.* at 16.

<sup>141</sup> Fusei kyōsō bōshihō [Unfair Competition Prevention Act], Law No. 47 of 1993 (as amended by Law No. 750 of



firms in Japan expressed their willingness to resort to the new criminal provision in cases involving former employees who misappropriated trade secrets.<sup>142</sup> By contrast, only 14% of the responding firms reported their willingness to rely on civil remedies.<sup>143</sup>

Survey results have shown a similar trend in the litigation activities of Korean firms. The 2006 KCCI survey revealed that the respondents' measures after such incidents included criminal complaints (26.8%), claims for damages (9.8%), and requests that law enforcement authorities investigate (7.3%).<sup>144</sup> Another recent survey by the Korean Small and Medium Business Administration showed a similar propensity for Korean firms to use criminal remedies. The firms reported that they requested law enforcement authorities to investigate (10.9%), filed criminal complaints (12.7%), and claimed damages (6.6%).<sup>145</sup> Furthermore, several survey findings have revealed that Korean firms want the Korean government to enhance criminal penalties for trade secret misappropriations and industrial espionage. For example, in a survey

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2005), art. 21, para. 8 (Japan).

<sup>142</sup> Results were based on 132 responding firms of the 417 firms surveyed. *Keisanshō Denkidensi sangyōniokeru eigyōhimitsuhogoni kansuru chōsa wo kōhyō* [METI to publicize “Study on Trade Secret Protection in Electric and Electronics Industries”], NIKKEI BP JIZAI AWARENESS, July 28, 2006, <http://chizai.nikkeibp.co.jp/chizai/gov/20060728.html> (last visited April 5, 2010) (citing Study on Trade Secret Protection in Electric and Electronics Industries by Japan Electronics and Information Technology Industries Association, the Communications and Information Network Association of Japan, the Japan Business Machine and Information System Industries Association, and Japan Recording-Media Industries Association).

<sup>143</sup> *Id.*

<sup>144</sup> THE KOREAN CHAMBER OF COMMERCE & INDUSTRY, *supra* note 137, at 1.

<sup>145</sup> The survey also revealed a low rate of no countermeasures by the responding SMEs:

Response	Noninnovative SMEs, %	Innovative SMEs, %	Total
Requested law enforcement authorities to investigate	8.2	12.2	10.9
Filed criminal complaints	9.6	14.1	12.7
Claimed damages	8.2	5.8	6.6
Enhanced their security management system	27.4	29.5	28.8
Took no particular measures	45.2	42.9	43.7
Other	11.0	9.0	9.6

SMALL & MEDIUM BUSINESS ADMINISTRATION, 2008YŌN SANŌP KIMIL KWALLI SILT<sup>4</sup> AE CHOSA [FACT-FINDING SURVEY ON MANAGEMENT OF INDUSTRIAL SECRETS] 6 (August 2008) (S. Korea).

by the Korea Industrial Technology Association in 2000, 37.6% of the responding firms requested the Korean government to enact or amend a law increasing criminal penalties for trade secret misappropriations.<sup>146</sup>

This raises the question of why firms in both Asian countries appear more willing than their counterparts in the United States to refer matters to criminal authorities. Various possible reasons may be affecting the decisions to file a lawsuit, such as cultural factors in the reluctance of firms to bring litigation to court, civil litigation costs, “the lack of attorneys who specialize in intellectual property cases,”<sup>147</sup> the active involvement of law enforcement authorities in trade secret cases,<sup>148</sup> and the structure of the system for civil litigation.<sup>149</sup> In the context of Japanese and Korean society, in fact, a considerable number of studies have explored the reasons these societies have traditionally relied less on formal litigation compared with Western countries.<sup>150</sup> Many researchers, especially in Japan and Korea, have focused on cultural factors unique to Japanese and Korean society. For example, they have argued that “a cultural preference for informal mechanisms of dispute resolution” in Japan and a “lack of modern legal consciousness”

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<sup>146</sup> KOREA INDUSTRIAL TECHNOLOGY ASSOCIATION, KIÖP YÖN’GUSO POAN KWALLI SILT’AE MIT AERO CHOSA YÖN’GU [STUDY ON SECURITY MANAGEMENT AND PROBLEMS OF ENTERPRISE LABORATORIES] 53 (Oct. 2000). Likewise, in a survey by the Small and Medium Business Administration in 2009, 10% of responding Korean SMEs still requested the Korean government to enhance criminal penalties for industrial espionage despite recent amendments of the Korean UCPA and enactment of the ITPA, which focused on the enhancement of criminal sanctions on trade secret misappropriations. SMALL & MEDIUM BUSINESS ADMINISTRATION, 2009NYÖN SANÖP KIMIL KWALLI SILT’AE CHOSA [FACT-FINDING SURVEY ON MANAGEMENT OF INDUSTRIAL SECRETS] 70 (Dec. 2009).

<sup>147</sup> Toshiko Takenaka, *Quick and Effective IP Enforcement in Japanese Courts*, 6-2 CASRIP NEWSL. 4 (1999), available at <http://www.law.washington.edu/Casrip/Newsletter/default.aspx?year=1999&article=newsv6i2jp1> (last visited April 6, 2010).

<sup>148</sup> As observed earlier, based on the national policy related to the protection of trade secrets, the Japanese and Korean governments are actively investigating trade secrets, industrial espionage cases, and even general information security incidents. In addition to the active investigation, they have tried to raise firms’ awareness of the importance of trade secret protection. Interestingly, according to the 2004 CSI/FBI survey, 18% of responding organizations “claimed that being unaware of law enforcement’s interest in the breach was a very important reason for failure to report the intrusion.”

<sup>149</sup> See, e.g., Nobutoshi Yamanouchi & Samuel J. Cohen, *Understanding the Incidence of Litigation in Japan: A Structural Analysis*, 25 INT’L L. 443 (1991).

