Behavioral And Social Mechanisms that Undermine Legality in The Workplace: Examining The Efficacy of Trade-Secrets Laws Among Knowledge Workers in Silicon Valley.

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Introduction

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The paper seeks to advance the state of legal scholarship with regards to the behavioral limits of formal and informal controls in the workplace. After describing and analyzing the normative status of trade secrets enforcement in Silicon Valley, the paper takes a three-tiered approach to the normative failures in compliance with trade secrets laws. In the first tier, the author considers the limits of formal enforcement of trade secrets, focusing on the relationship between the broadness and ambiguity of trade secrets and its limited deterrence and legitimacy. Lacking clear guidance from the law, the paper suggests that norms might take the normative and informative aspects of the law. None the less, in the second tier, the author demonstrates the limits of informal enforcement, examining the failures that could arise from conflict messages communicated by the information-accepting and information-producing firms as well as from the dependency of fairness on the prevailing practice. In the third tier of normative failures, the focus is on merging the bounded rationality line of research with the social norms scholarship, suggesting the potential failures that could emerge from biases related to the overestimation of information-sharing that takes place in the valley. The paper concludes with preliminary suggestions for changes in the formal definitions of trade secrets.

* Faculty of Law, Bar-Ilan University, Ramat-Gan, Israel, B.A, LLB Bar-Ilan University, PhD, University of California, Berkeley. Parts from an early version of this paper, (using smaller sample) were presented in the 2002 annual meeting of the Law and society association, UBC, Vancouver, and were published in the JOURNAL OF LAW, TECHNOLOGY AND POLICY 105 (2003) . For their insightful comments and suggestions in the earlier phases of this project I would like to thank my advisors, Robert Cooter, Robert MacCoun and Philip Tetlock. I profited greatly from the comments of: Hadar Aviram, Professor K.T Albiston, Adam Badawi, Dr. Rena Bogoch, Professor Meir Dan-Cohen, Dr. Adi Ayal, Professor Lauren Edelman, Dr. Gilad Hirchberger, Professor Alan Hyde, Professor Miri Gur-Arie, Professor Linda Krieger, Professor Mark Lemley, Professor Robert Merges, Professor Peter Menell, Professor Daniel Rubinfeld, Professor Anna Lee Saxanian, Professor Aloice Stulzer, Professor David Teece, Professor Tim Urdan and Professor Frank Zimring.
Introduction

In the high-tech industry in Silicon Valley there is a reported culture of high mobility of employees among competitors. Employee mobility and information diffusion between companies are perceived by many as being the bases of the innovative environment and commercial success of Silicon Valley. However, some scholars argue that this high mobility among competitors has led Silicon Valley employees to consistently violate trade-secret laws and contracts. Given that context, this project has two objectives.

The first objective of the project is to understand the relationship between the behavioral and legal factors impacting Silicon Valley employees’ behavior with regards to corporate secret information. In that sense, this project can be seen as a “problem-oriented” effort to understand employees’ perceptions of what is required from them socially and legally and how those two factors interact. The project thus offers a behavioral explanation for a reported culture of high mobility of employees among competitors that, according to some, has led to a relatively high number of trade-secret violations. Given this perspective, my empirical and theoretical inquiries will be targeted at identifying the ideal balance between formal and informal enforcement of trade secrets in a regime in which employee mobility and information diffusion are perceived by the majority as being innovative and important.

The second objective of this project is more theoretical in nature, focusing on the ways in which social norms act as substitutes and/or complementary sources of enforcement – an issue that is at the heart of a growing area of research in the fields of law and society and law and economics. The purpose of the project from this theoretical standpoint, then, is to improve the current level of research by comparing economic and psychological models to normative compliance in a real-life dilemma. By randomly assigning ‘realistically stylized vignettes’ to a sample of employees in the industry, I attempt to bridge the extant gap between qualitative field work, which tends to be rich but interpretive, and game-based experiments, which tend to be rigorous but constrained by limited external validity.

1 For an excellent review of the recent development in social norms research in economics see Avner Ben-Ner and Louis Putterman, Values and Institutions in Economic Analysis, in ECONOMIC VALUES AND ORGANIZATIONS supra note pp 3-69.

2 See, for example, Robert Sugden, Normative Expectations: The Simultaneous Evolution of Institutions and Norms, in ECONOMICS, VALUES, AND ORGANIZATIONS, supra note 2, at 73, 94–95 discussing the assumptions made when modeling norms into game theoretical settings. For a review of many types of games that could be used to study the creation and influence of norms, see Colin F. Camerer & Ernst Fehr, Measuring Social Norms and Preferences using Experimental Games: A Guide for Social Scientists, Institute for Empirical Research in Economics, University of Zurich. (January 2002); John M. Orbell et al., Covenants Without the Sword: The Role of Promises in Social Dilemma Circumstances, in SOCIAL NORMS AND ECONOMIC INSTITUTIONS, 117 (Kenneth J. Koford & Jeffery B. Miller eds., 1991); Yuval Feldman and Robert J. MacCoun Some Well-Aged Wines for the “New Norm” Bottles, Implications of Social Psychology to Law and Economics, THE LAW AND ECONOMICS OF IRRATIONAL BEHAVIOR. (Francesco Parisi & Vernon Smith eds., Stanford university Press (2005).

On the “problem-oriented” level, I will review and analyze the many factors contributing to the under-enforcement of trade secrets in the Valley and question the desirability of the current situation in which the law of trade secrets is not credible. I will specifically argue against claims that the limiting of the enforcement of trade-secret laws through social and cultural norms is a cause for “enthusiasm.” In a second stage, I will argue that behavioral failures in Silicon Valley’s current formal and informal normative system impede the efficient diffusion of information. I will thus maintain that, from a behavioral perspective, the main barrier to the optimization of information sharing is the gap between the law and the practice. I will demonstrate that this gap harms not only the effectiveness of the law, as is commonly argued, but also the ability of social norms to effectively regulate the behavior of the departing employee. According to the “theory-oriented” perspective, this paper might function as a consideration of some of the complexities that should be attended to by law and social norms scholars who wish to suggest alternatives to formal enforcement in general and the workplace in particular.

**Structure of the paper**

This paper will be divided into six sections:

In the first section, I will suggest a basic taxonomy of the current literature that forms the backdrop for this project, i.e. the decrease in formal enforcement of trade-secret laws in Silicon Valley. I will organize the various explanations into three groups: structural, cultural, and procedural.

In the second section, I will analyze from an efficiency perspective the pros and cons of free mobility of employees between competitors according to the various economic theories relevant to the analysis of the distribution of firm know-how information between the employer and employee. I will demonstrate that many of the scholars who discuss employee mobility tend to focus on only one aspect of economic efficiency and, hence, might not be presenting its real implication in full. After illustrating the complexities of the efficiency argument I will suggest that, while there are clearly advantages that result from free mobility’s promotion of know-how sharing, there is a point at which the resultant public cost exceeds the benefits. I will then suggest that, lacking an ability to identify ex-ante the types of trade secrets that should be shared and those that should remain with the previous employer, an important alternative and complementary factor that needs to be taken into account on grounds of pure efficiency is the behavioral effectiveness of the law.

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4 In this project my goal is not to suggest the optimal means of protecting trade secrets, I am interested in the effect of formal and informal controls on the behaviors of departing employees. Obviously, there are more sophisticated ways to ensure that the damage caused by departing employees will be minimal even if they are intentionally sharing information with other people, but this effort is not among my present interests. See for example J. Michael Steele, *Models for Managing Secrets*, 35 MANAGEMENT SCIENCE, 240 (1989).

5 Hyde, Stone and others, *infra* note 38
In the third section, I will examine the limitations inherent in the formal enforcement mechanisms currently in effect in Silicon Valley with regards to trade secrets. I will argue that the current state of trade-secret laws has led to a situation in which employees seeking to learn what confidential know-how information can be legally shared with their new employer are unlikely to get any guidance from the legislator or the courts system. Thus I will suggest that, as it stands now, trade-secrets enforcement is not only unlikely to deter people from divulging trade secrets; it is unlikely even to inform people, according to its expressive function, as to the existence of legal instructions for appropriate behavior. Employees are, consequently, likely to rely even more heavily on social norms, and if the law seems to be in conflict with those norms they will then become even less likely to rely on the law. Hence I will argue that, even lacking knowledge of the most efficient level of information sharing, even if we cannot determine whether the content of the law is desirable, we can still maintain that the law fails to fulfill its normative role in regulating the behavior of departing employees simply because it is irrelevant and illegitimate. Furthermore, overtime, such law may just push people into excessive disclosure of trade secrets. At the end of this section, I will present the findings from my empirical studies that relate to those shortcomings of trade-secret laws which hinder their ability to serve as legitimate, clear and credible and, hence, effective formal social controls. I will conclude that regardless of one’s position vis-à-vis the optimal level of information-sharing, the dysfunction of the current system of trade-secrets enforcement is intolerable and destructive of the possibility that employees will engage in efficient levels of information sharing.

In the fourth section, I will examine the extent to which informal social controls are likely to efficiently monitor the behavior of employees. As in the previous section’s treatment of formal controls, I will examine the structural limitations of informal controls both from the standpoint of their ability to inform people as to the appropriate mode of conduct, and from a normative perspective. I will focus on the structural limitation involved in the management of confidential know-how sharing through social norms, which results from the fact that two companies (employers) with different interests in the confidential information are involved. I will argue that the employee who moves between companies faces a unique social dilemma that could lead to number of normative failures (externalities, selective choice of reference group, and interdependency of morality). Based on these arguments and findings I will argue that those scholars who consider social norms to be an efficient substitute for formal laws are unrealistically optimistic about the abilities of social norms to fill the vacuum created by the weakness of the current formal system.

In the fifth section, I will introduce another set of failures inherent in non-formal enforcement, which follows behavioral economics’ critiques of the rational choice model. While this section will focus mainly on trade secrets, it will introduce

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For the most recent review of the findings of behavioral law and economics mainly focusing on the bounded rationality line of research – the notion that people make systematic biases when making decisions - see Russell B. Korobkin Thomas S. Ulen. Law And Behavioral Science: Removing The Rationality Assumption From Law And Economics, 88 CAL. L. REV. 1051 (2000).
a new source of failures for the social norms literature, which is particularly relevant in the consideration of multiple equilibria. I will discuss some of the problems that might arise from a systematic bias in the perceived norms as compared with the actual norm. I will put special emphasis on the potential tendency of employees to overestimate violations of trade-secret laws by their co-employees and hence to underestimate the normative power of trade-secret laws. Such biases could further exacerbate the limited normative constraints on excessive disclosure of confidential know-how information.

In the final section of this part I will conclude with the argument that, given the enforcement failures inherent in the system of formal law and the potential behavioral failures of non-formal controls, there is nothing to ensure an efficient monitoring of know-how sharing. Recognizing the importance of inter-firm mobility of employees on the one hand, and the importance of maintaining the secrecy of at least some types of trade secrets on the other, I will recommend some preliminary policy improvements to the current legal structure of trade secrets, focusing on the expressive function of the law. I will suggest that such changes could improve society’s ability to monitor, both formally and informally, the ‘sharing’ behavior of the employee who moves from one company to another. I go on to note, however, that in order to fully realize this task further econometric research should seek to demarcate the types of secrets that should remain with previous employers on efficiency grounds.

I. Social Mechanisms That Undermine the Enforceability of Trade-Secret Law

A. Short Background of the Legal Management of Intellectual Property in the Workplace

A short review of the doctrinal concepts involved is necessary before we begin the more focused discussion of formal and informal enforcement of trade secrets in Silicon Valley.

The legal treatment of intellectual property distribution between employer and employees can be classed according to trade secrets and ownership pre-assignment (e.g., copyrights and patents). While it is important to understand how property rights are assigned to inventions in order to fully grasp the scope of human capital distribution in the workplace, such a review exceeds the limits of this paper. For the

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8 For a consideration of the context of fairness or equity see Eric Rakowski, EQUAL JUSTICE, (1991) who develops a theory of justice with applications to the distribution of the rewards of inventions. Many argue against the injustice of the current distribution, in which employees get almost nothing for their creativity (See Steven Cherensky, A Penny for Their Thoughts: Employee-Inventors, Pre-Invention Assignment Agreements, Property, and Personhood, H81 CAL. L. REV. 597 (1993)); Ann Bartow, Inventors Of The World, Unite! A Call for Collective Action by Employee Inventors, 37 SANTA CLARA L. REV. 673 (1997)). Nevertheless, even given the context of fairness, at the macro level some argue that because employers internalize all the risks by employing many engineers who do not invent anything, they should at least be rewarded for their better choices (Robert P. Merges The Law and Economics of Employee Inventions, 13 HARV. J. L. & TECH. 1 (1999)).

9 For an excellent overview of some of the most important policy topics in this area see The New Relationship: Human Capital In The American Corporation (Margaret M. Blair & Thomas A. Kochan eds., 2000). See also Yuval Feldman, An Experimental Approach to The Study of Social
purposes of our discussion I will only mention, in short, that courts in the U.S. in general and in California in particular tend to allocate the inventions of employees to their employers in a relatively strict way. This is not the case with regard to trade secrets. There is a variety of factors that have made the enforcement of trade secrets, especially in California, a much more difficult task for employers. These factors, which I will discuss below, include freedom of occupation and inter-firm flow of innovation.

1. Doctrinal Approach to Trade Secrets in Silicon Valley

While, as shown, trade secrets have been traditionally treated in the U.S in an ambivalent manner, their treatment in California is even more complex. From a black-letter law perspective, the legal status of trade secrets in California in general and in Silicon Valley in particular is similar to that in any other part of the country. The official response of the courts to trade-secret violations is sometimes framed as being identical to that of many other states; and the policy of the courts, declared while struggling with the meaning of trade secrets, is generally against disclosure of trade secrets, as is evident in following case:

“By enacting the California Uniform Trade Secret Act in 1984, the state legislature added California to the long list of states which have determined that the right of free competition does not include the right to use confidential work products of others.”

Norms: The Distribution of Intellectual Property in The Workplace, 10 J INTELL PROP. L. 59 (2002), in which I compare employees’ attitudes toward the legal prevention of trade secrets usage with their attitudes regarding laws that prevent employees from using inventions that they have assigned to her previous employer.

10 See Merges supra note 8, who reviews the management literature of innovation, and concludes that, in a world of team production; the law should assign all property rights to the employer. William P. Hovell, Patent Ownership: An Employer’s Rights to His Employee’s Invention, 58 NOTER. L. REV. 863 (1983). Such a legal policy might not intuitively seem effective, given the common wisdom regarding the importance of equity as a cultural value in the U.S. See for example, Jane K Giacobbe-Miller, & Daniel J Miller, A Comparison of U.S. And Russian Pay Allocation Decisions and Distributive Justice Judgments, ACADEMY. MANAGE’T. J 177 (1995)). For efficiency-based analysis favoring employees, see Jay Dratler Jr, Incentives for People: the Forgotten Purpose of the Patent System, 16 HARV. J LEGIS. 129 (1979))

11 See, for example, Futurecraft Corporation v. Clary Corporation, 205 Cal. App. 2d 279, 287 (1962); “[G]rinberg was privileged to disclose and use the formulas which he had developed--they comprised a part of the technical knowledge and skill that he had acquired” (emphasis added). But see also Peter J. Whitmore, A Statistical Analysis of Non Competition Clauses in Employment Contracts, J. CORPORATION LAW 484, 518-19 (1990). Public policy concerns played a role in 19 of 105 cases studied (Discussed in Debra Weise, entrepreneurial employees, working paper, presented in University of Texas School of Law Faculty Colloquia-Guest Lecture Series (Fall 2001) (on file with author). (here and after: Weiss)

12 Not surprisingly, courts have focused on the freedom of occupation as their main policy argument, while economists as well as legal scholars have focused on the efficiency argument regarding the overall innovative surplus created by the free flow of information.