<sup>150</sup> For a brief overview of the literature on Japan, see Tom Ginsburg and Glenn Hoetker, *The Unreluctant Litigant? An Empirical Analysis of Japan’s Turn to Litigation*, 35 J. LEGAL STUD. 31, 33-36 (2006).

in Korea might explain the lower level of litigation in these two Asian societies.<sup>151</sup> However, recent empirical evidence examining Japanese and Korean litigation activities has shown that the litigation rate, especially the rate of civil litigation in these countries, has increased rapidly, and cultural factors do not appear to play a major role in explaining the reluctance of firms to engage in litigation activities.<sup>152</sup>

Given the increasing importance of intangible assets to Japanese and Korean firms and their increasing awareness of the importance of protecting intellectual property rights through their business strategies,<sup>153</sup> different institutional environments, which vary widely from country to country, may answer the questions here.<sup>154</sup> Among them, as mentioned briefly, procedural differences between the two Asian countries and the United States, which are related to firms' incentive to bring cases to court, play a more pivotal role. In other words, it may be a signal that

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<sup>151</sup> Takeyoshi Kawashima, *Dispute Resolution in Contemporary Japan*, in *LAW IN JAPAN: THE LEGAL ORDER IN A CHANGING SOCIETY* 41-72 (Arthur von Mehren ed. 1963); Richard B. Parker, *Law, Language, and the Individual in Japan and the United States*, 7 *WIS. INT'L L.J.* 179, 179-80 (1988) ("Ordinary Japanese citizens regard a resort to law to settle private disputes as a general disgrace to all concerned. The distaste of the Japanese for law has been widely noted. The most common explanation given for the phenomenon is that Western legal traditions conflict with the value Japanese place on mutual trust, personal interdependence, and group harmony."); PYONG-CHOON HAHM, *THE KOREAN POLITICAL TRADITION AND LAW: ESSAYS IN KOREAN LAW AND LEGAL HISTORY* (1967); Jeong-Oh Kim, *The Changing Landscape of Civil Litigation*, in *RECENT TRANSFORMATIONS IN KOREAN LAW AND SOCIETY* 323 (Dae-Kyu Yoon ed., 2000) ("[The traditional view of disputes] sees disputes as social evils which destroy traditional community order and values.").

<sup>152</sup> Ginsburg & Hoetker, *supra* note 152, at 31 ("From 1986 to 2001, the Japanese civil litigation rate increased by 29 percent."); Carl F. Goodman, *The Somewhat Less Reluctant Litigant: Japan's Changing View Toward Civil Litigation*, 32 *LAW & POL'Y INT'L BUS.* 769, 797 (2001) ("There are signs that a 'less reluctant litigant' may be emerging in Japan."); Jeong-Oh Kim, *The Changing Landscape of Civil Litigation*, in *RECENT TRANSFORMATIONS IN KOREAN LAW AND SOCIETY* 322-33 (Dae-Kyu Yoon ed., 2000) (explaining the changing trend in civil litigation from 1960 to 1995 and arguing "Koreans are no longer reluctant or feel shameful in bringing their disputes to the courts"). In addition, in Korea, trends in the ratio of civil cases to criminal cases indicated that "the number of disputes in the private sector is increasing at a much faster rate than cases in which criminal laws are violated or other parties are injured." *Id.* at 322-33.

<sup>153</sup> For example, according to a survey by the Korea International Trade Association et al. in 2009, 86.8% of 1049 responding Korean firms reported that the protection of intellectual property was "very important" or "important" in their business strategies. KOREA INTERNATIONAL TRADE ASSOCIATION ET AL., *CHICHÖK CHAESANKWÖN CHIM HAE CHOSA MIT CHEDOGAESÖN YÖN'GU* [FACT-FINDING SURVEY ON INFRINGEMENTS OF INTELLECTUAL PROPERTY RIGHTS AND POLICY SUGGESTIONS] 18 (2009).

<sup>154</sup> See John Owen Haley, *The Myth of the Reluctant Litigant*, 4 *J. JAPANESE STUD.* 359 (1978) (arguing that a lack of personnel in Japanese institutions, such as few lawyers and judges, led to the low litigation rates in Japan).

procedural laws have not effectively supported substantive trade secret law in Japan and Korea. In the following section, I briefly explore the defects of procedural law in the context of trade secret protection and recent enhancements of the law in the two Asian countries.

### **3.2. Lack of Procedural Law Supporting Effective Civil Remedies**

A trade secret holder in Japan and Korea can seek civil and criminal remedies in a case involving the misappropriation of trade secrets. Civil remedies further include provisional injunctions, injunctions, and damages. In a typical trade secret case, enabling the holder to have the trade secret restored intact may be the most effective legal remedy. In this sense, injunctive relief is a vital legal remedy for trade secret misappropriation in a trade secret case because of the nature of trade secrets, in which exclusivity coming from secrecy offers practical value. This is in part because damage relief requires a plaintiff to identify and measure damages, which is often difficult for the plaintiff. In fact, for example, in the 2001 survey by the JIPA and ACLD, 79 out of 179 Japanese companies that reported seeking a limited number of civil remedies also complained of difficulties in proving actual economic loss in civil cases under the Japanese UCPA.<sup>155</sup> In addition, in the two Asian countries, the courts have been criticized by foreign intellectual property owners for relatively small pecuniary damage awards, which may not provide a sufficient incentive for damage relief.<sup>156</sup> These factors, as observed before, have led the Japanese and Korean governments to adopt various supporting devices for measuring

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<sup>155</sup> 2003 JAPANESE UCPA AMENDMENT REPORT, *supra* note 134, at 3.

<sup>156</sup> See, e.g., Toshiko Takenaka, *Patent Infringement Damages in Japan and the United States: Will Increased Patent Infringement Damage Awards Revive the Japanese Economy?*, 2 WASH. U. J.L. & POL'Y 309 (2000) (explaining the new Japanese legislation on patent infringement damages in 1998). See also William C. Revelos, Note, *Patent Enforcement Difficulties in Japan: Are There Any Satisfactory Solutions for the United States?*, 29 GW J. INT'L L. & ECON. (1995).

pecuniary relief under the Japanese and Korean UCPA in recent years. Nonetheless, given the nature of trade secrets, “immediate injunctive relief is a highly powerful and effective response to misappropriation” because “securing an injunction early in a case often leads to prompt resolution of the entire matter.”<sup>157</sup> However, in the typical situation, it may take at least one year to seek a perpetual injunction at a trial. Given the increasingly shorter life cycle of recent technologies in the information age, provisional injunctive remedies may play a critical role in limiting damage to the plaintiff and preventing further disclosure of the trade secrets to the public.

In fact, in the United States, for provisional remedies, a trade secret holder has various weapons by which trade secrets can be restored intact, for example, through “the established remedy of replevin” in cases in which the trade secrets are embodied in tangible property.<sup>158</sup> In addition, immediate injunctive relief is available at the pretrial stage. For example, the temporary restraining order (TRO), which is an *ex parte* order that usually lasts until a motion for a preliminary injunction is being decided, and the preliminary injunctions, which impose more substantive restrictions on the adversary, are available provisional injunctive remedies. Courts in the United States frequently “will issue a TRO if the requested restriction appears minimally intrusive, such as in the case of an order that evidence not be tampered with.”<sup>159</sup> The TRO can be issued by courts “without even the several hours’ notice provided under most statutes and rules” in cases in which the plaintiff shows that immediate and irreparable injury will result.<sup>160</sup> Once the TRO is granted by a court, it can prevent the adversary from engaging in

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<sup>157</sup> JAMES POOLEY, TRADE SECRETS, § 7.02 [2] [a] (West 2009).

<sup>158</sup> *Id.* § 7.02 [1].

<sup>159</sup> However, “[TRO] is granted only on a strong showing, both on the merits and on the risk of irreparable harm if the plaintiff had to wait the several weeks necessary for a hearing.” *Id.* § 7.02 [2].

<sup>160</sup> *Id.* § 7.02 [2] [a]. See *Statera, Inc. v. Henrickson*, 2009 U.S. Dist. LEXIS 68891 (2009) (“A party seeking a temporary restraining order or preliminary injunction must show: (1) a substantial likelihood that the movant eventually will prevail on the merits; (2) that the movant will suffer imminent and irreparable injury unless the

certain acts that may frustrate the purpose of the action, for example, by “taking any action to delete, destroy, damage, shred, erase, wipe, or otherwise alter any computer hard drive or other computer storage media containing [the plaintiff’s] business information or other evidence within the scope of discovery.”<sup>161</sup> By contrast, unlike in the United States, no provisional injunctive relief, such as a TRO, exists in Japan and Korea. Thus, a trade secret holder must rely on a common type of provisional injunction. A more problematic issue is that the provisional injunction does not seem to allow the holder to have the trade secret restored intact because the procedure for the provisional injunction takes a long time in light of the role of the provisional injunction in the context of trade secret protection.<sup>162</sup>

On the contrary, as observed, the Japanese and Korean governments in recent years have realized the importance of trade secret protection for economic growth and have invested many governmental resources in deterring and responding to trade secret misappropriations and industrial espionage in situations in which not only cross-border industrial espionage, but also domestic technology leakage between competitors has been increasing. In these situations, criminal prosecution may give a definite advantage, and thus may provide the holder with a greater incentive to refer a trade secret case to government authorities. In the first place, as

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injunction issues; (3) that the threatened injury to the movant outweighs whatever damage the proposed injunction may cause the opposing party; (4) that the injunction, if issued, would not be adverse to the public interest.”).

<sup>161</sup> *Statera*, 2009 U.S. Dist. LEXIS at 13. In addition, “[a]lthough a TRO of more than ten to twenty days’ duration normally cannot be granted, the defendant often will agree to postpone the hearing and extend the temporary order to permit discovery and to provide more time to prepare a defense.” JAMES POOLEY, *TRADE SECRETS*, § 7.02 [2] [a] (West 2009).

<sup>162</sup> Sang-Hyun Song & Seong-Ki Kim, *The Impact of Multilateral Trade Negotiations on Intellectual Property Laws in Korea*, 13 UCLA PAC. BASIN L.J. 118, 133 (1994) (“The procedure for obtaining a preliminary injunction is time-consuming, usually taking a few months.”). Although Song and Kim focus on the difficulty of enforcing patent, trademark, and copyright violations in Korea, the situation in trade secret cases appears similar. It usually takes two to three months to obtain a preliminary injunction in trade secret cases. See also Toshiko Takenaka, *Patent Infringement Damages in Japan and the United States: Will Increased Patent Infringement Damage Awards Revive the Japanese Economy?*, 2 WASH. U. J.L. & POL’Y 309 (2000) (“Japanese courts have become a target of criticism from Japanese industry for its inability to grant quick, effective relief for IP infringement.”).

known in general, criminal prosecution relieves the trade secret holder of the burden of cost associated with civil litigation, which the holder would otherwise have to pay. More important in the context of trade secret protection is that criminal prosecution may prevent further trade secret misappropriations, such as disclosure to a third party by the misappropriator, from the early stages of a criminal investigation. For example, it has been reported that in recent high-profile industrial espionage cases in Korea, government authorities, such as the prosecutors' office or the Industrial Secrets Protection Center at the National Intelligence Service, are actively involved in these cases from the early stage and prevent technology leakage.<sup>163</sup> Furthermore, criminal prosecution helps the holder collect relevant evidence through search and seizure in the process of a criminal investigation. This perhaps offers firms in Japan and Korea, where an American type of "discovery" does not exist, a greater incentive.<sup>164</sup>

### **3.3. Protecting Trade Secrets During Litigation**

In addition to a lack of procedural law supporting effective civil remedies, in the context of trade secret protection, a lack of adequate measures for preserving trade secrets in secrecy during litigation may be another important factor affecting firms' incentive to bring trade secret cases to court in both civil and criminal litigation. Given the nature of trade secrets, which lose their status or competitive advantage by disclosure to the public or competitors, the loss of confidentiality in litigation may pose a serious threat to a trade secret holder, and worthwhile

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<sup>163</sup> See *Tech Theft*, THE KOREA TIMES, Feb. 4, 2010, available at 2010 WLNR 2439156; *Chip Technology Leaked to Taiwan*, SEATTLE TIMES, Feb. 3, 1998, at A5, available at 1998 WLNR 1500558.

<sup>164</sup> See Yasuhei Taniguchi, *The 1996 Code of Civil Procedure of Japan—A Procedure for the Coming Century?*, 45 AM. J. COMP. L. 767 (1997).

litigation may be hindered.<sup>165</sup> Accordingly, the confidentiality of discoverable trade secrets should be protected before, during, and after a trial through some safeguarding procedures.<sup>166</sup> In this sense, trade secret law, as substantive law, should be supported by appropriate procedural rules.<sup>167</sup> In fact, in the United States, although court records and judicial proceedings are generally open to the public under the presumption of public access to judicial records, such safeguarding procedures that prevent public disclosure of trade secrets have been recognized in cases involving trade secrets.<sup>168</sup> For example, at the discovery process, the Federal Rules of Civil Procedure allow a district court, “for good cause,” to “require that a trade secret or other confidential research, development, or commercial information not be revealed or be revealed only in a specified way” to prevent potential harm to the trade secret holder.<sup>169</sup> State statutes or rules provide similar means of preventing harm.<sup>170</sup> The Uniform Trade Secrets Act also illustrates these procedures, requiring courts to take “reasonable means,” including “granting

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<sup>165</sup> See *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1011 (1984) (“With respect to a trade secret, the right to exclude others is central to the very definition of the property interest. Once the data that constitute a trade secret are disclosed to others, or others are allowed to use those data, the holder of the trade secret has lost his property interest in the data.”) (footnote omitted).

<sup>166</sup> See Arthur R. Miller, *Confidentiality, Protective Orders, and Public Access to the Courts*, 105 HARV. L. REV. 428 (1991) (arguing that public access to confidential information and trade secrets should be restricted).

<sup>167</sup> *Id.* at 464.