13 Computer Code and Algorithms which are used in this study as examples of the confidential know-how information are protected by trade secrets (and also copyright laws, to some extent) in California. See, for example, Vermont Microsystems, Inc. v. Autodesk, Inc. 88 F 3d 142 and Cadence Dsign Sys., Inc. v Avant! Corp., 125 F3d 824

14 Morlife Inc. v. Perry, 56 Cal. App. 4th 1514, 1520, 66 Cal. Rptr. 2d 731, 735.
In other cases, however, the rhetoric of the courts suggests a somewhat different tone:15

“The decision to focus on the relationship and not to treat trade-secrets as ‘property’ reflects a policy choice by California in which the interest in promoting the free use of ideas is elevated over the interests in rewarding holders of economically significant secrets.”

As I will now suggest, this last case is more representative of the treatment of trade secrets in Silicon Valley. Recent scholarship on the transfer of information in Silicon Valley has argued that, in practice, there is substantial under-enforcement of trade-secret laws in Silicon Valley.16 There are several competing explanations for this under-enforcement of trade secrets.

**B. Reasons for the Under-Enforcement of Trade-Secret Laws - a Basic Taxonomy**

Saxenian17 discusses, from a macro perspective, the informational and innovative advantages of the practice of information sharing between companies. In the context of trade-secret enforcement, few scholars have noted that, in reality, very few trade-secret lawsuits are being filed in Silicon Valley. A number of reasons for this dearth of lawsuits against departing employees in Silicon Valley, have been suggested and I will now briefly review and organize these reasons, whether given directly in the context of Silicon Valley, or indirectly in the context of legal enforcement as explanations of the decline in use of formal laws in trade-secret disclosure enforcement.

1. **Employment Patterns in Silicon Valley**

**Geographical proximity –an Urban Planning Perspective**

The most comprehensive account for this Silicon Valley practice is Saxenian’s book, – THE REGIONAL ADVANTAGE. According to her account, the weak controls on the transfer of knowledge by employees who moved between Silicon Valley companies are, in effect, responsible for the success of Silicon Valley.18 Loyal to her institutional

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16 See for example Hyde, infra note 38.
18 Other leading “stories” which could not be described here in detail include the series of publications by Mark Suchman on how the lawyers in Silicon Valley have facilitated the relationship between the venture capitals, spin-offs (start-ups) and established firms (e.g. Mark C. Suchman, Dealmakers and Counselors: Law Firms as Intermediaries in the Development of Silicon Valley, pp. 71-97 in, UNDERSTANDING SILICON VALLEY: THE ANATOMY OF AN ENTREPRENEURIAL REGION/ (M. Kenney ed., 2000). See Sim B. Sitkin, “Secrecy in organizations: The determinants of secrecy behavior among engineers in three Silicon Valley semiconductor firms.” Ph.D. Dissertation. Stanford University (1986) . See also Olav Sorenson, Social networks, informational complexity and industrial geography, in, THE ROLE OF LABOR MOBILITY AND INFORMAL NETWORKS FOR KNOWLEDGE TRANSFER (D. Fornahl and C. Zellner eds., 2003).
affiliation, Saxenian argues that, in fact, one of the differences between Silicon Valley and Route 128 in Massachusetts is the relative proximity between companies in Silicon Valley. She argues that the geographical proximity between the various companies in the Valley had led to a situation in which employees in one company were informally interacting with colleagues from other companies. Saxenian reports that this proximity had led employees to feel that they worked for the Valley and not for any particular company. The argument in this context would be that with such physical proximity between companies, it is very hard to preserve an atmosphere of secrecy and, hence, restricting the transfer of confidential know-how information becomes much harder.

**Job Mobility**

Saxenian discusses a situation in which workers within one firm feel very close to other firms despite never having worked there; moreover, she points to a resultant situation in which it is very easy for employees, both mentally and physically, to move between companies in the Valley. From a psychological perspective, when surrounding companies are not perceived as “enemies,” moving from one company to another is not perceived as being a betrayal of a previous employer. From a practical perspective, departing employees don’t even need to move their children to a new school when moving to a new job. Thus, the sharing of know-how information occurred not only through the interactions that the employee had while working for the neighboring employer, but through the actual move of the employee to competing firms.

The relationship between high employee mobility and increased violation of trade secrets seems to be straightforward. If an employee moves frequently between companies, she is more likely to use trade secrets than an employee who works for a longer period of time in one company. I am obviously not suggesting that every departing employee is likely to disclose trade secrets, but when mobility among companies is great, it gives employees many more opportunities to divulge trade secrets with limited risk and with higher benefits.

High employee mobility might increase the disclosure of trade secrets not only due to the fact that employees have more opportunities, but also because high mobility means less opportunities to develop a strong sense of loyalty and group identity. It is important to mention that, according to classical sociological studies on the relationship between urban surroundings and the individual’s ability to deviate from the values of the group, the limited exposure to group values that result from to

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19 Professor Saxenian holds a joint appointment in the school of urban planning and in the school of information management and systems in the University of California, Berkeley.

20 *supra* note 17

21 "[I]nter-firm worker mobility is a permanent feature of the labor market for semiconductor engineers, rather than an occasional symptom of job shopping during periods of rapid employment growth...Job changing is likely to be especially frequent in Silicon Valley. Within this industrial complex, small specialized semiconductor producers typically depend upon the external labor market (as opposed to the internal labor market of the firm) to meet their demands for skilled and experienced workers..." Quoted in Saxenian 34-35, statement of Pat Hill Hubbard from the American Electronics Association, Technical Employment Projections (1981) Angel (*The Labor Market for Engineers in the U.S. Semiconductor Industry*, 65 ECON. GEOG. 99, 103 (1989). At 106 referred to by Saxenian *supra* note 17). found that in a nationwide survey of semiconductor engineers, half the job changes reported were moves in which both the old and new employers were located within the Silicon Valley.
the dynamics of life in big urban centers is one of the main factors responsible for the prevalence of deviation.  

Employability vs. Job Security

In a recent paper, Stone offers differing normative justifications for why employees should be allowed to use at least some of the know-how information received from their former place of employment. According to her, a new psychological contract exists with regard to the sharing of confidential know-how information. The realities of high mobility and limited job security have changed expectations regarding information confidentiality and loyalty to a single employer. Given this new psychological contract, the law should change, and adapt to the new standards in employment relations. A new conceptualization of employment is similarly suggested by Black E. Ashford’s discussion of “Organizations in Flux,” as well as by Michael B. Arthur’s notion of a “boundary-less career.” According to this new career pattern model, people are trying to create networks and develop their career skills. This “boundary-less career” places a huge premium on individual initiative, networking, and learning. This paradigm results in workers who care dearly about their work, but may not care as much about the specific organization that they work for. Arguably, in such a paradigm, the nature of secrecy could not be expected to remain unchanged. While Stone directs her criticism at inevitable disclosure, her argument also holds in the case of actual violations of trade secrets.  

22 Sociologists, who discuss the importance of community in the context of legal compliance and crime, are discussing the structural and cultural values which are required for a successful community norm to strongly affect crime. The structural factors are primarily related to aspects such as residential segregation, and the cultural factors are mainly related to issues such as shared values. Urban communities’ weak social fabric is being seen as responsible for the high crime rates in urban communities (see, for example, Elijah Anderson, STREETWISE, RACE, CLASS and CHANGE IN AN URBAN COMMUNITY (1990)). This argument doesn’t imply a normative judgment such as comparing disclosure of trade secret to street crime in urban centers, but does suggest the similarity in theoretical rationale to the existence of deviation which is attributed to limited and short interactions with other members of a group who might bear the harm caused by the individual actions.  

23 She calls for a narrow definition of trade secrets that would widen the employee’s career choices as much as possible. (Katherine V.W. Stone The New Psychological Contract: Implications Of The Changing Workplace For Labor and Employment Law 48 UCLA L. REV. 519 (2001) (here and after: Stone))  

24 For a recent rigorous attempt to isolate the causal chain between the psychological contract and behavior see Patrick C Flood, Thomas Ramamooorthy, Nagarajan Turner& Jill Pearson, Causes and Consequences of Psychological Contracts Among Knowledge Workers In The High Technology And Financial Services Industries, 12 INTERNATIONAL J HUMAN RES. MANAG’T. 1152, (2001)  

25 Black E. Ashforth, ROLE TRANSITIONS IN ORGANIZATIONAL LIFE, AN IDENTITY BASED PERSPECTIVE (2001), at p. 8  


28 Instead of ensuring job security, employers promise employability – that is if you work for me, it will be easier for you to find a job in the event that I have to fire you. See William J. Bayron, Coming To Terms With The New Corporate Contracts, 38 BUSINESS HORIZON, 8 (1995)  

29 Inevitable disclosure (see PepsiCo., Inc. v. Redmond, 54 F.3d 1262 (7th Cir. 1995) )
Entrepreneurs vs. Thieves

One of the fastest growing areas of research in organizational studies is related to the various ways through which culture influence employees’ behavior. The cultural arguments are obviously related to the previous descriptions of high mobility and geographical proximity, and it is hard to isolate and measure the direction of the causal relationship.

Such causal relationship between employment pattern and incorporation of social values is demonstrated by Cardon. She demonstrates that the anticipation of tenure in the firm influences the organizational integration of newcomers. She demonstrates that different employees come with different expectations and that those expectations are likely to impact a number of organizational factors, including the employee’s ability to internalize the values of the organization. Hence, according to her arguments, one could speculate that a newcomer to a Silicon Valley firm who is aware of the job mobility statistics in Silicon Valley will allocate limited resources to acquiring the values of her current firm. We could expect that among those ‘not acquired values’ would potentially be loyalty to the confidentiality of information acquired in the firm.

Indeed, there are two ways to conceptualize this change in the cultural meaning of trade secrets in Silicon Valley. One emphasizes the relatively positive treatment of potential (illegal) users of trade secrets, while the other is emphasizes the relatively negative treatment of those who pursue them.

Glorification of Entrepreneurs (Spin–Offs and Start-Up Companies)

In general it is fair to say that the culture of Silicon Valley is characterized by a great appreciation for innovation and entrepreneurship and less respect for internal

30 Stone’s paper on the psychological contract finds that the expectations of the parties should be an important factor in determining the scope of trade secrets protection. For a critique of the role that expectations should play in defining trade secrets, see Steven Wilf, Trade Secrets, Property, and Social Relations 34 CONN. L. REV. 787 (2002)

31 Especially interesting are the following three chapters in the INTERNATIONAL HANDBOOK OF ORGANIZATIONAL CULTURE AND CLIMATE, Cary L. Cooper and Sue Cartwright and P. Christopher Earley (eds, 2001) : Robert Goffee and Gareth Jones Organizational Culture a Sociological Perspective on p. 3, reviewing and analyzing the basic taxonomies for studying culture in organizational context, focusing mainly on shifts and changes in organizational culture. Iva Smit, Assessment of Cultures: a way to problem solving or a way to problematic solutions. 165, 167 created a detailed comparison of some of the leading models of organizational cultural structure. And Benjamin E. Harmlin, Economics and Corporate Culture at p. 217, who argue that culture should get more attention from economists, and review some of the formal models of the role of expectations and internalization in social norms research.

32 Melissa Sue Cardon, Organizational Socialization and Knowledge Integration of Newcomers: The Role Of Anticipated Tenure, Dissertation Columbia university (2002)

33 These two aspects are obviously not mutually exclusive.

34 The fact that entrepreneurship and innovation are contradictory to group cohesion and group loyalty is debatable among organizational scholars. See also C.J. Nemeth and Barry M. Staw (1989) The Tradeoffs of Social Control and Innovation in Groups and Organizations. in ADVANCES IN EXPERIMENTAL SOCIAL PSYCHOLOGY (L. Berkowitz ed., 1989) pp 175-210. On the other hand, in a different paper at the same volume, Francis J. Flynn and Jennifer A. Chatman, Strong Cultures and innovation: Oxymoron or Opportunity, at p. 263 who review the role of organizational norms in encouraging innovation, argue that conformity doesn't mean uniformity - we can agree that we don't disagree. They thus suggest ways in which the norms of the organization could be used to enhance innovation, especially when cooperation and coordination are necessary for the innovation in the organization. Moreover they argue in
labor markets and large corporations.\textsuperscript{35} Again, this doesn’t mean that the culture is such that it encourages violation of trade secrets. However, it does mean that, to some extent, employees in this area share a cultural norm that lacks respect for the maintenance of confidential information within the boundaries of a traditional firm,\textsuperscript{36} particularly when a better use for that information could be found in a spin-off or a start-up.\textsuperscript{37}

**Bad Reputation for Companies that Sue Departing Employees**

On the other side of the coin is the social perception of those who sue individuals who appropriate trade secrets. Professor Alan Hyde\textsuperscript{38} has conducted the most comprehensive legal analysis of the reasons for Silicon Valley’s success. His argument is that Silicon Valley could not have succeeded had courts prevented employees from competing with their former employers on the grounds that they would “inevitably disclose” some unspecified trade secret. Hyde speculates that, in fact, many employees who start up new Silicon Valley firms or move to competitors rely on actual knowledge of some “tangible program, specifications, or research projects”.

\textsuperscript{35} The incompatibility of scientific culture and secrecy was recognized by the classical organizational researcher Robert Presthus, THE ORGANIZATIONAL SOCIETY 1962, at p. 316 who quotes the following from two interviews with employees working in the military and in a research lab, qualitatively comparing their approaches to what he calls alienation index. A government security officer is quoted as saying, “An ounce of loyalty is worth a pound of brains.” On the other hand a research physicist argues that, “…unfortunately, secrecy and progress are mutually incompatible. This is always true of science.” (emphasis added)

\textsuperscript{36} Raymond Paternoster and Sally Simpson, Sanction Threats and Appeals to Morality: Testing A Rational Choice Model of Corporate Crime, 30 L. AND SOC’Y REV. 549 (1996) have found that the moral climate of the firm had a significant relationship with the reported intention to comply, while the moral climate of the industry had no effect.

\textsuperscript{37} It is also relevant to note that Mark Suchman’s dissertation has demonstrated the unique social role of lawyers in Silicon Valley who are being seen more as facilitators than litigators. See Suchman, supra note 18. According to Weiss, supra note 11 in most cases entrepreneurs are not graduates fresh out of school, but rather are people who had worked for several years in high-tech firms and then left the firm to found a new company upon formulating an idea for a better product.

\textsuperscript{38} Professor Hyde is currently writing a book about employment practices in Silicon Valley . Many of the chapters are available to read on his website. Professor Hyde was kind enough to answer many of my questions regarding his findings on the Silicon Valley story. His working papers are entitled: Silicon Valley: The Wealth of Shared Information; Some Economics of Nonrivalrous Information ; Legal Impediments to Endogenous Growth ; the one I am referring to the most is How Silicon Valley Effectively Abolished Trade Secrets, and can be found on his site \url{http://newark.rutgers.edu/~hyde/} (visited August 2002). Copied with the author’s permission. After this paper was completed, Alan Hyde’s book was published. (Alan Hyde, WOKING IN SILICON VALLEY, ECONOMIC AND LEGAL ANALYSIS OF A HIGH VELOCITY LABOR MARKET (2003). The papers that I am refereeing too were renamed as chapters in the book, (Mobile Employees, Information Spillover and Trade Secrets, A new Economic Analysis of Trade Secrets Law From an Economics of information Perspective, Information Ownership and Transmission by Mobile Employees: Alternative Economic Approaches. The overall arguments in the papers and in the book are for the most part similar.
In his efforts to understand how the law of trade secrets enabled the spillover of information described by Saxenian, Hyde offers three possibilities, of which the third is the most appealing:

“... (3) ... (e)nforceability is limited because: ... Firms that litigate in defense of their trade secrets face substantial informal social and economic sanction from other firms (whose cooperation is necessary to accomplish many projects), venture capitalists, and incumbent and prospective employees.”

Hyde concludes that, in fact, the informal market mechanism has abolished the trade-secret laws from Silicon Valley: most firms didn’t sue departing employees, even when those employees clearly violated trade-secret laws and agreements, due to the reputation effect.

Given the number of employees who move among competitors, a certain level of trade-secrets misappropriation is maintained, though few instances of misappropriation trigger lawsuits. Thus, Hyde translates the culture of information-sharing in Silicon Valley into the reputation costs that prevented employers in Silicon Valley from pursuing their legal rights in courts. To conclude, according to Hyde the informal reputation mechanism reduced the possibility of enforcing the level

39 “(1) there is a difference between California’s laws and other states laws regarding the definitions of forbidden use of trade secrets. (2) There is a difference between the IP part in Silicon Valley employment contract and contracts in other states.”

40 Professor Robert P. Merges also agrees with this view, but adds another caveat regarding employers’ tendencies to refrain from suing. In an interview with James Mitchel in the SAN JOSE MERCURY NEWS, April 26th 1998, Merges is quoted as saying: “companies here are also more reluctant than those elsewhere to try to stop employees from working for competitors. They don’t want to be seen as tough on ex employees because it would make hiring more difficult. And many executives remember when their companies were start ups and are more sympathetic to employees who are leaving.”

41 Hyde’s reliance on corporate shaming is interesting since it is used in the reverse of the classical perspective – shaming the one who follows the law instead of shaming the one who disobeys the law. (See, for example, David A., Skeel Jr. Shaming in corporate law. (Symposium on Norms and Corporate Law) 149 U PENN L REV 1811 (2001)).

42 Although Hyde doesn’t discuss this phenomenon, his study resembles a much earlier study by Stuart Macaulay (Stewart Macaulay, Non-Contractual Relations in Business: A Preliminary Study, 25 AM. SOC. REV. 55 (1963)) which showed that breaches of contracts rarely reached courts.

43 The only reason there was a reputation costs from suing, is because it was seen as an attack on the values structure of the valley. See John C Coffee, Jr. Do norms matter? A cross-country evaluation. (Symposium on Norms and Corporate Law) 149 U PENN L. REV. 2151 (2001) for a discussion of the effect of non-compliance with industrial norms on the market-value of the firm.

44 Obviously, former employers do prosecute the perpetrators of physical theft of very valuable hard-core technology, as well as very senior employees who move to competitors, but the vast majority of trade-secret violations in Silicon Valley by rank and file employees are not subject to any legal action.
of secrecy intended by the state for a high velocity environment,\textsuperscript{45} and reputation damage was intensified by the “negative” media coverage of cases.\textsuperscript{46}

2. Procedural and Legal Factors:

Constrains on Non-Compete Covenants in California:

The constraints on non-compete covenants have their roots in the common law of England. Harlan Blake \textsuperscript{47} attributes the English common law tradition of restricting covenants not to compete to the case of Mitchell v. Reynolds,\textsuperscript{48} since it was at that juncture that courts developed a suspicious approach to contract, restraining competition from departing employees. California is one of the states with the greatest dislike for these covenants.

Gilson\textsuperscript{49} conducted a doctrinally oriented follow-up to Saxenian, focusing on the most efficient means of preventing departing employees from transferring trade secrets: non-compete covenants.\textsuperscript{50} These contracts are not enforceable in California,\textsuperscript{51} however, a fact that makes the enforcement of trade secrets harder because the court can no longer rely on the non-compete covenant and needs to ascertain whether there

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\textbf{45} When discussing the costs inflicted on those employers who did try to sue their departing employees, Hyde, \textit{supra} note 38, text near n 24, concludes that, “First, a few such highly-publicized suits accomplished little for plaintiffs, as will be seen from reviewing the journalistic coverage of these suits. Second, such suits imposed direct costs on these plaintiffs in terms of reputation, internal morale, and recruiting. This will be confirmed from journalistic and interview accounts.”

\textbf{46} An anecdotal example comes in the form of the following media reaction to a case of alleged theft of trade-secrets documents (\textit{criminal charges}) (Symantec Corp. vs. Borland International, Inc). An article about the case states that, “the argument that bothers us is that Borland and the Santa Cruz County district attorney, by prosecuting Eubanks and Wang for the alleged transfer of Borland Documents, are \textit{threatening the free movement of talent from company to company} – a \textit{Silicon Valley tradition} said to have fueled the growth of the microcomputer industry.” MacWeek March 15th (1993) page 42, (emphasis added). See also H Stephen KreiderH Yoder \textit{Silicon Valley Days: High-Tech Firm Cries Trade-Secret Theft, Gets Scant Sympathy} WALL STREET JOURNAL Oct 8, 1992. Thus, the bad reputation cost for companies who sue their departing employees is not limited to employees who use “tacit knowledge,” as Gilson infra note 49 observes, but extends to employees who were actually accused of \textit{stealing documents}. A related argument in the media centering on the fact that IP is benefiting the big corporations at the public’s expense can be seen in HJames LardnerH “Patents are killing innovation in Silicon Valley” Business 2.0; San Francisco; Jul 2002.


\textbf{49} Ronald J. Gilson, \textit{the Legal Infrastructure of High Technology Industrial Districts: Silicon Valley, Route 128, And Covenants Not To Compete} 74 NYU L. REV.575 (1999). See also Edmund W. Kitch, \textit{The Expansion Of Trade Secrecy Protection And The Mobility Of Management Employees: A New Problem for The Law}, 47 S. CAROLINA L REV 659 (1996)

\textbf{50} It should be noted that the vast majority of non-compete litigation cases have nothing to do with trade secrets. Peter J. Whitmore, \textit{A Statistical Analysis of NonCompetition Clauses in Employment Contracts}, J. CORPORATION LAW 515 (1990). Thus, one could argue that at face value there is no direct relationship between the sharing of trade secrets and non-compete contracts. Nevertheless, this proposition is rejected in the following paragraph.

\textbf{51} California Business and Professions Code 16600: “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.”
actually was a trade-secret misappropriation by the employee.\textsuperscript{52} Covenants not to compete have the potential to prevent an employee from using any of her knowledge to benefit a competitor.\textsuperscript{53} According to Gilson, section 16600 forced employers to accept a norm of high mobility of employees between competitors, which led to the present situation in which trade secrets are being transferred among competitors. The attempt to substitute the lack of non-compete contracts with the doctrine of inevitable disclosure has been blocked for the time being by California courts.\textsuperscript{54}

The notion that the increase in trade-secret disclosure is correlated with the unenforceability of non-compete is supported empirically by Wiese.\textsuperscript{55} She demonstrates that the effect of non-compete legislation’s restrictions was mainly felt in the manufacturing sector. In her view, this fact suggests that the mobility of employees between competitors contributes to industrial output when departing employees pass trade secrets. While this conclusion could definitely be challenged, it serves as yet another source of evidence for the hypothesis that without non-compete, some information that would otherwise not be divulged is transferred by departing employees.\textsuperscript{56}

**The High Cost of Litigation:**

A related argument, which is not unique to Silicon Valley but which is aggravated by the fact that non-compete contracts are disallowed there, is the fact that

\textsuperscript{52} See the discussion in the previous paragraph.


David Lincicum, Note: *Inevitable Conflict?: California's Policy of Worker Mobility And The Doctrine Of "Inevitable Disclosure*, 75 S. CAL. L. REV. 1257 (2002) summarizes the short history of California courts’ treatment of the inevitable disclosure, which has basically led to a situation in which it is not clear what the legal status of this doctrine in California effectively is.

“If the Electro Optical court (Electro Optical Indus., Inc. v. White, Supreme Court Minute 04-12-2000, 2000 Cal. LEXIS 3536, 2000 Cal. Daily Op. Service 2830, 2000 D.A.R. 3812 (Cal. Apr. 12, 2000)) thought it settled the dispute over the inevitable disclosure doctrine in California, it was soon proved wrong when the California Supreme Court ordered the decision depublished on April 12, 2000. This order left the court's judgment unchanged, but prevented the opinion from being cited by any California court…. Even worse, the most recent cases to deal with the doctrine in California have been critical of it. For example, in Danjaq, L.L.C. v. Sony Corp., a federal district court stated that “PepsiCo is not the law of the State of California or the Ninth Circuit.” A few months later, in Bayer Corp. v. Roche Molecular Systems, Inc., a federal district court stated that California trade secret law did not recognize the doctrine of inevitable disclosure. It then went further, stating that the doctrine would run counter to California's strong public policy favoring employee mobility. Although both of these cases clearly state that inevitable disclosure is not the law in California, they both involve federal courts deciding state law issues and as such, their decisions are not binding on state courts. Therefore, with the depublication of Electro Optical, the doctrine remains in limbo. **There is neither controlling authority adopting the doctrine nor any such authority clearly rejecting it.**” (Emphasis added) see also James Pooley, *The Sky is Not Falling: When It Comes to Trade Secrets and Employee Mobility, a Little “Inevitable Disclosure” is Not Such a Bad Thing*, The Recorder, Nov. 1998, at S31.

\textsuperscript{55} Supra note 11.

\textsuperscript{56} In her words: “The much larger effect on the manufacturing sector suggests that although non-compete covenants more commonly protect goodwill than trade secrets, their effect on trade secrets is more important.”
trade-secrets litigation is very expensive. The ambiguous nature of trade secrets is relevant not only insofar as it raises a set of public policy concerns within the courts, as discussed in the following paragraph; it also means that there is a transaction cost involved in proving in court that a violation of trade secrets has occurred. The employer needs to prove that the information was, in fact, a secret; that she has taken reasonable steps to protect it; that it has economic value; that the employer’s usage of the information was not implicitly permitted; and so on. Since proving trade-secret misappropriation is so difficult, expensive, and unpredictable, few employers actually use litigation to prevent trade-secrets misappropriation unless the loss from the disclosure is devastating. As I will argue in a later section of this paper, the huge litigation costs lead to a situation in which employers will usually sue for extreme cases of trade-secrets violations, as in the case of former CEO’s/CTO’s or in a case of corporate raiding.

Secrecy Seems to Be at Odds With Freedom of Occupation/Freedom of Speech

The most cited grounds for the public policy argument against the enforcement of trade-secrets by courts is that the property rights of the employer seems to be at odds with the freedom of occupation. This factor is not unique to Silicon Valley, but it seems to fit well with the above-mentioned reputation argument by suggesting another reason for the relatively low social status associated with the enforcement of trade-secrets. It appears that employers’ claims are being perceived as less legitimate than patent infringement claims, in part because the proprietary interest of employers

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57 The high cost of litigation leads to a set of solutions to trade secret theft that I completely disregard in this project. Such measures include both technological features that monitor the flow of information in the organization, and organizational techniques that control the management of information within the firm. For an example of an organizational technique (preventing a situation in which only one employee has access to the information) that attempts to limit the risk to the firm from a departing employee who might share its confidential information see Jonathan S. HFeinstein & JeremyH Stein, Employee Opportunism and Redundancy in Firms 10 JOURNAL OF ECONOMIC BEHAVIOR & ORGANIZATION 401 (1988).

58 As compared with patent and copyrights litigation, wherein establishing the facts involves a relatively straightforward procedure.

59 For example, in a December 2001 interview with an engineer in a small firm in Silicon Valley, the interviewee said to me, “In the current situation in the Silicon Valley, my previous employer doesn’t even have enough money to sue me.”

60 Gilson, supra note 49, suggests on page 601, the ambiguity of trade-secret laws is mainly to blame for the costly nature of trade-secret enforcement.

61 The classic paper by Mark Galanter (Marc Galanter, “Why the ‘Haves’ Come Out Ahead: Speculations on the Limits of Legal Change, 9 L. & SOCIETY REV. 95 (1974)) on how the powerful get ahead discusses the practice of sending letters to employees from a lawyer and the effect that a lack of independent legal advice has upon their decision. Arguably, the sophisticated senior employees with independent legal advice are more likely to take the confidential know-how information with them, bringing on a subsequent lawsuit. They have thus given less guidance to rank and file employees. Senior employees are more likely to be risk-takers, in contrast, rank and file employees have more to lose and less to gain from trying to fight the system. Moreover, it may be that senior employees are more likely to be sued due to their deep pockets, than to the potential damage faced by the firm upon their departure.

62 I will go on to demonstrate, with reference to these cases, that a rank and file employee is unlikely to get guidance about more modest trade secrets violations whose threat to the employer do not justify the trade-secrets litigation costs.
seems to be in conflict with the freedom of mobility. This factor exceeds the informal reputation mechanism that exists in the Valley, however, for it also impacts the way in which trade-secrets enforcement can be applied in courts. Judges who discuss the enforcement of trade-secrets all appear to agree that, in theory, the employee’s right to work and compete doesn’t extend to the right to divulge and take advantage of employees’ trade-secrets. They would, more likely, respect the trade-secrets of employers in a balanced way.

“Trade-secret cases applying California law often balance an employer’s right to proprietary information against an employee’s right to use his or her knowledge, training, and experience to gain a livelihood.”

In practice, it seems that the unclear distinction between the employee’s skill and the employers’ proprietary knowledge leads to a situation in which, foreseeing the unsupportive approach of courts and the low social legitimacy of trade-secrets litigations, many trade-secrets claims do not reach the courts.

C. Cooperation or Concession – The Employer’s Perspective

To further our analysis it is important to note that the taxonomy of reasons for under-enforcement of trade-secrets in Silicon Valley, as described above, suggests two conflicting angles that the employer could take regarding the confidential know-how information that is disclosed by her former employees. According to some of the above rationales, the employer accepts this disclosure because she assumes the behavior to be a part of the Valley culture and, hence, part of the psychological contract under which the employer has operated her business. According to this line of reasoning, employers typically don’t sue their departing employees because they remember how they started their own careers, because they also hire employees from other companies, and so on. Thus, their behavior could be defined as voluntary cooperation with a practice of trade-secrets sharing by departing employees.

According to some of the other approaches, however - especially those defined under structural and legal themes - the employer concedes to the norm against her individual will. The employer abstains from suing her departing employees because she cannot afford the social and/or legal costs associated with filing such a suit. According to this view the employer does not approve of any level of trade-secrets violation and, given the opportunity, would sue departing employees who use trade secrets. This distinction is replete with important implications for the discussion in the fourth section regarding the abilities of social norms to monitor inter-firm flow of information.

63 Milgrim, 1 Milgrim on trade secrets § 5.01 (1994).
64 Robert P. Merges, supra note 8.
65 W. Bradley Wendel, Non legal Regulation of the legal Profession: Social Norms in Professional communities, 54 VAND. L. REV. 1955, 2015 (2001) argues that one of the risks that could result from the law’s having yielded to informal control mechanisms is that organizational norms can not be trusted to be ethical. In the context of lawyer’s ethics Wendel discusses the possibility that the norms will benefit the lawyers but not the clients. This is precisely the issue that I am discussing in the context of trade secrets enforcement when the norms are controlled by employees. Though, on one hand, the argument made was that this is to the benefit of Silicon Valley as a whole, there is always the risk that without a critical external point of view of the Valley, emerging norms will impose harm on parts of the community.
II. Is Information-Sharing an Efficient Practice?

Following a discussion of the possible explanations for the alleged practice of under-enforcement, a natural next step is to ask whether such an act is, in fact, an efficient one.

A common theme in economic analyses of norms regards the question not only of how norms emerge but what has kept them alive. In a game theory context, it has been argued that a norm can persist as long as no one has any interest in changing it. However Basu demonstrates that while that argument might be true from a game theory perspective, there are many cases in which norms might persist though they harm other groups. Thus, in theory, even if there is an existing practice of information sharing, this fact could not lead to the conclusion that the practice is socially efficient. As I will discuss in the fourth section when I consider some of the potential and actual normative failures, the conflict of interests that arises between the information-owning and information-accepting norms is one of the main impediments to controlling the types of information that are distributed. Given a situation in which the norms might favor some parts of the population over others, and there are not always mechanisms to ensure that the two firms in question will “play the game” again, efficiency cannot be deduced from the mere fact that the practice persists - its qualities should be examined without any presumption of efficiency.