<sup>168</sup> See *Nixon v. Warner Commc’n, Inc.*, 435 U.S. 589, 598 (1978) (“It is uncontested, however, that the right to inspect and copy judicial records is not absolute. Every court has supervisory power over its own records and files, and access has been denied where court files might have become a vehicle for improper purposes.”); *Richmond Newspapers, Inc. v. Virginia*, 448 U.S. 555, 600 n.5 (1980) (“This is not to say that only constitutional considerations can justify such restrictions. The preservation of trade secrets, for example, might justify the exclusion of the public from at least some segments of a civil trial.”) (Stewart, J., concurring); *State ex rel. Ampco Metal, Inc. v. O’Neill*, 78 N.W.2d 921 (Wis. 1956) (stating “unless the testimony as to plaintiff’s claimed trade secrets be taken *in camera*, [plaintiff] will be denied any effective remedy for the wrong it has sustained, assuming the truth of the allegations of its complaint” in a trade secret case examining an issue as to taking evidence *in camera* and sealing the records).

<sup>169</sup> FED. R. CIV. P. 26(c)(1)(g).

<sup>170</sup> See, e.g., TEXAS R. CIV. P. 192.6 (Protective orders) & TEXAS R. EVID. 507 (“A person has a privilege, which may be claimed by the person or the person’s agent or employee, to refuse to disclose and to prevent other persons from disclosing a trade secret owned by the person, if the allowance of the privilege will not tend to conceal fraud or otherwise work injustice. When disclosure is directed, the judge shall take such protective measures as the interests of the holder of the privilege and of the parties and the furtherance of justice may require.”).



protective orders in connection with discovery proceedings, holding *in-camera* hearings, sealing the records of the action, and ordering any person involved in the litigation not to disclose an alleged trade secret without prior court approval.”<sup>171</sup> In criminal cases, in which the defendant’s right to a public trial is protected under the Sixth Amendment, courts also may limit the disclosure of trade secrets because the right to a public trial is not considered absolute, and preservation of the secrecy of trade secrets is constitutional under certain limited circumstances in which other important interests override the defendant’s right to a public trial.<sup>172</sup> Accordingly, for example, the Economic Espionage Act requires a court to issue orders and take the necessary measures to preserve the confidentiality of trade secrets while “strik[ing] a balance between the protection of proprietary information and the unique considerations inherent in criminal prosecutions.”<sup>173</sup>

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<sup>171</sup> UNIF. TRADE SECRETS ACT § 5, 14 U.L.A. 647 (2005). In addition, the UTSA comment provides more protective measures, including “restricting disclosures to a party’s counsel and his or her assistants” and “appointing a disinterested expert as a special master to hear secret information and report conclusions to the court.” *Id.* § 5 cmt., 14 U.L.A. 647 (2005). For practical consideration of these measures, see JAMES POOLEY, TRADE SECRETS, § 11.03 (Protective Orders Governing Discovery) & § 12.02 (Maintaining Secrecy). See also Kurt Putnam, *Your Trade Secret Is Safe with Us: How the Revision to Federal Rules of Civil Procedure Makes Discovery Presumptively Confidential*, 24 HASTINGS COMM. & ENT. L.J. 427, 430-34 (explaining the blanket stipulated protective order); Timothy S. Durst & Cheryl L. Mann, *Behind Closed Doors: Closing the Courtroom in Trade Secrets Cases*, 8 TEX. INTELL. PROP. L.J. 355 (2003) (explaining protective orders, sealing orders, and *in camera* hearing).

<sup>172</sup> See *Waller v. Georgia*, 104 S.Ct. 2210, 2212 (1984) (holding that “[u]nder the Sixth Amendment, any closure of a suppression hearing over the objections of the accused must meet the following tests: the party seeking to close the hearing must advance an overriding interest that is likely to be prejudiced; the closure must be no broader than necessary to protect that interest; the trial court must consider reasonable alternatives to closing the hearing; and it must make findings adequate to support the closure”); *Press-Enterprise Co. v. Superior Court of California*, 478 U.S. 1, 106 S.Ct. 2735 (1986) (preliminary hearing). For a trade secret case, see *Stamicarbon N.V. v. American Cyanamid Co.*, 506 F.2d 532, 540 (2d Cir. 1974) (“We think that this case would present an equally convincing justification for limited *in camera* procedures if, in the course of the contempt trial, the district judge should find that [the plaintiff] was likely to suffer irreparable injury, and that protection of its secrets could be achieved with minimal disruption of the criminal proceedings.”).

<sup>173</sup> *United States v. Hsu*, 155 F.3d 189, 197 (3d Cir. 1998). Section 1835 of 18 U.S.C. reads as follows:

In any prosecution or other proceeding under this chapter, the court shall enter such orders and take such other action as may be necessary and appropriate to preserve the confidentiality of trade secrets, consistent with the requirements of the Federal Rules of Criminal and Civil Procedure, the Federal Rules of Evidence, and all other applicable laws. An interlocutory appeal by the United States shall lie from a decision or order of a district court authorizing or directing the disclosure of any trade secret.

This raises the question of how Japanese and Korean procedural laws have worked to preserve trade secrets in secret during litigation. In Japan, even after the adoption of a substantive trade secret law in 1990, the Japanese UCPA has been criticized because procedural rules have not effectively supported substantive law due to the lack of safeguarding procedures preventing unintended disclosure of trade secrets in litigation.<sup>174</sup> This criticism has arisen from the fact that Article 82 of the Japanese Constitution provides for the principle of a public trial.<sup>175</sup> Although the principle of a public trial is not absolute, there are few exceptions; for example, where “a court unanimously determines publicity to be dangerous to public order or morals, a trial may be conducted privately.”<sup>176</sup> However, a case involving trade secrets did not fall within these exceptions.<sup>177</sup> Hence, under the Japanese Code of Civil Procedure, trade secret cases were held in public. In addition, anyone was able to access the relevant records of the proceedings, including the complaint, answer, and other documents, such as records of witnesses’ testimony.<sup>178</sup> In practice, to seek a legal remedy for trade secret misappropriation, the trade

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18 U.S.C.A. § 1835 (West 2009). See James H.A. Pooley et al., *Understanding the Economic Espionage Act of 1996*, 5 TEX. INTELL. PROP. L.J. 177, 206-10 (1997) (explaining practical considerations of preservation of secrecy in criminal trade secret cases); Mark L. Krotoski, *Economic Espionage and Trade Secrets*, 57 U.S. ATT’Y’S BULL. 2, 14-15 (Nov. 2009) (stating protective orders being used during each phase of a criminal case).

<sup>174</sup> See, e.g., KAZUMASA SOGA, *THE LEGAL PROTECTION OF TRADE SECRETS IN JAPAN: A COMPARATIVE STUDY OF ENGLISH AND GERMAN* 172-86 (2003). For academic debate on the disclosure of trade secrets in litigation, see Nakayama Nobuhiro, *Eigyōhimitsuno hogono hitsuyōseito mondaiten* [Necessities and Problems of Trade Secret Protection], 962 JURISUTO [JURIST] 14 (1990) (Japan); Kobashi Kaoru, *Eigyōhimitsuno hogoto saibankoukaino gensoku* [Trade Secret Protection and the Principle of Public Trial], 962 JURISUTO [JURIST] 38 (1990) (Japan); Ito Makoto, *Eigyōhimitsuno hogoto shinrino kōkaigensoku (1)* [Trade Secret Protection and the Principle of Public Trial], 1030 JURISUTO [JURIST] 78 (1993) (Japan); Ito Makoto, *Eigyōhimitsuno hogoto sinrino kōkaigensoku (2)* [Trade Secret Protection and the Principle of Public Trial], 1031 JURISUTO [JURIST] 77 (1993) (Japan).