A review of the relevant economic literature shows that most scholars who have discussed this question have focused on a narrow aspect of economics to prove their case. For the most part, the advocates of each policy tend to underestimate associated costs, focusing solely on the advantages of their approach. Hence, the following review will not attempt to evaluate what weight should be given to each approach in order to produce an aggregated estimation of the most efficient policy. Instead, this review will function as a demonstration of the complexity involved in judging the efficiency of trade-secrets regulations and, hence, the incompleteness of existing approaches that focus on efficiency as measured by the limiting or un-limiting of employee mobility. This complexity is part of what seems to be appealing in the focus on efficacy and enforceability, as a compatible line of reasoning when attempting to efficiently regulate know-how information flow between firms.

A. Economic Perspectives Supporting Greater Restrictions on the Transfer of Confidential Know-How Information

The debate as to whether the practice of information sharing is efficient is widely engaged, even in areas beyond trade secrets. Perhaps the most conspicuous

66 George A. Akerlof, The Economics of Caste and Of the Rat Race and Other Woeful Tales. 90 QUARTERLY JOURNAL OF ECONOMICS 599 (1976)
68 i.e. externalities
69 The various estimates of impact on efficiency are to some extent dependent on the eyes of the beholder. For example the American Society for Industrial Security, taking a data security approach, treat the whole aspect of trade secrets misappropriation as a pure economic loss (estimated at about 2 billion dollars a month!), discussed in Robert G. Bone A New Look At Trade Secrets Law Doctrine In Search of Justification 86 CAL. L. REV 541(1998).
example of the efficiency debate emerges in the context of digital copyrights, where there have been numerous symposiums and public debates in legal academia and practice in recent years that have tended to counter the protection of ownership with the notion of innovation. Within the digital copyrights debate many of the arguments that are being made focus on the software industry and the importance of innovations that emerge from open source, sharing codes, etc. The existence of this parallel policy debate should be kept in mind as we review the conflicting arguments associated with the restriction on confidential know-how information, given its shared practical implications for technological innovation.

From a policy perspective, greater restriction could be achieved in one of two ways. The first would be a stricter enforcement of trade secrets by way of an allowance of non-compete contracts and a creation of presumption favoring the employer. The second approach would entail a broader definition of the types of information that could be referred to as trade secrets. In the next section I will discuss in more detail the interaction between these two possible strategies.

**Effect on Investment in R&D**

The classical rationale for backing restrictions on the transfer of trade secrets in the high tech industry is that this is precisely the type of industry in which investment in R&D is larger. Most R&D knowledge is not patentable; without strict protection for all types of R&D, firms will have fewer incentives to invest in R&D. Moreover, lacking protections of R&D knowledge, a scenario may unfold wherein firms find that they are better off cutting expenses on R&D and raising salaries in order to draw creative employees “loaded” with confidential R&D knowledge from other companies that have invested in R&D.

**Transaction-Costs Approach**

From a transaction-cost approach, mandatory limitations on the transfer of trade secrets seem to be efficient. There are three types of transaction costs that could be reduced by broad and strict restrictions on the transfer of trade secrets:

The obvious one is contracting – the existence of law-based definitions saves the costs associated with agreeing on the types of information that should not go with the departing employee. By strictly enforcing a broad-based mandatory definition of

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70 We might consider another set of arguments relative to software protection. These arguments are related to network externalities, de-factor standard, switching costs and the like, and they discuss the lack of justification necessary to give copyrights protection for software products. The argument seems to hold true for some of those who oppose trade secrets protection for computers, mutis mutandis. If we want to allow the normal development of software we should have similar concerns when it comes to trade secrets. Obviously there are requirements for novelty and no obviousness which are irrelevant with regard to trade secrets.

71 For a recent example see Open Source Business Conference (OSBC), scheduled for March 16-17 (2004) in San Francisco.

72 In fact, in the next section I will argue that under certain circumstances broader regulation diminishes the possibility of strict enforcement.

73 To qualify for a patent, information needs to be in a higher level of novelty, etc. See RESTATEMENT OF THE LAW, THIRD, UNFAIR COMPETITION § 39, comment e.
trade secrets, the parties are spared the need to create sophisticated self-enforced contracts that would ensure the protection of the firms' trade secrets.

The second type of transaction cost reduction relates to the costs of monitoring and managing information. Lacking legal protection for all types of information that the firm cares about, the firm would need to invest efforts into the monitoring of access to the unregulated information.74

The third type of transaction cost is associated with allocation. A broad definition that allocates rights to the employer for all types of confidential know-how information would sidestep the confusion that can arise in a regime that allows some of the firm’s confidential knowledge to go with the employee. Merges, building on his treatment of the tragedy of the anti-commons argument,75 suggests that in a world of team production the increase in transaction costs (associated with coordination and hold-ups) that result from giving property rights to many people might decrease social welfare.76

**Team Production Approach**

Along those lines, Merges justifies his approach by advocating the notion of team production: property rights should not be assigned to each individual employee, because doing so might undermine and complicate team production. Similar arguments seem to hold for the restriction of disclosure of trade secrets. The growth of team production models increasingly forces the employer to disclose information about the whole project to everyone in the team.77 Without strict enforcement of trade secrets, an employer could not seriously rely on the protection of trade-secret laws, especially lacking non-compete.78 One consequence might be limited disclosure of confidential knowledge in production teams; it may even impact the process of choosing the size of the team, due to monitoring considerations. Following the logic of this perspective, we might want to avoid a situation in which the production activities are influenced by monitoring rather than efficiency considerations, per sé.

**Human Capital Approach**

As mentioned, human capital is seen to pose major public policy concerns associated with the restriction of employee mobility. This is, in fact, the argument made by Stone in her discussion of “employability”. Stone argues that, given the new notion of employability, decreasing the protection of trade secrets is necessary in order to give the employee incentives to invest more in the study of techniques that

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75 See Merges, *supra* note 8.


77 For a review of the advantages of work-teams and transfer of knowledge within and between different divisions in the organization see Fernando Olivera & Linda Argote, *Organizational Learning and New Product Development: CORE Process*, in SHARED COGNITION IN ORGANIZATIONS, THE MANAGEMENT OF KNOWLEDGE (Leigh L. Thompson, John M. Levine, David M. Messick eds, 1999) at p 297.

78 Merges (1999), *supra* note 8 at 46-52.
might also be of use in his or her future jobs. This change is especially relevant when the tenure of the employee in his current job is relatively short and less predictable, for in this scenario the future usage of the technology exerts a greater weight on the decision structure of the employee. Here, then, the human capital approach might suggest a strategy that would minimize the restriction of confidential know-how information usage in future jobs. However, a deeper examination of the implication of human capital for restrictions on the use of trade secrets might suggest an answer that is far more complex. In terms of investing in employee education, an employer is more likely to do so if she knows that she can get legal protection for some of her investments. Lacking the protection of the law, however, the employer is likely to limit investments in education or training that might benefit the future career of the employee, since the costs resulting from information disclosure exceed the benefits to the firm that result from investments in employee training. In a regime marked by limited protection of trade secrets, any investment in employee education relating to know-how information (that which exceeds the bounds of public knowledge) becomes self-destructive, since it increases the market-value of the employee and might theoretically make her more likely to leave the firm.

79 From this perspective she follows the basic rationale of Becker’s traditional approach to human capital (Gary S. Becker, HUMAN CAPITAL: A THEORETICAL AND EMPIRICAL ANALYSIS, WITH SPECIAL REFERENCE TO EDUCATION 23 (2d ed. 1975)) that distinguishes between firm-specific knowledge and general knowledge. However it seems that Stone, supra note 23, argues that there is no longer a need for the employee to pay for knowledge he could use in future jobs, due to the “new psychological contract.”

80 See for example, Stewart E. Sterk, Restraints on Alienation of Human Capital, 79 VA. L. REV. 383 (1993) who explores restraints on the alienation of human capital in three doctrines: employment law, family law and bankruptcy law. He argues that the justifications to create those restraints are not, in fact, justifiable and contradict a basic theory in property law of freedom of entitlements which is important for the healthy development of property law. He develops an interesting thesis that suggests an anomaly in the law wherein human capital is protected in a one-sided way. The courts always tend to protect the employee, the spouse, and the debtor. From both the economic and moral perspective, however, the employer, the other spouse, and the creditor might have legal and legitimate rights to this human capital and their side doesn’t get equal protection due to a disputable assumption of inequality, etc.

81 See Paul H. Rubin & Peter Shedd, Human Capital and Covenants Not to Compete, 10 J. LEGAL STUD. 93, 97 (1981). They argue that without protection, the employer will abstain from training his employees.


83 This is of course a simplified approach, assuming that the employee is motivated only by her market value. In reality, due to elements of reciprocity, employees who feel that their employer is investing in them might be more likely to stay for longer periods in the company since they then feel more committed. Nonetheless, even when controlling for the norm of reciprocity, the bottom line still seems to suggest that from the employer’s non-institutionally-protected perspective, a fear of increased opportunism by the employee seems to hold. Weiss’s findings about the moderating effect of education, which considers the relationship between non-compete and increase in industrial output, refer to education acquired by the employee prior to entering the job, and therefore can neither support nor refute the above-mentioned arguments.
B. Economic Approaches Favoring more Limited Restrictions on the Transfer of Confidential Know-How Information

After briefly reviewing the economic schools of thought that focus on the cost of free mobility I will consider the other side of the equation, examining the benefits to society from free mobility and a more moderate approach to the restriction of trade secrets.

Endogenous Growth and Innovation – Information-Diffusion in Industrial Parks

Saxenian argues that, in contrast to economists’ classical belief regarding the “boundaries of the firms” and the “tragedy of the commons,” the main reason for Silicon Valley’s success is the spillover of knowledge between firms in the Valley. Because departing employees have transferred negative information as well as new ideas, the Valley as a whole has flourished and trade-secret protection has therefore not been given serious consideration. In fact, the economic literature increasingly recognizes that, in the real world, firms share significant information and knowledge across firm boundaries and that the willingness to do so can significantly affect economic growth, both for industrial districts in particular and inter-firm relations in general.

84 Saxenian, supra note 17.

85 Negative information cannot be patented, but it captures most of the knowledge aggregated by a firm, and many of the problems that courts face in enforcing trade secrets are related to preventing ex-employees from using negative information that they were exposed to through their employment period.

86 Saxenian, supra note 17, 111-131, especially with regard to “learning from failure.”

87 Saxenian, supra note 17, at 149 “while non disclosure 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” (emphasis added).

88 Walter W. Powell, Trust-Based Forms of Governance, in Trust Organization: Frontiers Of Theory And Research Roderick 51 (M. Kramer & Tom R. Tyler eds., 1995) discusses the trust needed in industrial districts such as “Third Italy,” Germany, and the Silicon Valley. The logic of these districts is self-reinforcing – common interest encourages the success of other firms’ products that are complementary to their own. These social ties facilitate monitoring.

An important resource for the information-sharing in Silicon Valley is: David Angel, High Technology Agglomeration and the Labor Market: The Case of Silicon Valley, 23 Envir & Planning 1501 (1991). This work discusses how experiential knowledge passes freely through open labor markets, and the fact that firms have a general interest in developing the semiconductor industry. Angel says that the best way to transfer information is through personal relations. Firms cannot learn all they need to know internally; they have to rely on the informational networks of the scientists. For an elaborate discussion of information network, see also C. DeBrasson & F. Amesse, Networks of Innovators: A Review and Introduction to the Issue, 20 Research Policy, 363 (1991). In this work we find an exploration of how the boundaries of organizations slow innovation and the diffusion of knowledge in society, even in an R & D context.

89 But see John Storey; Paul Quintas; Phil Taylor Wendy Fowle, 13 International Journal Of Human Resource Management 1 2002, who question the empirical basis for causal argument that that flexible structure of employment leads to greater innovation.
Edmund W. Kitch\textsuperscript{90} was the first legal scholar to suggest that, from a welfare perspective, non-compete restrictions have created inefficiencies related to the discontinuities in employees’ careers.\textsuperscript{91} Similarly, the notion of information-diffusion was advocated by Gilson and by Hyde as one of the main causes of Silicon Valley’s success. The argument made by the above-mentioned scholars is that trade secrets, transformed by departing employees, enhance the innovation in other firms, especially in spin-offs. Thus, they argue, a policymaker who seeks to improve industrial output should favor limited restrictions on the transfer of trade secrets between firms.

**Copyright Protection of Computer Code and its Implication for Trade Secrets**

The economic debate on the conflict between innovation and trade-secret protection resembles the discussion about the scope of copyrights protection of computer code. Dam,\textsuperscript{92} discussing the famous Whelan case,\textsuperscript{93} has concluded that copyrights protection of software extends beyond programs’ literal codes to include aspects such as structure and organization of the software. Using economic rationales he argues against the protection of copyrights in computer software. His main arguments are related to economic argument such as compatibility, de facto standards, and network externalities, basically supporting the idea that the efficient development of software requires the use of others’ work, and that the more protection each individual gets for her own products the more complicated the development of related software products will be. Thus, for example, when a given software is the de facto standard, Dam argues\textsuperscript{94} that there is economic justification for allowing the copying of this software. Another major distinction that he makes\textsuperscript{95} relates to the purpose of the copying.\textsuperscript{96}

When extended to trade secrecy protection, this line of reasoning begs the question, “How should we treat an employee who, upon leaving a company and seeks to develop a product based on a secretive software product that he was exposed to in his previous company?” Following the above rationale, especially in the context of spin-offs and entrepreneurship, the departing employee will aspire to use this


\textsuperscript{91} On page 710, Kitch *supra* note 49 in fact preceded Gilson in recognizing California as a hub of technology, on the one hand, and as a culture that doesn't favor secrecy, on the other hand. He notes that there is no exception in code 16600 to permit the enforcement of non-compete with regard to trade secrets. Another efficiency argument favoring a lower level of secrecy is proposed by Kitch on page 721. He says that firms do, in fact, want to be different, but not too different; and that they have an interest in maintaining knowledge about the things that they do to develop a market for their product. In addition, he argues that post-employment limitations are creating a problem of discontinuity and lack of depth in the specialization of each employee.


\textsuperscript{93} Whelan Associates, Inc. V. Jaslow Dental Laboratory, Inc., 797 F. 2d 1222 (3d Cir – 1986)

\textsuperscript{94} *Supra* note 92 at p.344.

\textsuperscript{95} Id at p. 361.

\textsuperscript{96} According to dam we might want to allow people to copy the product in order to transform the product into a better product, but we don’t want to allow people to copy the product in order to substitute for the product by creating a similar product. See the disagreement about this distinction in Campbell v. Acuff-Rose Music, Inc., 114 S. Ct. 1164.
information to improve the current product – otherwise, his new firm will have less chances of surviving competition with his previous firm. Dam would thus allow such particular usage of trade secrets by the employee.

**Monopoly Reduction**

Debra Weiss, who has empirically demonstrated the positive relationship between restrictions on non-compete and industrial output, has offered a different explanation for the improvement in industrial output in states with restrictions on the enforceability on non-compete covenants, based mainly on the concept of monopoly reduction. She argues that non-compete contracts basically allow companies to maintain monopolies on know-how information. Since small firms have relatively little market power, they tend to innovate more, paving the way for new markets. The growth of these new markets is encouraged by the firms’ liberal attitude toward usage of trade secrets by entrepreneurial employees. Weiss’s main point, then, is that in industries in which small companies are more likely than major companies to innovate, the State should prevent any limitations on the creation of spin-offs by restricting the possibility of non-competes. She argues that, from an anti-trust perspective, even appropriation of trade secrets could be efficient.