<sup>175</sup> Article 82 of the Japanese Constitution states that “[t]rials shall be conducted and judgment declared publicly.” Kenpō [the Constitution], art. 82 (Japan).

<sup>176</sup> *Id.*

<sup>177</sup> Kazuko Matsuo, *Recent Amendment to the Unfair Competition Prevention Law for the Protection of Trade Secrets*, 9 UCLA PAC. BASIN L.J. 78, 95 (1991) (“Notwithstanding the possible different interpretations, unless the present Civil Procedure Law is partially amended, trade secret litigation will not be free from danger . . .”).

<sup>178</sup> *Id.* at 94 (“any person is allowed to inspect the records of proceedings, and the parties involved in the suit and interested third parties may take a copy or obtain an original copy, certified copy or summary thereof . . .”).

secret holder has to specify the alleged trade secret and prove the misappropriation. As observed in *Miyakoshi Kikou Ltd. v. Guurudo Inc.*,<sup>179</sup> this may make the holder fear that the status of the trade secret will be lost in the proceedings unless measures are taken to protect it in litigation, and this substantially limits the rights of the trade secret holder. Indeed, the 2001 JIPA survey showed that the possibility of disclosing trade secrets during a trial was one of the most important reasons why civil remedies under the Japanese UCPA were not sufficient.<sup>180</sup>

In response to these criticisms and to voices from industry, the Japanese government has adopted some safeguarding procedures as part of measures to strengthen trade secret protection by referring to foreign procedures, for example, secrecy-preserving measures in trade secret-related cases in the United States.<sup>181</sup> Unlike in the United States, because the Japanese Code of Civil Procedure does not have an American type of discovery process, these protective measures are focused on the preservation of secrecy during and after a trial. First, the Japanese UCPA adopted “protective orders” to prevent the disclosure of trade secrets.<sup>182</sup> In addition, to enhance the enforcement of the protective order, the Japanese UCPA criminalized violations of the protective order.<sup>183</sup> Nonetheless, unlike in the United States, the protective order can be issued only in civil cases. In criminal cases involving trade secrets, the defendant’s right to a public

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<sup>179</sup> Tokyo District Court of Japan, Judgment of Sep. 24, 1991, Case No. Shōwa 60 (Wa) 15593.

<sup>180</sup> 2003 JAPANESE UCPA AMENDMENT REPORT, *supra* note 134, at 5.

<sup>181</sup> KEIZAI SANGYŌSHŌ CHITEKI ZAISAN SEISAKUSHITSU [MINISTRY OF ECONOMY, INDUSTRY, COMMERCE. CHIKUJŌ KAISETSU FUSEI KYŌSŌ BŌSHIHŌ [UNFAIR COMPETITION PREVENTION ACT 121 (2007) [hereinafter METI, UNFAIR COMPETITION PREVENTION ACT] (Japan).

<sup>182</sup> Under Article 10, a court may, upon a motion of the party, order a party, a counsel, or an assistant “not to use the trade secret for any purpose other than pursuing the lawsuit or to disclose it to a person other than those who have received the order with regard to said trade secret” in cases in which (1) trade secrets are written or included in a brief or evidence, and (2) “the party’s business activities based on the trade secret are likely to become hindered by the use of said trade secret for purposes other than pursuing the lawsuit or its disclosure, and it is necessary to restrict the use or disclosure of the trade secret in order to prevent this.” Fusei kyōsō bōshihō [Unfair Competition Prevention Act], Law No. 47 of 1993 (as amended by Law No. 55 of 2006), art 10 (1) (Japan).

<sup>183</sup> Fusei kyōsō bōshihō [Unfair Competition Prevention Act], Law No. 47 of 1993 (as amended by Law No. 55 of 2006), art 21. para. 2. item 5 (“imprisonment with work for not more than five years or a fine of not more than five million yen, or both.”).

trial is protected under Article 37 (1) of the Japanese Constitution, which provides that “[i]n all criminal cases the accused shall enjoy the right to a speedy and public trial by an impartial tribunal.”<sup>184</sup> Article 37 (1) is interpreted strictly, and the issuance of the protective order is not available.<sup>185</sup> Second, although Article 92 of the Japanese Code of Civil Procedure allows a court to issue orders to restrict public access to court records in which trade secrets are stated or recorded, this applies only to third parties.<sup>186</sup> Thus, Article 12 of the Japanese UCPA further provides that when the protective order has been issued, if anyone who has not been issued a protective order requests inspection of that portion of the sealed record, the court that took the request must notify the party who filed the motion of this fact under Article 92 (1) of the Japanese Code of Civil Procedure.<sup>187</sup> This enables the party notified to move for a protective order against the person within two weeks so that unintended disclosure by the other party can be prevented. Third, the Japanese UCPA adopted *in camera* examination. Under this procedure, when parties, legal representatives, or witnesses are examined regarding the existence of a trade secret, and when a court, by the unanimous consent of the judges, finds (1) that “they are unable to give sufficient statements regarding the matter because it is clear that giving statements regarding the matter in open court will significantly hinder the party’s business activities that are based on the trade secret,” and (2) “that, without said statements by the party, the court is unable to make an appropriate decision on the presence or absence of infringement on business interests by unfair competition which should be made based on the determination of said matter, it may

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<sup>184</sup> Kenpō [the Constitution], art. 37(1) (Japan).

<sup>185</sup> METI, UNFAIR COMPETITION PREVENTION ACT, *supra* note 183, at 121-22.

<sup>186</sup> Minji soshōhō [Code of Civil Procedure], Law No. 109 of 1996, art. 37. para. 1 (Japan).

<sup>187</sup> Fusei kyōsō bōshihō [Unfair Competition Prevention Act], Law No. 47 of 1993 (as amended by Law No. 55 of 2006), art. 12 (1) (Japan). *See* Shozo Ota, *Reform of Civil Procedure in Japan*, 49 AM. J. COMP. L. 561 (2001).

conduct the examination on the matter *in camera* by means of a ruling.”<sup>188</sup>

Article 109 of the Constitution of Korea also articulates the principle of the public court, stating that trials and decisions of the courts are open to the public.<sup>189</sup> As in Japan, Article 109 recognized a few exceptions to the principle, only where “there is a danger that such trials may undermine the national security or disturb public safety and order, or be harmful to public morals.”<sup>190</sup> Even in this case, the exceptions apply not to courts’ decisions, but only to trials.<sup>191</sup> However, in practice, the preservation of trade secrets is not sufficient to justify excluding the public from a trial in Korean courts because of constitutional considerations.<sup>192</sup> Nonetheless, the opinions of scholars and commentators are not agreed on the issue of whether trade secret cases can be closed to the public. On the one hand, scholars have argued that because the principle of a public trial in a trade secret case may deprive a trade secret holder of his or her right to a trial, as stipulated in Article 27 of the Korean Constitution, the disclosure of the trade secret during or after a trial may disturb public safety and order.<sup>193</sup> For the basis of the argument, they point out the purpose of the Korean UCPA, which not only protects the private interests of a trade secret holder, but also maintains the order of sound transactions by preventing unfair competitive acts.<sup>194</sup> On the other hand, scholars have contended that because the primary purpose of trade

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<sup>188</sup> Fusei kyōsō bōshihō [Unfair Competition Prevention Act], Law No. 47 of 1993 (as amended by Law No. 55 of 2006), art. 13.

<sup>189</sup> Hōnpōp [the Constitution], art. 109 (S. Korea).

<sup>190</sup> *Id.*

<sup>191</sup> *Id.* (“trials may be closed to the public by court decision.”).

<sup>192</sup> See Young Su Go, *Yōngōp pimil ūi poho e kwanhan sosongpōp chōk kochal* [Procedural Law on the Protection of Trade Secrets], 8 PIGYOSAPŌP [JOURNAL OF COMPARATIVE PRIVATE LAW] 935 (2001).

<sup>193</sup> Hōnpōp [the Constitution], art. 27, para. 1 (S. Korea) (“All citizens have the right to be tried in conformity with the law by judges qualified under the Constitution and the law.”).

<sup>194</sup> Sunhee Yoon & Jiyoung Kim, *Chapan konggaero inhan yōngōppimil nusōl pangji e kwanhan sogo* [Prevention of Disclosure of Trade Secrets under the Principle of the Public Trial], 21 BALMYEONGTEUKHEO [INVENTIONS & PATENTS] 22, 25 (1996).

secret protection is to protect the private interests of a trade secret holder, nondisclosure in a trial should not be allowed in cases involving trade secrets.<sup>195</sup> In part because of this problem, as in Article 92 of the Japanese Code of Civil Procedure, in 2002 the Korean government adopted a provision in Article 163 of the Korean Code of Civil Procedure regarding the restriction of trade secrets in court records with public access that applies only to third parties.<sup>196</sup> No other safeguarding procedures exist that prevent public disclosure of trade secrets in cases involving trade secrets in Korea, and this lack of safeguarding procedures has been criticized by Korean scholars.<sup>197</sup> In this context in Korea, compared with its counterparts in the United States and Japan, litigation involving trade secrets may present a great risk to the integrity of the trade secret, and relevant procedural laws do not provide a sufficient means of preventing potential harm from disclosing trade secrets during litigation or of vigorously claiming a trade secret holder's right through the formal legal process. In addition, the lack of adequate safeguarding measures may be an important institutional reason why Korean firms may not to rely much on formal litigation in trade secret cases.

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<sup>195</sup> See, e.g., Kyong Jik Gwak, *Yŏngŏppimil ūi chimhaewa kuje mit sosongsang ūi che munje* [Problems on Trade Secret Misappropriations, Remedies, and Procedures], 250 INKWŌN KWA JŎNGŪI [HUMAN RIGHTS AND JUSTICE] 42, 62 (1997).

<sup>196</sup> See Minsasosongpŏp [Code of Civil Procedure], Law No. 9171, 2008, art. 163 (S. Korea) (“In cases where there exists a vindication that it falls under any of the following subparagraphs, the court may limit the parties by its ruling upon their motion, to the persons eligible to file a request for perusal or copying of the portions containing any secrets from among the litigation records, or for delivery of the authentic copy, a certified copy or an abridged copy of the portions containing any secrets from among the judicial documents or protocol: . . . 2. When any trade secrets of the party (referring to the trade secrets as stipulated in subparagraph 2 of Article 2 of the Korean UCPA) are entered in the litigation records.”).

<sup>197</sup> SANGJO JONG & JUNSEOK PARK, *YŎNGŎPPIMIL ŪI SAPŎPJŎK POHO E KWANHAN PIGYOPŎPJŎK YŎN'GU* [COMPARATIVE STUDY ON JUDICIAL PROTECTION OF TRADE SECRETS] 84 (Seoul Nat'l Univ. Ctr. for Law and Tech. 2009) (Korea). In response to these criticisms, however, in recent years, the Supreme Court of Korea appears to have begun preparing the enhancement of these safeguarding procedures.

### **3.4. Summary**

Although Japan and Korea adopted substantive trade secret laws in the early 1990s, procedural laws that existed at the adoption did not effectively support the substantive laws at the early stage of implementation. In particular, defects in procedural law in the context of trade secret protection, including the unavailability of a quick and effective provisional injunction at the pretrial stage and a perpetual injunction, and the lack of procedural devices supporting effective damage relief, appear to have led firms in Japan and Korea to rely more on criminal remedies. In addition, the lack of adequate procedural measures to protect trade secrets during litigation may have decreased trade secret holders' incentive to resort to trade secret law. In response to these issues, the two Asian countries have improved procedural rules to support substantive trade secret law effectively in recent years. The Japanese government has recognized the defects in procedural law and has actively addressed these defects by adopting relevant measures for effective damage relief and for protecting trade secrets during litigation. By contrast, although the Korean government has adopted some procedural devices for effective damage relief, it has not been actively involved in improving procedural law, especially measures for preserving the secrecy of trade secrets during litigation, which is a critical procedural rule for effective legal remedies in the context of trade secret protection.

## CHAPTER VII. CONCLUSION

In the early 1990s, trade secret law was adopted in Japan and Korea following the U.S. model, based on the strategic judgment of the two governments regarding economic and trade policy in response to trade pressures from foreign countries. In this respect, trade secret law is a “legal transplant” adopted because of the extrinsic motivation of the Japanese and Korean governments. At the early stage of implementation, despite the fact that, in Japanese and Korean society, this imported law played a role in avoiding further trade pressure from foreign countries, the law did not have a significant role in corporate control of valuable information and the management of human capital, in which trade secret law plays a critical role in the United States. The weak impact of trade secret law in the early stages of implementation can be attributed to the fact that the imported law did not *fit* the environment of the two host countries well.