**C. Tentative Conclusion: A Balanced Approach Should be Taken to the Advocated Free Mobility of Employees.**

The above review clearly suggests that in order to favor one regime over another we need to consider a whole variety of economic theories that, at least at face value, seem to differ in their normative implications. Nevertheless, it should be noted that the two primary camps are not in complete opposition. In fact, most scholars who favor the free mobility of employees do not suggest that all types of trade secrets should be disclosed. Most of them admit, explicitly or implicitly, that a limit should be imposed at one point or another.

Stone clearly states that she does not advocate gross violations of trade secrets; Hyde suggests that we should allow disclosure as long as it doesn’t affect

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97 Rather than substitute for.
98 Following this rationale, we might suggest a different treatment when the employee departs the firm to work for an established competitor, given that in this situation there less of a chance that the employee will use the information to develop an improved product.
99 See also Harvey J. Goldsmid, Antitrust’s Neglected Stepchild: A proposal for dealing with Restrictive Covenants under Federal Law, 73 COLUM. L. REV., 1193 (1973) – suggesting that non-compete contracts could be seen as monopolistic by the employer and should be subject to anti-trust scrutiny.
101 Weise seems ambivalent about the possibility of using trade secrets. As she states in page 44, supra note 11, “This observation suggests another potential explanation for the connection between stimulating output and non competes. Perhaps departing employees are not taking with them their own inventions, but are merely appropriating their employer’s trade secrets. Nonetheless, this practice improves output by reducing the employer’s monopoly power.” (emphasis added)
102 Stone, supra note 23, focuses her critique on inevitable disclosure, recognizing the need for general protection of trade secrets.
the incentive-structure of the employer;\textsuperscript{103} Wiese suggests that trade-secrets disclosure is efficient as long as it is being developed by the employer himself;\textsuperscript{104} and Gilson does not explicitly take any one stance, though he does seem to recognize some line implicitly.\textsuperscript{105}

Naturally the obvious problem that arises from reading those who advocate violation of trade secrets, is that they are unable to suggest a clear line, beyond some economic speculation of the existence of what should or should not be disclosed by departing employees\textsuperscript{106}. Nevertheless, my main argument is that in the current legal monitoring of trade secrets, nothing ensures that departing employees will transfer only efficient levels of information. As I will soon argue, even those who support the free mobility of employees and information between companies should perhaps curb their enthusiasm about the takeover of laws by information-sharing norms, and recognize the value of a credible law that would offer clear guidelines as to where the ‘red line’ should be.

Given that the main focus of this project is on the interaction of social and legal monitoring and not on human-capital formulas, I will simplify my argument in the following paragraphs:

According to theories that emphasis monopoly reduction, Inter-Firm information sharing (R&D Spillovers, innovation) and various theories that focus on employee’s freedoms, departing employees should be allowed to take more information with them. However, according to theories of Transaction costs, Monitoring costs, Team Production that emphasize Investment in in-firm R&D and employer’s freedoms, departing employees should take less information. Trade-secret laws state that everything that is kept in confidentiality and has economic value should not be disclosed, and that any person who violates the laws governing trade secrets can be sued by his previous employer. Our review in the first section suggests, however, that in reality most employees who move between companies are \textit{beyond} the scope of what the law allows.\textsuperscript{107} Hence the typical employee takes more

\textsuperscript{103} This is how Hyde justifies his support of trade secrets appropriation. Nonetheless, given that a trade secret is a legally protected \textit{only if it derives economic value from being confidential}, by disclosing a secrets you bring an economic loss to the employer (at least according the traditional theory that sees information as a public good), and hence by definition change its incentive structure.

\textsuperscript{104} “A non-compete is less likely to be desirable to the extent that the employee contributed to the innovation.”

\textsuperscript{105} Gilson \textit{supra} note 49 at 600. He argues that there are benefits to the under-enforcement of trade-secrets only relating to the “… kind of knowledge spillovers that give rise to a second-stage agglomeration economy.”

\textsuperscript{106} For example according to Hyde, disclosing customer lists is fine, since there is no incentive structure of development that could be affected. However, according to Weiss and Gilson, customer lists are the last thing that should be allowed, since they are unlikely to lead to innovation. Nonetheless, according to Stone, networking is the part of the new psychological contract, etc.

\textsuperscript{107} Hyde even argues that this practice becomes part of the working definitions of trade secrets in some law firms in the Valley “…lawyers in the Valley who represent firms and venture capitalists concluded from this experience until recently that the working definition of trade secret in the Valley is narrower than the formal legal definition. They so advised clients, as they told me in interviews conducted mainly in March 1996, and deals are concluded on that basis” Hyde, \textit{Supra} note 38, text near footnote 24.
information that what the law allows. I will argue that even if we accept the possibility that there are some types of information sharing that should be shared from a perspective of the general welfare of Silicon Valley we must consider the possibility that the gap between the typical practice and the law could lead employees to go even further toward excessive disclosure, which represents the point at which even the advocates of free and unlimited employee mobility admit that inefficiency is rising. In other words, even if we accept the pro-free mobility approach that there is some point in the which taking more than what the law allows increases general welfare, we need to recognized that there is a point which decreases general welfare in region with high-mobility of knowledge workers between companies. In the first section we showed that in accordance with almost all scholars who study the Silicon Valley there is a gap between law and practice. In the second section have concluded that, while the volumes of research pointing to the innovations that could arise from information sharing are compelling, we are unaware of any econometric study that could specify exactly what type of information should be shared by departing employees and whether this point is more closely related to the law or the typical practice. What I will attempt to explain in the rest of this paper is in the current gap between the practice and the law, neither the law nor the norms can ensure that what people actually do will be efficient. Furthermore, we will argue that the current gap might be responsible for pushing people toward excessive disclosure, for various failures that we will describe in the next three sections.

108 Obviously, in some areas, formal enforcement intentionally leaves a gap between itself and formal law. One of the most common examples is the enforcement of anti-speeding laws on highways. It is a near-formal norm that only if you drive 10% or so over the speed limit are you likely to be penalized. Such a gap is important in order to enable room for enforcement errors. It comes with fewer costs in the context of speeding because one can easily derive the norm by comparing one’s speed with that of others on the road, and because the formula of, say, add 10% or 10 MPH is easy to apply. I will show that the gap between the law and its enforcement cannot be attributed, in the context of trade secrets, only to an intentional error gap.

109 Assuming we accept the very questionable argument that the employee will be able to know ex-ante that the type of secret he divulges will increase or decrease the general welfare of Silicon Valley.

110 Thus, while the notion of free mobility clearly has the economic advantage, and therefore non-compete and inevitable disclosure regulations carry negative outcomes that should not be overlooked, at a certain level of information disclosure the advantages will be overshadowed by the social costs related to the increase in transaction-costs and the decrease in educational investment and R&D.

111 There is another set of arguments that should be discussed here, but which will be omitted due to page limitations. These arguments relate to the question of whose efficiency we are interested in promoting. Is the success of the Valley, which is celebrated by many of the pro-mobility scholars as a legitimate unit of analysis? While one might argue that, in the long-run, the welfare of the Valley and the welfare of the firm coincide, in many accounts, as could clearly be shown, the welfare of the Valley might conflict with that of the information-producing firm. For example, it is not clear to me what mechanism would ensure that the firm would be able to hire employees with knowledge as valuable as that held by the departing employee.

112 While in theory the data regarding some of the dependent variables (industrial out, investment in R&D) and the independent variables (tenure, characteristics of the firm, policies toward trade secrets) could be obtained with enough effort, some factors (actual use of trade secrets) might prove very hard to obtain in a questionnaire-type research project due to the human subject limitations on asking people about their own violations of the law, and the potential unwillingness of employees to cooperate with such intrusive questions to begin with.
D. From Efficiency to Enforceability

Focusing on the informational aspect of the law, I will argue that its broad and ill-defined nature forces social norms to take over, thus guiding individuals’ determinations of how exactly to behave. I will argue for the importance of narrowing and clarifying the boundaries of the information that is protected by trade secrets in order to allow both formal and informal social controls to monitor behavior more efficiently. The approach taken in this paper is thus that, rather than determine which secrets are valid to disclose, we should focus on what could realistically be achieved through social and formal enforcement when employees are allowed to move to competing employers. Regulating “information sharing” activities that are impossible to avoid either psychologically or culturally would decrease the ability of trade-secret laws to monitor departing employees’ behavior.113 Hence, while common wisdom might suggest that a change in the law would usually bring some change in the practice in the same direction, I would argue that from a certain gap114 between the law and the practice, when the law moves to include more information, it could push employees to actually share more information.

This dynamics could be captured in the following scheme:

Figure 1 The Relationship Between The Scope of The Law and Its Enforceability.

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Employee’s Skill--
Excessive protection Excessive disclosure

Law

Harm to
Legitimacy
Credibility
Relevancy (informative)
Acceptability
Social enforcement

Practice

Core Technology

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113 For an econometric analysis of the failures in compliance that exist due to partial and unpredictable enforcement in an environmental context see Dan A. Fuller Compliance, Avoidance, and Evasion: Emissions Control under Imperfect Enforcement in Steam-Electric Generation, 18 THE RAND J ECON. 124 (1987). (Note that in this study predictors such as morality were not measured.)

114 Although, I don’t offer any formula to identify how big should the gap be.
It is important to mention that, as opposed to writers such as Lawrence Lessig on copyrights\textsuperscript{115} or Stone in regard to trade secrets, I don’t want to argue that a narrower protection of trade secrets is required only from the employee’s perspective. My focus stems from a consideration of society’s interest in enabling an effective monitoring of employees’ inefficient and opportunistic transfer of confidential know-how information. I believe that the expansion of trade-secrets protection and their increasingly flexible definition might have mistakenly been seen as an achievement for employers, and will argue that when we take into account the interaction between legal and social monitoring, we will find that employers in areas like Silicon Valley might be better off with \textbf{limited} protection of trade secrets. My focus on social enforcement and monitoring leads to the position that the definition of the law should not be oriented solely toward litigation but also toward clarifying people’s understanding of what they need to do, especially given that litigation is so unlikely.\textsuperscript{116}

While I will not offer any magic formula that can identify what exactly should be shared, in the fourth part of this paper, I will argue that when the legal definition of trade secrets expands to include \textit{every} type of information that derives value from its confidentiality, there is a reduction in the informative and normative value of the law. Lacking substantial formal enforcement and clear guidance from courts, employees will have to look to their peers in order to understand the letter of the law. In the fifth and the sixth parts, I will show that allowing norms to take over the traditional role of courts might not lead to a more efficient situation. I will conclude by arguing that narrowing and, therefore, clarifying the meaning of the law could make both formal and informal controls more effective, which will subsequently lead to a more efficient inter-firm flow of information.

\section*{III. The Limits of Formal Controls}
When discussing the limits of formal controls, I will not simply argue that there is a gap between law and practice, for the existence of a gap doesn’t necessarily mean that the law isn’t functioning. For example, everyone knows that you can drive 10 mph over the speed limit and still stay out of trouble with the police. While from a simplistic perspective there is a gap between law and practice, it is clear without reference to empirical study that the legal speed limit affects the practice even if the law doesn’t correspond with the practice. However, in the context of trade secrets, as shall be shortly demonstrated and backed with empirical findings, the law’s scope and ambiguity are at least partly responsible for its own declining effectiveness. Before I embark upon that discussion, though, I will attempt to answer in short the obvious question: If one thinks that trade-secrets laws are ineffective in the prevention of trade-secrets disclosure, why shouldn’t the legal policymaker utilize the most efficient legal tool for their prevention - non-compete covenants?

\textsuperscript{115} Lawrence Lessig, THE FUTURE OF IDEAS (2001).

\textsuperscript{116} This notion seems to be the consensus among scholars who discuss the expressive-educational role of the law. The main problem in the context of trade secrets is that the flexibility that courts take when they define a secret only in the context of a specific employment relationship complicates people’s ability to understand, outside the context of courts, what exactly it is that they cannot do.
A. Is the Non-Compete Covenant the Best Tool for the Job?

Without a doubt, the best formal control for the prevention of trade-secrets use by departing employees is the non-compete contract. As mentioned, however, scholars who support fewer controls on trade secrets tend to do so by calling for a restriction on non-compete covenants. In the working paper referenced earlier, Weiss compared the eight states that maintain various degrees of limitations on the enforcement of non-competes with most of the remaining states that allow for non-compete contracts. Among the factors included in her equation are regional factors, level of education, investment in R&D, and industry output. She shows, using econometric analysis, that a prohibition of non-competes improves industrial output in industries in which employees hold college degrees and that small firms play an important role in innovation. Similarly, Gilson argues that in such arenas there is no economic incentive to develop R&D spillovers and that, therefore, the restrictions imposed by non-compete force employers to “give away” R&D spillovers. With a few reservations (that I will express below), I tend to agree with the above-mentioned arguments. Certainly something is working well here and, therefore, non-compete fails to provide an easy solution when a complete block on the transfer of trade secrets is not desirable.

Before continuing to discuss the ability of trade-secret laws (not including non-compete) to monitor the behavior of employees, I wish to draw attention to a few flaws in Gilson, Hyde and Weiss’s arguments regarding the alleged efficiencies in restricting non-compete contracts in Silicon Valley. While, as mentioned previously, my focus in this part is on the formal and social enforceability of trade-secrets disclosure and not on their desirability, I feel that it is imperative to mention in short some of my concerns regarding normative arguments for what should be done, before I continue to discuss what I think could be realistically achieved by trade-secrets laws in Silicon Valley.

B. Flaws in the Argument against Non-Compete Covenants

First, classical law and economics theory recognize that, in some cases, it can be more efficient to breach an agreement if the situation of the breached-upon party doesn’t worsen as a result (Pareto efficiency). Presumably, the advantage to

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117 See Gilson, Supra note 49.
118 Weiss, supra note 11.
120 E.g. the software industry.
121 Thus, as opposed to the suggested approach of welfare maximization, the classical approach of efficient breach is highly stable and consensual because no one becomes the worse for it (assuming perfect compensation). The welfare approach ignores the individual employer and would support breach of duty by the employee even if the previous employer did become worse off. Such a situation means that the employer will have an incentive to change his behavior in a way that he wouldn’t under a Pareto-efficiency-based breach, in which compensation is being paid to the breached-upon party. Gilson would argue in response that if we allow a breach only when the employee will compensate the employer then no breach would occur because the benefit to the departing employee is smaller than the benefit to society.
ensuring that no one becomes worse off is that no one will have disincentives to enter a similar transaction in the future. However, the current justifications for restrictions on non-competes speak for employers who want to prevent their employees from sharing confidential know-how information but cannot afford the potential negative outcomes, i.e. they cannot use non-compete agreements (as Gilson argues), and they don’t want to bear the reputation costs (as Hyde argues). In other words, the current mechanism does not aim to ensure that no one will be the worse for this “efficient breach” of the duty of confidentiality. The only consolation that is offered to these employers is the overall success of the Valley. One might also argue that because every employer could hire employees that bring the knowledge of other firms, and because the Valley as a whole would be better off, then therefore everyone would be better off. This argument is compelling but is obviously somewhat problematic, since the lack of redistribution mechanisms creates a tragedy of the commons problem. In other words, every employer will want to invest in raising salaries to attract employees with confidential knowledge of other firms, while failing to invest in R&D.

A second flaw relates to Gilson and Hyde’s conclusion that the policy is justified from a welfare-maximizing perspective, for we might wonder whether they refer to the welfare of Silicon Valley or to the welfare of the U.S. One might argue that since Silicon Valley is generally perceived as being a place where employees enjoy greater mobility, it attracts many of the most creative employees from other areas of the country - these employees might self-select themselves to work in an environment with high mobility and lower job security in order to garner maximum control over the benefits of their productivity. In other words, the relationship between the legal infrastructure of Silicon Valley and its success is mainly demonstrated in the fact that it is different from other legal regimes. The above reasoning could lead one to reach two separate but related conclusions.

One: the success of Silicon Valley was achieved at the expense of a loss for other parts of the U.S. The Valley thus functions as a classic example of negative spillovers from local government policies, which requires the intervention of the central government.

Two: according to this argument, even from California perspective, there is no economic justification for the allowance of such unlimited mobility; it might be

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122  This approach could probably not work within the boundaries of efficient breach, since their whole argument is that the departing employees don’t internalize all the benefits to society from the information they “take” with them.

123  See Nathan Newman, *Trade Secrets and Collective Bargaining: A Solution to Resolving Tensions in the Economics of Innovation*, 6 EMPL. RTS & EMLOY. POL’Y 1 (2002) for a discussion some other distractive effects of free mobility of employees on the labor Market, such as effect on an increased gaps in salaries. This gap occurs, since high skill employers are able to take advantage of the free mobility and get compensated for the innovation of the whole company, by basically getting paid to being with them the fruits of others labor, reducing at the same time the wage other more honest and less skilled employees can subtract from innovation, they too had part in developing. Hence according to Newman what happens in Silicon Valley is a situation where high-end skill employees defect to another firm on the expanse of the salaries and jobs of lower skilled and older skilled workers. Newman recognizes that there are some clear advantage to innovation from inter-firm sharing, but he thinks that unrestricted employee mobility is not the solution given all the costs that are associated from making the employees the people who are in charge of transferring that tacit knowledge without proper guidance and protection from the state.

124  See generally, Robert D. Cooter, *THE STRATEGIC CONSTITUTION*, Chapter 5.(2001)
sufficient to allow just a little bit more mobility and information-sharing than other states, so that potential employees will be motivated to move to Silicon Valley.

Moreover, how can we know from a welfare perspective whether or not the particular type of trade secrets should have been transferred? As Weiss observes, “A non compete is less likely to be desirable to the extent that the employee contributed to the innovation.” She argues that the use of trade secrets is less likely to be efficient when it prevents employees from using information that they had contributed to, and takes into consideration the role of education — but does an employee’s higher educational level really mean that he contributed to the production of the secret? And, even if this argument is valid, what could ensure that the knowledge that is being transferred consists of information developed solely by the employee?

In other words, assuming that Gilson is right, and that divulging certain types of trade secrets contributes to social welfare, what would ensure that only those actions that promote general welfare would occur? According to a simplistic account offered by Coase, Pareto efficiency could be achieved because if no one is worse off then there is no one to prevent the efficient transaction from occurring. How could employees or employers know which transactions to prevent? We know, for example, that in the absence of tangible theft, lawsuits that try to prevent the divulgence of trade secrets are not likely to win in court; but from a perspective of welfare, do we want to encourage people to commit trade secrets to memory? In the case of something very valuable whose worth to the Valley exceeds its cost to the employer, wouldn’t it be better from a welfare perspective to allow employees to download a whole document? Tangibility, then, clearly impacts the ability to control and monitor disclosure. What remains unclear is why, from a welfare perspective, there should be a difference between the tangible and non-tangible appropriation of information. Is it even possible for the ‘Valley’ to appreciate the welfare perspective and encourage employees to come to this more efficient conclusion, even if it might trigger a lawsuit by the employer? If we accept the view that the state should not use non-compete contracts to prevent disclosure of trade secrets all-together, and if we appreciate the fact that some divulgence carries positive externalities, don’t we need other formal controls to be integrated in order to ensure that the secrets that should be disclosed will be disclosed and that those that should not be disclosed will not be disclosed? As I will argue below, the current structure of trade-secret laws is not likely to be very helpful in our attempt to ensure the efficient disclosure of trade secrets. Thus, I will endeavor to show that the current formal social controls are not likely to clarify people’s understanding of the types of information that they are allowed to take with them.

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125 Supra note 12
126 Is it true that “[s]ince college graduates are more likely to contribute to innovation the law is less likely simply to encourage appropriation of employer ideas”?
127 See my discussion in Feldman, Tangibility and Authorship http://ssrn.com/abstract=562233
128 While I will focus on few flaws in the structure of current trade-secrets laws, formal laws were shown to be limited - especially in the context of corporate ethics - even when the law was clear and focused. See for example, Michael W. Maher The Impact of Regulation on Controls: Firms’ Response to the Foreign Corrupt Practices Act, 56 THE ACCOUNTING REVIEW, 751 (1981).
C. Trade Secrets as a Fuzzy Set (Relationship-Dependent)

The need for clarity in legal regulations is a common concern among jurisprudence scholars. Prominent among them is Fuller who, on the one hand writes that: "obscure and incoherent legislation can make legality unattainable by anyone, or at least unattainable without an unauthorized revision which itself impairs legality." At the same time, however, Fuller recognizes that there are limits to the requirement for clarity. He supports the incorporation of general standards, such as good faith and due care.

Defining the optimal level of clarity of the definition of trade secrets is no less complex. Courts in the U.S. repeatedly assert that the definition of trade secret depends on the specific relations of each case. The following quote is typical: "….Where this balance is struck in individual cases depends largely upon the facts and circumstances surrounding the employer-employee relationship." (Emphasis added)

This means that in order for an employee who plans to leave her firm to know ex-ante whether a certain behavior is legal or not, she needs to be aware of the particular nature of its relationship to the case law in discussion. One might argue

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129 The importance of clarity and clarification in the law, especially in the context of criminal law, is an old theme of modern jurisprudence scholars. See, for example, Jeremy Bentham, THE THEORY OF LEGISLATION, 1931, in p 421. For a more general account see Colin S. Diver, The Optimal Precision of Administrative Rules, 93 YALE L. J. 65, (1983). For a different perspective that demonstrate some counterintuitive effects of ambiguity on compliance see Timothy Malloy, Disclosure Stories, (Unpublished manuscript on file with author).

130 Leon Fuller, THE MORALITY OF LAW at p. 63.

131 "Sometimes the best way to achieve clarity is to take advantage of, and to incorporate into the law, common sense standards of judgment that have grown up in the ordinary life lived outside legislative halls" on the other hand he says that Nor can we ever, as Aristotle long ago observed, be more exact than the nature of the subject matter with which we are dealing admits.

132 "Trade secrets are probably the most nebulous and elusive species of intellectual property. Trade secrets are not only broad in scope; they are vague in their boundaries. No federal certificate describes the secrets to be protected (unlike patents, copyrights and trademarks and they are subject to an expansive statutory definition." Fredrick P. Schaffer and Robert C. Welsh, CORPORATE RAIDING, PLI (2000).

134 Vermont Microsystems, Inc. v. AutoDesk, Inc. 88 F.3d 142,149, 39 U.S.P.Q. 2d 1421 (2d Cir. 1996)

135 Similarly, Stone supra note 23, argues that trade-secret protection prevents an employee from disclosing knowledge that qualifies as a "trade secret," a vague and uncertain standard at best. On P. 593 she states that even more explicitly: "As courts expand the types of information they call trade secrets, it becomes increasingly difficult for an employee to avoid learning them. Even an employee who does not want exposure to trade secrets has no way to know which information that he learns on a job might later be the subject of a successful claim of protected trade secret status. When such an employee changes jobs, he is at risk of a suit for misappropriation."

See also Brandon B. Cate CASE NOTE: Sahoro & Associates, Inc. v. Porocel Corp.: The Failure of the Uniform Trade Secrets Act to Clarify the Doubtful and Confused Status of Common Law Trade Secret Principles, 53 ARK. L. REV. 687 (2000), discussing the fact that courts need to rely on common law norms due to the vagueness of the legal definition of trade secrets in the UTSA.
that ambiguity was not shown to reduce the law’s deterrence effect for criminals and that criminals may indeed seek to avoid ambiguity. I would argue, however, that from an expressive perspective, in a world in which employees do move between competitors, ambiguity will simply make the line between wrongdoers and law-abiding citizens an unclear one and might thereby cause more employees, lacking a clear legal message, to basically ignore the law.

Furthermore, defining trade secrets as relationship dependent makes it very expensive for employers to prove misappropriation, since they need to then put the misappropriation in the context of the employment relationship rather than focusing solely on the value and secrecy of the information. Moreover, legal ambiguity increases reputation loss, since the blameworthiness of the departing employee is less clear. The employer may now have to pay the high financial costs of litigation in addition to costs relating to reputation loss without any certainty as to the success of the legal action.

The notion of flexibility in the definition of trade secrets is not merely a characteristic of court rhetoric; the prevailing wisdom among employers advocates for ambiguity regarding the kinds of information that departing employees should be allowed to take with them. For example, popular employers’ legal guides suggest that it is in the best interest of the employer not to create a list of projects that the employee should keep in confidence upon leaving the company. Thus, according to this line of reasoning, people are less likely to receive guidance from the courts regarding those topics that they need the most guidance about.

It should be noted that while I am emphasizing the costs of ambiguity to social enforcement and human-capital management, legal ambiguity might also prove advantageous to human-capital management. According to the Basic Human Capital model, employees need either compensation or personal interest to invest in knowledge they cannot use outside the firm, and employers have no interest in investing in information that an employee could use outside the firm unless the employee is paying for it via a reduced salary. One might argue that preserving the ambiguity that surrounds the types of information that employees can take with them is important in order to reduce the ability of both employees and employers to engage in such opportunistic calculations.

Though I criticize trade-secret laws for being too fuzzy and ambiguous, the following point should be considered a counter-argument to my previous reasoning. In the preceding section I argued that economic theory suggests conflicting policy recommendations regarding employee mobility. Among the theories that I reviewed was the human-capital approach. I mentioned that it might suggest on the one hand a greater restriction on the transfer of trade secrets (giving incentives for the employer), and on the other hand it might limit the restriction on the transfer of trade secrets (giving the employee incentive to educate herself). It seems to me that from this
types of secrets that are hard to define, the above-mentioned arguments suggest that it is exactly these cases that are less likely to be pursued by employers. Employers are likely to file a lawsuit when they feel that they have a "smoking gun," such as missing documents, suspicious email communication, corporate raiding, and so on. But these are not the cases for which the employee really needs guidance; he needs guidance relating to precisely those cases in which employers are less likely to risk litigation. This argument is similar to that made by KT Albsiton, regarding the type of family leave act cases that get to summary judgment and motion-to-dismiss, and why pro-employer case law would be affected by the fact that only those cases tend to get published. Given both the lack of guidance from courts and the ambiguous nature of trade secrets individuals may, following Sherrif’s classical argument, be prompted to take cues from other employees’ behavior. Gradually, for most rank-and-file employees, informal social norms tend to be much more available and useful than formal social monitoring. In later sections that discuss the limits of non-formal

141 Professor Merges argues that he has never seen a case of trade secrets that did not entail tangible items being taken by the employee. However, one might argue that those cases in which nothing tangible was taken by the employees are precisely those cases in which a potential violator of the law would need guidance from courts as to what they are required to do. Robert P. Merges, Property Rights Theory and Employee Inventions in Corporate Governance Today, 19 (Apr. 28), quoted in Gilson, Supra note 49 at 602.

142 Gilson, supra note 49, pp 601 “...and significant protection is provided even against departing employees in circumstances where the misappropriation is clear (as when the former employee has removed or copied documents), the technology obviously secret, and the damage to the business substantial.”

143 Support for the fact that ignorance is a stronger predictor of incompliance than intentional evasion can be found in John Brehm & James T. Hamilton Noncompliance in Environmental Reporting: Are Violators Ignorant, Or Evasive, Of the Law? 40 AM. J POLITICAL SCIENCE, 444 (1996).

144 Though one needs to distinguish what gets to the system and what is more likely to get published, which is not the same thing. According to Albiston’s paper, even if a normal distribution of cases enters the legal system, there are very limited types of cases which get published and those cases tend to give a biased view of the case law. KT Albiston, The Rule of Law and the Litigation Process: The Paradox of Losing By Winnings, 33 LAW & SOC’Y REV. 869 (1999).

145 In contrast to jury cases, which are usually not published.

146 Mussafer Sherif, an Experimental Approach to the Study of Attitudes. 1 SOCIOMETRY, 90 (1937).

147 It is important to mention in this context that there are obviously legal suits in Silicon Valley. However these suits are usually either against a CEO, or they relate to a major threat to the company (i.e. ten employees are leaving together for a competing firm). There is no reason to believe that, from an efficiency perspective, only high-profile employees should be prevented from moving from one company to another.
controls, I will refer to the problems that legal ambiguity creates for social enforcement as well.  

D. “Trade Secret” as Too Broadly Defined for the High Tech Industry: Over-Regulation and Under-Enforcement

The Expansion of the Definition of Trade Secrets in 1985

One facet of the fuzzy nature of trade secrets relates to the fact that trade-secret laws are very broad in the types of information that they protect. While, on the one hand, California law prevents employers from imposing post-employment restrictions on their departing employees, California has on the other hand adopted the broadest version of trade-secrets protection in the nation.

The original definition of trade secrets comes from the Restatement of Torts. According to the Restatement:

A trade secret may consist of any formula, pattern, device, or compilation of information used in one's business that gives him an opportunity to obtain an advantage over competitors who do not know or use it.

According to the Uniform Trade Secrets Act, a trade secret is defined as:

“information, including a formula, pattern, compilation, program, device, method, technique, or process, that derives independent economic value (actual or potential), from being generally unknown to, (and not readily ascertainable by proper means) by, other persons who could obtain economic value from its disclosure or use, and is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.”

Arguably, it would be very hard for an employee to monitor the behavior of his fellow employees if he himself is not sure what trade secrets effectively are.

There is obviously some inter-causality between scope of the law and fuzziness of the law. See for example Stone, supra note 23 at page 593 who states it even more explicitly: “As courts expand the types of information they call trade secrets, it becomes increasingly difficult for an employee to avoid learning them. Even an employee who does not want exposure to trade secrets has no way to know which information that he learns on a job might later be the subject of a successful claim of protected trade secret status. When such an employee changes jobs, he is at risk of a suit for misappropriation.”

I will later argue that these mixed signals might be partially responsible for the under-enforcement of trade secrets law and for the failure of formal controls to effectively monitor employees’ behavior.

A different piece of legislation, which by comparison the UTSA gives a narrower definition of trade secrets, is the Restatement (Second) of Agency § 396 (1958) "trade secrets, written lists of names, or other similar confidential matters... The agent is entitled to use general information concerning the method of business of his principal and the names of the customers retained in his memory, if not acquired in violation of his duty as agent."

The phrase in prentices was not adopted by California. The implication is that in California even if the knowledge can be obtained by proper means, so long as the knowledge was obtained through improper means, California will recognize that as a violation of trade secrets law.

Uniform Trade Secrets Act of 1979 § 1(4), 14 ULA 542 (1979). Was adopted in California in 1985. The Restatement (third) of Unfair Competition ss 39-35 (1985) is seen for the most part as adopting similar definition to that of the UTSA. However, in contrast to the UTSA, the restatement doesn’t even list the potential types of information that could become trade secrets.
Given the differences between the types of information protected by those two laws, one might not be surprised to learn that the law expanded in 1985 to protect negative information, information which is not in use, as well as process and methods.

Scholars characterize the expansion as being sensitive to the required flexibility in modern industrialized life: “these expansions incorporate and recognize the need for expanded flexibility.” My criticism of the new law centers on the fact that, while it might be a good law for judges’ discretion, defining all forms of confidential know-how as trade secrets may prevent cases that should have reached court from actually getting there. The loss to formal controls from the broad definition of trade secrets can be attributed, in my opinion, to the arguments that follow:

1. Requiring the Impossible and Illegitimacy Spillovers

The first argument against the expansion of trade secrets relates to the behavioral effect that results when employees are asked to behave in a manner that proves difficult for them, and the overall legitimacy of trade secrecy is threatened. The jurisprudential idea that underlies this behavioral effect can be found in the writings of Fuller, in which he refers to “requiring the impossible.”