First, *the role of substitutes* for a transplanted law may be vital in explaining the initial weak impact of the imported law on Japanese and Korean society.<sup>1</sup> As observed earlier, utility models, as supplements to the patent system, had played a partial role in substituting for trade secret law in certain circumstances from the early stages of industrialization in Japan and Korea. During this period of rapid economic growth, these substitutes gained prominence because they were a better fit with Japanese and Korean society than trade secret law. To facilitate firm-level technology learning for rapid economic growth, Japan and Korea needed a patent system that permitted domestic enterprises to exploit imported technology and its improvements to the fullest extent. In this context, the utility model system, which had a more powerful and effective function in terms of disclosure of subpatentable or incremental innovations through reverse

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<sup>1</sup> See Hideki Kanda & Curtis J. Milhaupt, *Re-examining Legal Transplants: The Director's Fiduciary Duty in Japanese Corporate Law*, 51 AM. J. COMP. L. 887 (2003).



engineering or duplicative imitation of a foreign technology than trade secret law, was likely a better option for the Japanese and Korean governments. In addition, because the utility model system gave exclusive rights, which were stronger than the legal rights offered by trade secret protection, domestic enterprises could have had a strong incentive to rely on the utility model system to protect their incremental innovations.

As an important social norm in labor practice in Japan and Korea, lifetime employment also played a partial role in substituting for trade secret protection and postemployment covenants not to compete until recently, when the two Asian countries experienced economic downturns. The practice of lifetime employment, as an established social norm in a substantial number of industry fields, has been often considered one of the most important and positive institutional factors in the rapid economic growth that took place in Japan and Korea. Apart from the origin and effect on economic growth of the lifetime employment system (e.g., through an increase in employee productivity), it was a more efficient institution in the context of protecting valuable information and investing in human capital compared with separate trade secret laws and postemployment covenants not to compete. From the perspective of employers, under the preestablished practice of lifetime employment, they did not have to pay any extra costs associated with separate contracts. From the point of view of the governments, trade secret law appeared to be an unnecessary legal device that could also have undermined the established social norms in labor relationships.

Second, in addition to the positive role of substitutes for trade secrets, the *extrinsic motivation* of the governments at the adoption of trade secret law hindered the formation of an adequate legal infrastructure to support this imported law. As observed, although in the process of adopting the substantive law of trade secrets in Japan and Korea, it was recognized that

procedural law had an inherent limitation in supporting the imported trade secret law, the defects of procedural law were not resolved with the adoption of trade secret law in these countries, and adequate enforcement of the imported law was hindered by a lack of legal institutions in the context of trade secret protection. As a result, the fact that the inherent limitations of procedural law were left unresolved at the time trade secret law was adopted may also have affected the fact that the imported substantive law did not fit Japanese and Korean society well in the early stages of implementation.

However, the recent technological and economic environments in the two Asian countries have changed the role of substitutes for trade secret protection and government incentives. First, as the capability for technological innovation has improved, the second-tier patent system has been losing its role in the Japanese and Korean economies, which are pursuing continued economic growth under new innovation models that focus on state-of-the-art technologies, such as information technology. Second, the recent economic downturns in Japan and the financial crisis in Korea resulted in substantially weakening the role of lifetime employment as a partial substitute for trade secret protection and postemployment covenants not to compete. Under this changing technological and economic situation, Japan and Korea have suffered from new social problems: the misappropriation of trade secrets and industrial espionage. Accordingly, trade secret law and postemployment covenants not to compete have gained prominence because they are now a better fit with Japanese and Korean society. Based on this recognition, the Japanese and Korean governments have been internally motivated to enhance trade secret protection in recent years by borrowing existing U.S. procedural rules to find the right fit with the imported law in this changing environment. In other words, trade secret law (including covenants not to compete) has been recognized as an important mechanism

for dealing with corporate control of valuable information and the management of human capital in Japanese and Korean society.

On the other hand, although the theoretical justification for trade secret protection in Japan and Korea (where trade secret law has mainly been treated as a legislative policy) has not been hotly debated as the United States, the development of the imported law has experienced difficult progress, which has given rise to difficult policy problems in these nations. One of the most important issues is that the changing environment has led the governments and courts in Japan and Korea to accept trade-offs between the perceived demands of continuing economic growth and the Constitutional rights of employees, reminiscent of the history of struggles that created the modern trade secret laws and covenants not to compete in the United States.<sup>2</sup>

Although the governments and courts in Japan and Korea have struggled to reconcile these conflicting interests, Japan and Korea have adopted somewhat different approaches to this issue, and the government and courts in Korea appear to favor employers more than employees. The recent enactment of the ITPA in Korea illustrates this approach well. In addition, the traditionally strong role of government in Japanese and Korean economic development and the lack of adequate enforcement procedures have affected the different mechanisms for enforcing the imported law in the receiving countries compared with those in the donor country.

In this context, the trade secret law transplanted in Japan and Korea is also a good example of the role of legal transplants based on extrinsic motivation in the area of intellectual property law. Since Alan Watson coined the term “legal transplant,” the metaphor of legal transplants has held immense appeal for legal scholars for analyzing legal transfer, specifically in

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<sup>2</sup> See Catherine L. Fisk, *Working Knowledge: Trade Secrets, Restrictive Covenants in Employment, and the Rise of Corporate Intellectual Property, 1800-1920*, 52 HASTINGS L.J. 441 (2001).

the field of comparative law.<sup>3</sup> However, Watson's thesis has been hotly debated and attacked in recent years. The central platform of these criticisms or attacks, as mentioned above, concerns Watson's general understanding of the relationship between law and society. For example, Kahn-Freund disagrees with Watson's proposition that there is no particular relationship between law and society, and argues that "there are degrees of transferability" of legal rules or institutions.<sup>4</sup> He claims that law and its external environment, in their sociological, economic, and, most important, political interrelations, are closely related, so any legal transplantation is neither direct nor immediate and carries a significant "risk of rejection" if legislators do not pay attention to these interrelations in the process of legislative transplantation.<sup>5</sup> Many other scholars