Critique of the expansion of the actual law is suggested by Kitch (Edmund W. 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)) who, at 665, talks about a “new class” of employees who now enter the scope of the protection of trade secrets.

Stone, Supra note 23 at 593: “By focusing on economic value rather than specific concrete technical innovations, the UTSA approach makes the definition of trade secret almost infinitely expandable.” (emphasis added);

Stone, Supra note 23, says on page 578, “Courts have become increasingly receptive to employer efforts to limit employee use of human capital by adopting expansive theories of trade secrets and employees' duty of loyalty…”

For a description of the rationale behind the even greater expansion in the definition of trade secrets in the third restatement of tort, see Benjamin A. Emmert, Keeping Confidence With Former Employees: California Courts Apply The Inevitable Disclosure Doctrine To California Trade Secret Law, 40 SANTA CLARA L. REV. 1171 1177-1178 (2000).

“In 1995, the ALI realized that business practices had changed significantly since the publication of the Restatement (First) of Torts. Trade-secret law had evolved from a simple articulation of a standard of commercial morality into an important tool for encouraging investment in research and development. Modern research and development practices required disseminating confidential information to a broader group of employees, agents, and licensees who could assist in exploiting the information. The ALI concluded that to adequately protect these new practices, trade secret protection should be extended to any action that would violate the equitable theory of unjust enrichment. The ALI developed the Restatement (Third) of Unfair Competition to meet this objective. In adopting the UTSA's definition of a trade secret as well as a more expansive foundation, the Restatement (Third) of Unfair Competition provides the most inclusive trade secret protection to date.” (Emphasis added).


Compare with Karryn Gustavsen PhD Dissertation on Welfare recipients (cash benefits), who are pushed by the law to choose either starvation or harsh punishment. (Unpublished Manuscript)

THE MORALITY OF LAW at page 70.
This argument meshes well with Fuller’s general interest in the way in which enforceability might marginalize discussions of the core issues. The famous distinction that Fuller makes is between external and internal morality. For example, when Fuller argues that the law should not forbid homosexual relationships between consenting adults, he claims that there is no need to examine whether or not homosexual relationships are substantially moral. According to Fuller, the existence of such a law in effect led innocent people to violate the law, hence making them subject to blackmail, etc. Fuller’s insight underlies the argument that I wish to develop with regard to trade-secret laws. On the substantive level it may be difficult to determine the optimal amount of information that should be transferred between companies or how exactly we should measure the efficiency of disclosing trade secrets. Focusing on the internal morality of the law as Fuller defines it might suggest, however, that we do not need to decide whether the activity in question is desirable - we need only recognize that it is unavoidable. Similarly, both sociologists of law and legal psychologists recognize that a gap between formal law and community norms will eventually undermine the legitimacy of the law. The argument that I would like to submit is that if the law defines behaviors that are part of the common practice as illegal, it might lose some of its overall legitimacy in psychological terms or, to use economic terminology, its credibility. Moreover as Darely, Carlsmith and Robinson argue: “When ordinary people intuit what the code holds from their opinion of what it should hold, they often get the code wrong and the ex ante function of the law suffers accordingly.”

Loss of legitimacy could spill into areas of law that are currently in congruence with the norm. Consequently, an employee could say “If you forbid both excessive and typical disclosure, I would not listen to what law has to say about excessive disclosure.”

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160 Id at p. 132.
161 Admittedly, this is the weakest point in this part of the dissertation; see my suggestion for future research in the concluding section.
163 This idea is more thoroughly researched in the context of the normatively accepted punishment of the crime. For a discussion of the importance of an “accepted” ratio between the crime and the punishment see Lee V Hamilton & Steve Rytina, Social Consensus on Norms of Justice: Should the Punishment Fit the Crime? 85 AMERICAN JOURNAL OF SOCIOLOGY, 1117 (1980); see also Steven Shavell & Michell A. Polinsky, The Fairness of Sanctions: Some Implications for Optimal Enforcement Policy, 2 AM. L. & ECON. REV. 223 (2000). Moreover, it should be noted that the negative effects of over-enforcement are not related only to legitimacy - it could also sometimes lead to a change in incentives that will, in turn, lead to an undesired outcome for a regulation. See, for example, Viscusi’s discussion of the idea that severe penalties (as opposed to moderate penalties) will be counterproductive Kip W. Viscusi, The Impact of Occupational Safety and Health Regulation 10 THE BELL J. ECON. 117 (1979).
165 See, for example, the critical discussion by H.L.A Hart in PUNISHMENT And RESPONSIBILITY (1968) at pp.19-22 on the alleged relationship between legitimacy loss and allowing excuses in criminal law for the sake of preserving the legitimacy of the law.
disclosure.”

Recent empirical findings back the notion of illegitimacy spillover in Nadler’s work. She demonstrates, using experimental techniques that people who were exposed to unjust laws were more likely to report a decrease in their general intention to obey laws unrelated to the law they were told about.

2. **Greater Reputation Loss from Filing a Trade-secrecy Suit**

According to Hyde, the main reason for the under-enforcement of trade secrets in the Valley is related to the potential reputation loss that is faced by employers. In the current situation, in which the same law prohibits both the typical sharing and the excessive sharing, employers might avoid filing suits against departing employees even for excessive violation which, according to our earlier definition, exceeds the desirable practice. The reason for this is that future employees are unlikely to be able to discern the difference between enforcement of typical disclosure and enforcement of excessive disclosure as long as both types of lawsuits are defined as a violation of the same law. Therefore, those employers who will sue for a violation of excessive disclosure might face a reputation loss that is on par with those employers who sue for a violation of a typical disclosure.

3. **Free-riding Problem– Under-Supply of Positive Externalities in the Market**

The previous argument attributes the increase in reputation loss, in part, to the fact that the law includes behaviors that are violated by many in the Valley. This then aggravates another problem – free riding. While it was suggested that even litigation costs led to a free rider problem due to the externalities of precedents, the additional issue of reputation costs might aggravate the problem even further. Why should one employer pay not only legal fees, but also the costs associated with reputation-loss to help clarify the meaning of the law and signal to employees in other firms that there are legal ramifications for the disclosure of trade secrets? One

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166 A similar idea, the ‘generalization of disrespect,’ is hypothesized by Darley and Robinson (Paul H. Robinson & John M. Darley, *The Utility of Desert*, 91 NW. U.L. REV. 453, 482 (1997)). They suggest that individuals who support drinking will lose faith in the legal system in general if they see criminal action being brought against people who drink.

167 Janice Nadler *The Effects of Perceived Injustice on Deference to the Law* University of Illinois at Urbana-Champaign, 2000. (Copy with the author.)

168 See also Dale T. Miller *Disrespect and the Experience of Injustice*, 52 ANNUAL REVIEW OF PSYCHOLOGY 527 (2001).

169 *Supra* note 38.

170 Robert D. Cooter, *A Normative Failure Theory of the Law*, 85(5) CORNELL L. REV. 747 (1997). See also See Robert H. Frank, *SOCIAL NORMS AS POSITIONAL ARMS CONTROL AGREEMENT, ECONOMICS, VALUES AND ORGANIZATIONS*, *Supra* note 1, pp 275-295, who concludes on page 284: “As a descriptive matter, it is clear that most people have at least a limited willingness to incur costs both to enforce and to adhere to social norms.” However he also recognizes that internal motivations don’t work alone and that, in fact (P 285): “In practice, then, internal motivations and exchange relationships will often act in mutually reinforcing way.”

171 Which are extremely high in the context of trade secrets, see Bone, *supra* note 70 at 278

172 It should be noted that even scholars within the economic tradition recognize that self-interest cannot explain the enforcement of social norms. At the same time, however, they recognize that self-interest still has an important role in maintaining social norms, and hence the free-rider effect can not be ignored. See Jane Mansbridge, *Starting with Nothing*, ECONOMIC, VALUES AND
outcome of this problem can be discerned when we review the few trade-secret litigation cases that have reached courts in Silicon Valley. As mentioned earlier those cases dealt, for the most part, with very senior employees, corporate raiding, or cases in which the violation of the trade-secrets regulation was extremely clear. The cases usually dealt with clear misappropriation of documentation - usage of the very core technology of the company for the building of very similar products. Therefore, when an employee tries to precisely discern between efficient and inefficient disclosure he is unlikely to get answers from the courts because those borderline cases rarely reach the courts. Thus, the cases with the highest informational externalities never reach the courts, and the cases that do reach the courts would have been clear to the general population of Silicon Valley without the courts’ help.

4. Pulling Potential Cooperators and Defectors Together into the Same Group of Law-Violators Weakens the Social Sanctions that Accompany Legal Sanctions

The final argument, which I want to extend to a broader definition of trade secrets, is that the current scenario limits the ability of legal sanctions to trigger social sanctions. When the definition of trade secrets includes both common and uncommon activities, nearly all members of society are part of the law-violators’ group. In this situation, it is obviously less likely that people who violate the law in a typical level would sanction those who violate the law in a level of the excessive level. In other words, creating a broader definition of trade-secrets law will reduce the number of people who can cite the law itself as a source of legitimacy when sanctioning legal transgressors.

5. Downward Spiral of Formal Enforcement: Procedural Justice Perspective

The high costs of trade-secrets litigation may have a pronounced negative effect on the procedural justice of formal enforcement. In an influential case, an IBM employee argued that the whole lawsuit against him was unfair because he was the first to be prosecuted relative to the issue; the court rebuffed him, stating that this was due to the high expense associated with suing departing employees, and that his argument should not hold. I would argue that, while this argument might not serve as complete justification from a jurisprudential perspective, it does show that the few extant trade-secret cases will likely spiral down to even fewer cases, since the cost of suing will only increase. The procedural-justice aspect of neutrality and equal usage

ORGANIZATIONS, supra note 1, pp. 151-168, who discusses the fact that it is impossible to base social-norms enforcement only on self-interest and that considerations of justice are necessary to understand the maintenance of norms.

173 On an anecdotal level, Lue Gibbons of Toledo Law School mentioned to me that while working at IBM the joke was that even the toilet paper was stamped “confidential.” Obviously I cannot attribute any level of incompliance to trade-secrets law to those jokes, but it represents a common feeling among many employees that there was an unrealistic expectation placed on them with regard to confidentiality.


175 The dynamic notion of minority opinion becoming more and more expensive is suggested by Robert D. Cooter, Three effects of social norms on law: expression, deterrence, and
of the law is being harmed by the perception of unexpected litigation.\footnote{For a suggestion that expectations have a significant effect on perceptions of procedural justice, see Keath Van Den Bos, R. Vermunt, H.A.M Wilke, \textit{The Consistency Rule And The Voice Effect: The Influence Of Expectations On Procedural Fairness Judgments And Performance}, 26 EUROPEAN J. OF SOC. PSYCH. 411(1996).} Thus, for example, if employees think that employers are filing very few lawsuits, they will be more reluctant to accept the legitimacy of a lawsuit.\footnote{Since in the current trade secrets litigation, both violations are being treated as one.} This might in turn cause employers, fearing the reaction of some of their employees, to be even less likely to file lawsuits against their employees, which might make it still harder for other employers to file lawsuits on the same grounds. As I will argue in the fifth part, in which I discuss pluralistic ignorance, since lawsuits are the main public expression of displeasure with disclosure of trade secrets by employees, the decline in the perceived number of lawsuits in the Valley\footnote{Reported by Hyde, \textit{supra} note 38} might lead to a biased estimation of the norm.\footnote{In this context it is interesting to examine the proposal of Harel and Segal about ways in which people’s uncertainties about the likelihood of arrest could be used to the advantage of the legal system – assuming we are speaking of criminal activities with no social value at all (which is not the case in the context of trade secrets).}

\textbf{Tentative Conclusion}

In this section I have built the argument that, currently, the laws of trade secrets have a limited effect on the monitoring of confidential know-how sharing. I have argued that while information sharing between firms is, overall, a phenomenon that should be encouraged, there is a consensus among scholars that not all types of information should be transferred between firms by departing employees. I have argued that the fuzzy and broad definitions of trade-secret laws contribute to their normative limitations. In the following pages I will present, in short, empirical findings that support the theoretical arguments made in the previous section. All relevant methodological procedures and limitations are discussed in the methodology section of the dissertation.

\textbf{Methodological Synopsis}

\textbf{The Sample}

The design of the questionnaires used in the study was based on interviews that I conducted with approximately 30 engineers in Silicon Valley over a period of two years (2001-2002). The sample that I used comprised 260 high-tech employees in the greater Silicon Valley area (including San Francisco), who completed questionnaires during the years 2002-2003. The individuals who filled out the questionnaire were not randomly assembled. I used two main data collection methods: 190 participants filled out a paper and pencil questionnaire and 70 participants filled out a web-based survey.\footnote{There is no significant difference between the two ways of data collection, see Methodological Appendix for further details.}
Of a total of 260 participants, approximately 110 were students or colleagues of students\footnote{Many students in the evening MBA program took more than one questionnaire and had their friends fill out the questions.} in the evening MBA program at the Haas School of Business, University of California, Berkeley. Twenty-five participants were MA students in UC Berkeley’s School of Information Management and Systems. For both schools I approached students with work experience in Silicon Valley (response rate 65%). Another 85 participants were from ten small to medium-size firms and three very large firms (response rate was 45% for the paper and pencil version and approximately 10% for the web-based version). Another 40 participants came from two associations of software developers in Silicon Valley (response rate 7%)\footnote{I was unable to obtain any response from almost any of the companies in which I had no contact person (approximately 30 companies and organizations). The few companies that did respond (4 companies/trade organizations) refused to allow me to distribute the questionnaires after hearing the topic of my survey.}.

The people who filled the questionnaire were not randomly assembled - they were working in the same firms as the contact people\footnote{The limitation relating to the fact that I did not solicit the name of the individual firm should be addressed in future research by using a coding mechanism that would satisfy the Human Subjects Committee requirement}. The group of contact people was composed in a snow-ball technique\footnote{Naturally, the fact that the sample is not random does not pose a big problem for the experimental procedure in which I randomly assign participants to different group.}.

The high response rate in the paper-and-pencil version of the study was surprising given both the sensitivity of the questions and the time constraints of many of the participants\footnote{About one-third were working and studying at the same time.}. However, this rate might prove to be ultimately misleading. The paper-and-pencil version was distributed to individual firms to which I obtained access. In almost all cases, without knowing a contact person in the firm, it was almost impossible to receive permission from the managers of the company to distribute questionnaires\footnote{The original contact people were mainly alumni of UC Berkeley.}. Consequently, it might be theoretically necessary to take those refusals into account and decrease the response rate. Nevertheless, the response rate that I have chosen to report is based on the number of responses per number of questionnaires sent. A second limitation relates to the contact people who agreed to distribute questionnaires in the individual firms. These contact people were not randomly selected, and for the most part were either friends of friends or individuals whose spouses studied at Berkeley. Although in most cases the contact people did not themselves respond to the questionnaire, those whom they felt comfortable asking to participate might conceivably share some common perception of the norm of which I am unaware.

For reasons of confidentiality I was not allowed to associate the name of the participant’s affiliated company with the individual questionnaire\footnote{Response rate in this case was an approximation based on the number of active people who were on the lists according to the list owner.}. However, since I was not collecting all the data simultaneously, but rather started with Berkeley students and alumni and only then moved to other populations, it is possible to state with confidence that there was no difference between the Berkeley students/alumni and the other participants in the study. This fact cannot remedy, in and of itself, the...
limitation related to over-representation of Berkeley alumni and students in the sample. Nonetheless, it should be noted that since there were, for the most part, only 5-10 people in each firm it is highly unlikely that any difference between the firms based on some in-firm culture would have been significant.

Method of Data Collection

Paper and Pencil

Each participant received a copy of the questionnaire, an informed consent sheet, a bag of M&Ms\(^{188}\) and a stamped self-addressed envelope. The different versions of the questionnaire were distributed in a complete random way\(^{189}\). Overall, results from 190 participants were collected according to this method.