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<sup>3</sup> Alan Watson, a pioneer of legal transplant theory, provided several pieces of historical evidence in his 1974 book showing that, as a result of legal borrowings, similar rules that developed from Roman civil law and English common law exist in Western worlds with different systems. ALAN WATSON, *LEGAL TRANSPLANTS: AN APPROACH TO COMPARATIVE LAW* 44-56 (2d ed. 1993). Drawing on these findings, he concludes that legal transplantation is "the most fertile source of [legal] development" in most societies and is "socially easy," irrespective of geographical, social, economic, and political differences between donor societies and receiving societies. *Id.* at 95-96. Watson develops his theory in terms of the relationship between law and society, the essence of which appears to be that legal rules in a given society are usually not a reflection of the endemic economy, politics, or culture of a society, but rather are the result of legal borrowings from other societies or other eras, made by legal authorities such as legislators, legal scholars, or judges, in the process of lawmaking. *Id.* at 95-118 ("usually legal rules are not peculiarly devised for the particular society in which they now operate . . ."). Watson later reaffirmed his thesis concerning the relationship between law and society in his subsequent writings. See ALAN WATSON, *SOCIETY AND LEGAL CHANGE* 111 (1977) ("The connection of a legal rule with any one environment is less intimate than may be supposed."); Alan Watson, *Comparative Law and Legal Change*, 37 *CAMBRIDGE L. J.* 313, 314-15 (1978) ("To a large extent law possesses a life and vitality of its own; that is, no extremely close, natural or inevitable relationship exists between law, legal structures, institutions and rules on the one hand and the needs and desires and political economy of the ruling elite or of the members of the particular society on the other hand."). With respect to the metaphor of legal transplants, for instance, Ewald, the legal philosopher and comparatist, reformulates Watson's theory and suggests that, despite the limitations and weaknesses of his thesis as a general theory about the relationship between law and society, Watson's work has significance in the development of scholarship on that relationship. For a more detailed discussion of Watson's theory of legal change, see William Ewald, *Comparative Jurisprudence (II): The Logic of Legal Transplants*, 43 *AM. J. COMP. L.* 489 (1995) (reformulating Watson's theory of legal transplants in his numerous writings in five theses, and explaining his contribution to scholarship on law and society). For a comment on Ewald's reinterpretation and rereading of Watson's theses, see Roger Cotterrel, *Is There a Logic of Legal Transplants?*, in *ADAPTING LEGAL CULTURES* 71 (David Nelken & Johannes Feest eds., 2001) [hereinafter *LEGAL CULTURES*].

<sup>4</sup> Otto Kahn-Freund, *On Uses and Misuses of Comparative Law*, 37 *MOD. L. REV.* 1 (1974). See Alan Watson, *Legal Transplants and Law Reform*, 92 *L. Q. REV.* 79 (1976) (challenging the principles on which Kahn-Freund's theory is based); Eric Stein, *Uses, Misuses, and Nonuses of Comparative Law*, 72 *NW. U. L. REV.* 198 (1977-1978) (examining the arguments of Watson and Kahn-Freund and arguing for the importance of comparative law in American legal scholarship).

<sup>5</sup> Kahn-Freund, *supra* note 4. Teubner agrees with Kahn-Freund's argument regarding the difficulty of legal

have also criticized Watson for his thesis that law is insulated from outside influences.<sup>6</sup>

Criticisms of Watson's legal transplant theory emphasize the importance of the *context* of legal transfer in a given society. On the other hand, even if the metaphor of "legal transplant" seems to have dominated scholarly discussions regarding legal transfer since Alan Watson coined the term in his 1974 book, some scholars have criticized the metaphor and suggested alternatives. In particular, as economic globalization expands, scholars are more likely to focus on legal harmonization—the convergent or divergent effects of globalization—so this might seem to lead them to emphasize the diffusion of law.<sup>7</sup> However, none of the different theories on *the nature of law* seems to be satisfactory for explaining or predicting how transferred legal rules and institutions work in a given society, especially in the context of Northeast Asia, in part because most scholars have developed their theses based on the experiences of the Western world. As a logical result of these different understandings of legal transplants and the relationship between law and society, no meaningful progress has been made on the question of the meaning of successful legal transplants and the conditions surrounding them.

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transplantation. However, he sees a foreign legal rule transferred from other cultures as an "irritant" and argues that the transplanted rule "irritates law's 'binding arrangements.'" Gunther Teubner, *Legal Irritants: Good Faith in British Law or How Unifying Law Ends Up in New Differences*, 61 MODERN L. REV. 11, 12 (1998).

<sup>6</sup> For example, Friedman criticizes Watson's thesis that law is insulated from outside influences by contending that "the influence of society [on a legal system] seems at all times to be immense, overwhelming." Lawrence Friedman, *Some Comments on Cotterrel and Legal Transplants*, in LEGAL CULTURES 93. He argues that legal change can take on different forms as laws adjust to a given society already pursuing its particular objective, such as "modernization or industrialization," and a legal transfer from one country to another is one way among them. *Id.* at 94. In particular, Legrand has an extreme view on legal transplantation across jurisdictions. He claims that legal transplantation is impossible, and his reasoning centers on the meaning of a rule, which he calls the "crucial element of the ruleness of the rule." Pierre Legrand, *The Impossibility of 'Legal Transplants'*, 4 MAASTRICHT J. EUR. COMP. L. 111, 116 (1997). He criticizes Watson's thesis as the result of misapprehension of the nature of legal rules. The key to Legrand's argument is that the meaning of a rule in a given country is "culture specific," and the meaning of the rule cannot survive the travel from one country to another. *Id.* at 116-17.

<sup>7</sup> See, e.g., Teubner, *supra* note 5, at 11-13 (arguing that "legal irritants" is a superior metaphor for the transfer of legal rules because a foreign legal rule "works as a fundamental irritation which triggers a whole series of new and unexpected events"); Máximo Langer, *From Legal Transplants to Legal Translations: The Globalization of Plea Bargaining and the Americanization Thesis in Criminal Procedures*, 45 HARV. INT'L L.J. 1, 29-35 (2004) (criticizing the limitation of the metaphors of "legal transplant" and "legal irritants," and proposing the metaphor of "legal translation"); William Twining, *Diffusion and Globalization Discourse*. 47 HARV. INT'L L.J. 507, 510-12 (2006) (preferring the metaphor of "diffusion of law").

In light of the current controversy over the theory of legal transplants, the above analysis of trade secret law in Japan and Korea suggests some implications for future development of the legal transplant theory. First, it refutes Watson's contention regarding "socially easy" legal transplantation and the relationship between law and society, whereby legal rules in a given society are usually not a reflection of the society's endemic economy, politics, or culture. Rather, this analysis reaffirms the importance of *context* in a given society for successful legal transplantation. However, as examined briefly, one theory of legal transplantation that focuses on the experience of Western nations, with different views on the nature of law, does not explain or predict how transferred laws and institutions will work in a given host country. First, as Kanda and Milhaupt noted, the "motivation" of legal actors, such as government officials, is one of the most important factors for successful legal transplantation. In addition, the "availability of substitutes" plays a critical role in predicting how a specific legal rule will work in a host country. Second, as Mattei contended, the case of trade secret law implies that the most efficient legal rule is the one that will survive among different legal sources in the host country. However, the result of this competitive process may often depend on whether these substitutes are viable for a specific economic policy established by the government, in light of the strong role of government in economic development in East Asia. Third, this case also implies that in the context of legal transplants in the area of intellectual property law, the technological capability of the host country is an important factor that may determine the success or failure of a transplantation.

Finally, the criteria mentioned above for a successful legal transplant, as well as an understanding of the impact of the law on the economic behavior of the relevant parties, also have critical and practical importance to those who attempt intentional legal transplants, such as

governments that intend to borrow foreign legal rules for certain purposes and development agencies that seek to change legal rules and institutions via transnational legal transfer, especially in the area of intellectual property law applied in developing countries.

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