Web-Based

In an attempt to increase the number of data collection sources I also created a web-based version of the questionnaire. I used surveymonkey.com to build the interactive questionnaire. To ensure the random distribution of the different versions, I used an algorithm which assigned a random number to each participant; the algorithm then used this number to send each participant who pressed the ‘continue’ command within the email solicitation a different version of the questionnaire. While the overall response rate was less than 10%, it should be noted that most of those who did not respond to the questionnaire neglected to read the questionnaire first\(^{190}\). Almost all who clicked on the link completed the survey, but approximately 80% did not even click on the link. Due to the relatively low response rate, I chose to abandon this mode of data collection after gathering responses from about 70 participants. My rationale for continuing to include these participants in the study is that there was no difference between the web-based and the paper-and-pencil versions of the questionnaire with regard to any of the measured factors.

The Manipulated Factors Legality, Authorship and Tangibility

Two factors were manipulated in this study - the saliency of legality and the nature of the confidential information which was shared by the employee in the scenario. This manipulation was conducted by randomly assigning to the participants of the study, six different versions of a scenario that describes the behavior of a departing employee as she enters a new firm that requires her to use confidential information from her previous employer.

Thus, half of the participants were randomly assigned a scenario, followed by a statement pointing to the illegality of the described employee’s behavior. For the other

\(^{188}\) Which the participant kept even if he did not return the questionnaire.

\(^{189}\) See Keppel & Sheldon Zedeck, DATA ANALYSIS FOR RESEARCH DESIGN (1989) at pp. 379-380 for a discussion of precautions one needs to take prior to a random assignment.

\(^{190}\) I was able to count the number of people who clicked to read the survey using a simple web-counter, and compare that number with the number of individuals who actually completed the survey.
half of the participants this statement was omitted from the questionnaire, and no reference to legality was made until after the relevant questions had been asked. The second manipulated factor was the manipulation of the activity type in which the employee in the vignette had engaged. One-third of the participants were randomly assigned a scenario in which the employee had *learned* the confidential information from her previous employer, but did not take a hard copy of the information with her. Another third of the participants were assigned a scenario in which the employee had *developed* the confidential information while working for the previous employer, but did *not* take a hard copy of the information with her. The final third of the participants were assigned a scenario in which the employee had *learned* the confidential information from her previous employer, and took a hard copy of the information with her by *downloading* it to her personal computer.

To summarize, this is a 2X3 design in which one factor – legality – has two levels (legality salient / not salient), while the other factor – activity – has three levels (information was developed / learned / downloaded) thus, the subgroup of ‘learned’ serves as a control group for the two other subgroups. When comparing developed information with learned information, I am studying *authorship*, whereas when I am comparing learned information with downloaded information, I am studying tangibility. Thus, learned has two roles, when compared with developed, the focus is on the fact that in the control group the employee did not develop the information, when compared with downloaded, the focus is on the fact that in the control group the employee memorized the information.

The random manipulation allows me to talk about a causal model, wherein the saliency of the law is the independent variable. By controlling for other intervening variables, I am able to assess in part which factors are influenced by the type of sharing activity, and which factors are primarily responsible for this effect.

Following the presentation of the various scenarios, I measured employees’ responses with regard to the following factors:

**Perceived Practice of Information Sharing in Silicon Valley**

-In your estimation, what proportion of Silicon Valley employees share with their current employers confidential “know how” information that they were exposed to earlier in their career?

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191 At the end of the questionnaire participants were submitted to a manipulation check, most participants in the non-legal group, knew that the sharing is illegal (though the ratio was significantly different from that in the legal group). However, since the purpose of the manipulation was not to inform people, it was to prime legality and to make it salient, participants in the non-legal group who knew that sharing the information was illegal, were not considered to be participants who failed the manipulation checks. Furthermore, since at the end of the questionnaire all participants were asked questions about legality, it is highly possible that participants were informed about legality at the end of the questionnaire. Having said that, since I had no control over the order in which people read the questionnaire, the fact that so many of the non-legal group knew that the sharing was illegal, should be considered as a limitation to my findings, especially with regard to factors which were *not* affected by legality.

192 See the methodological appendix for a discussion of the limitations that still exist with regard to attributing causality to the saliency of legality.

193 2-3 items for each factor, measured on a likert scale of (1-10); Alfa scale and factor analysis were performed. Results are available on file with the author.
-How likely is a typical Silicon Valley employee to share with her current employer confidential “know how” information that she was exposed to earlier in her career?

-How frequently do you hear about people who share with their current employers confidential “know how” information that they were exposed to earlier in their career?

Scenario-Specific Questions:

**Descriptive norms**
-What proportion of Silicon Valley employees would have behaved like Amanda?
-What proportion of co-workers in your current company would have behaved like Amanda?

**Psychological Contract**
-Do you think that a typical Silicon Valley employer expects that her employees will use in the future some of the firm’s confidential know-how information?
-Do you think that part of a typical Silicon Valley employee’s expectation of her employer is the permission to use some of the firm’s confidential “know-how” information?

**Social approval / Injunctive norms**
-How likely is it that your fellow co-workers in your current company would approve of a situation in which you improve the production of the new system based on the confidential “know-how” information you … in your previous company?
-How likely is it that your current employer would approve of a situation in which you improve the production of the new system based on the confidential “know-how” information you … in previous companies?
-How likely is it that your previous employer would approve of a situation in which you improve the development of the new system based on the confidential information you (had a part in developing) while working in her company?

**Career Effect**
-In this scenario, if Amanda decided to use the methodology … would you expect such an incident to have a positive or a negative effect on her career?

-Do you think that willingness to disclose confidential know-how information of her previous employer will increase or decrease her chances to get hired?
-Do you think that refusal to disclose confidential know-how information of her previous employer will increase or decrease her chances to get hired?

**Morality**
To what extent do you agree with the following statement:
-I will not feel guilty if I use confidential “know-how” information that I had a part in developing in order to improve the development of my current employer’s new product.
Using confidential “know-how” information that I had a part in developing to improve the development of my current employer’s new product goes against my moral principles.

It would be morally wrong for me to use confidential “know-how” information I had a part in developing to improve the development of my current employer’s new product.

**Proxies for behavior:** I have used two proxies for behavior: the employee’s intention to share confidential information; willingness to pay for abstaining from sharing information.

**Intention to share**
- How likely are you to share the information in this scenario?
- How likely are you to behave as Amanda did if you were in her shoes?

**Willingness to pay**
- Assume you were looking for a job, and that many positions that you found were very likely to present the same dilemmas Amanda faced. How likely would you be to delay your employment for a month to avoid working in such companies?

- Assume you were looking for a job and that many positions you found were very likely to present similar dilemmas to those faced by Amanda. How likely would you be to give up an average salary increase of $5000 a year to avoid working in such a company?

**Legal Costs**
- In this scenario, how likely is Amanda’s previous employer to sue her for violating trade-secret laws?

- In your estimation, how many of the people who violate trade secrets in a similar way to Amanda will eventually be sued?

**General Questions about Trade Secrets in Silicon Valley:**

**Acceptability of Trade-Secrets Laws in General**
- If you had to guess, what percentage of the employees in Silicon Valley violated trade-secret legal restrictions during their careers?

- How likely is a typical Silicon Valley employee to violate trade-secret laws when joining a new company?

- How frequently do you hear about people who have violated trade secrets when joining a new company?

**Fairness of the Law in General**
- Overall, how fair are the laws of trade secrets from the perspective of employees?
-Overall, how fair is it for an employer to sue his previous employee for violation of trade secret laws?

-Do you think that trade-secret laws are legitimate from a social perspective?

**Certainty about the Law**

-How certain are you about the types of information that you are legally allowed to take with you to your next job?

-Do you find the legal definition of trade secrets to be clear?

In addition I have measured factors such as age, gender, employment history in Silicon Valley, and job type.

**E. Limits of Formal Controls: Findings**

Participants’ responses with regard to the main factors measured are presented in Table 1.\(^{194}\)

<table>
<thead>
<tr>
<th></th>
<th>WTP (reversed)</th>
<th>psychological contract</th>
<th>Acceptability of the law</th>
<th>Fairness of the law (general)</th>
<th>Intention to share TS</th>
<th>toCareer effect</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N</strong></td>
<td>242</td>
<td>239</td>
<td>226</td>
<td>223</td>
<td>247</td>
<td>237</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td>6.5041</td>
<td>5.3849</td>
<td>4.9322</td>
<td>4.7758</td>
<td>5.3158</td>
<td>6.0506</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td>7.0000</td>
<td>5.5000</td>
<td>4.6667</td>
<td>5.0000</td>
<td>5.0000</td>
<td>6.0000</td>
</tr>
<tr>
<td><strong>(SD)</strong></td>
<td>(2.8167)</td>
<td>(2.5405)</td>
<td>(1.8630)</td>
<td>(2.2538)</td>
<td>(3.0533)</td>
<td>(2.1426)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Descriptive norms (general)</th>
<th>Fairness of the law (scenario specific)</th>
<th>norm Legal approval</th>
<th>approval (new norm general)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N</strong></td>
<td>239</td>
<td>120</td>
<td>241</td>
<td>120</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td>4.4003</td>
<td>4.1889</td>
<td>6.3071</td>
<td>3.6000</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td>4.6667</td>
<td>(2.6656)</td>
<td>(2.1631)</td>
<td>(2.7077)</td>
</tr>
<tr>
<td><strong>(SD)</strong></td>
<td>(1.5279)</td>
<td>(2.7320)</td>
<td>(2.1631)</td>
<td>(2.6969)</td>
</tr>
</tbody>
</table>

As can be clearly seen from Table 1, the typical employee would be more likely than not to share confidential information and to have similar view with regard to prevalence and desirability of the consensus.\(^{195}\)

\(^{194}\) In the methodological synopsis I discuss how the sample was designed, how the factors were operationalized, and how the data was collected about these factors. The six cells of the study did not differ on any demographic factor with one exception; consequently a MANCOVA was conducted to rule out a possibility of alternate explanations. All experimental designs were conducted with and without demographic factors.

\(^{195}\) The factors chosen theoretically, only two factors had eigenvalue which was greater than one, however, Items loading were greater than .50 without substantial cross-loading (< .50) for almost all factors, only problematic factor was acceptability of the law that (not surprisingly) had substantial cross-loading with descriptive norms and psychological contracts. Factors were chosen on theoretical grounds, not on grounds of eigenvalue greater than one standard.
1. Flaws in the Current Perception of Formal Deterrence

I will now present briefly some of the findings that best demonstrate my above-mentioned arguments regarding the lack of efficacy of the formal controls mechanism. Perhaps the most vivid representation of the problem of trade secrets in Silicon Valley can be found in the fact that, while 83% of the study participants knew that the behavior of the employee in the scenario was illegal, 50% of the participants would be more likely than not to share confidential know-how information when confronting the situation of the employee in the described scenario. Moreover, among the participants in the study who were told explicitly that the behavior of the employee is illegal, 44% said that they would share the confidential information with their current employer despite their knowledge that the behavior in question is illegal. Thus, we obviously see here a situation in which there is a far-from-marginal proportion of employees who would share information with full knowledge of the illegality of their actions.

In a first stage of analysis I will demonstrate the near-total lack of relevancy of legal costs to the behavior and attitudes of employees. This irrelevancy will be demonstrated on two levels: 1) their effect on behavior is minimal especially with comparison to the effect of other social factors; and 2) the legal control mechanism it is not responsive to the severity of the act, hence limiting the ability of the law to effectively interact with those social control elements which do consider violation-types to be crucial to the normative evaluation of the wrong-doing. In the second and third stages I will show that part of this problematic aspect of the law is related to its ambiguity and the fact that it is simply too broad for the high-tech culture of Silicon Valley.

2. Formal Deterrence was Perceived to be Minimal

One of the main problems from a deterrence perspective in the enforcement of trade secrets in the Valley is that people don’t think that they are likely to be sued. Less than 30% of the participants in the study considered a lawsuit for a trade-secrets violation to be more possible than not. Moreover, on average, participants thought that only 30 percent of those who violate trade secrets are likely to be sued. While underestimation of formal sanctions is reported also in other contexts, the following findings about information sharing are even more devastating.

196 While in this part I demonstrate the limits of deterrence, in Feldman, Expressive law, which focuses on the expressive function of the law, I show that legality still seems have some effect on the behavior of the individual and other employees. Nonetheless, the fact that legality does have some effect on employees’ views can not undermine the main premise of this paper is that legality does not work well.

197 The fact that formal deterrence has minimal effect on people emerges in many studies that attempt to discern whether deterrence works or not. See, for example, Charles R. Tittle, Sanction Fear and the Maintenance of Social Order, 55 SOCIAL FORCES 579-596(1977), though he admits that it could be that the sanction-fear explanatory power is being mediated by other factors and so maintains an unknown indirect effect. Robert MacCoun reports similar findings in the context of the effect of likely punishment on drug users (Robert J. MacCoun, Drugs and the Law: A Psychological Analysis of Drug Prohibition, 113 PSYCHOL. BULL. 497, 500-501 (1993)). Even more paradoxically is the finding that perceived-severity of law was correlated with a higher intention to drive under the influence, which might be explained by a confounding background variable. (See John Gatsil, Thinking, Drinking, and Driving: Application of the Theory of Reasoned Action to DUI Prevention, 30 J. OF APPLIED SOC. PSYCH. 2217 (2000)).
3. Perceived Legal Costs were not Effective

In a hierarchical regression, legal costs added practically nothing to the other two factors associated with cost, career effect and social approval.

Table 2: Beta Coefficients and t(Df) Values Of Social And Formal Costs, Toward Intention.

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Beta</th>
<th>t(106)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>download dummy coded</td>
<td>-.296</td>
<td>-2.954</td>
<td>.004</td>
</tr>
<tr>
<td>developed dummy coded</td>
<td>.009</td>
<td>.093</td>
<td>.926</td>
</tr>
<tr>
<td>Step II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>download dummy coded</td>
<td>-.108</td>
<td>-1.270</td>
<td>.207</td>
</tr>
<tr>
<td>developed dummy coded</td>
<td>-.008</td>
<td>-.099</td>
<td>.922</td>
</tr>
<tr>
<td>Approval of others</td>
<td>.502</td>
<td>5.763</td>
<td>.000</td>
</tr>
<tr>
<td>career effect</td>
<td>.159</td>
<td>1.810</td>
<td>.073</td>
</tr>
<tr>
<td>Step III</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>download dummy coded</td>
<td>-.109</td>
<td>-1.280</td>
<td>.203</td>
</tr>
<tr>
<td>developed dummy coded</td>
<td>.003</td>
<td>.034</td>
<td>.973</td>
</tr>
<tr>
<td>Approval of others</td>
<td>.491</td>
<td>5.600</td>
<td>.000</td>
</tr>
<tr>
<td>career effect</td>
<td>.146</td>
<td>1.648</td>
<td>.102</td>
</tr>
<tr>
<td>legal cost</td>
<td>-.083</td>
<td>-1.080</td>
<td>.283</td>
</tr>
</tbody>
</table>

R^2 change associated with the addition of legal costs was .06, F (1,106)=1.165, NS. These findings in themselves were not surprising given a growing number of studies that challenge the simple explicit deterrence model. Nonetheless, when combined with the following findings, it presents a gloomy picture of the status of trade-secret laws in Silicon Valley.

4. Perceived Legal Costs were not Responsive to the Severity of the Act

As explained in the Appendix, the participants in my study were presented with different types of information-disclosure scenarios. These different scenarios, predictably, elicited different responses. While, for example, participants considered downloading information to be different from using information that had been committed to memory, with regard to social factors such as morality, fairness and approval by others, there was no such difference with regard to legal costs.

To test this question I conducted a one-way ANOVA in which activity type was the independent variable and legal cost was the dependent variable. While, as I show in the third part of the dissertation, the distinction between memorized and downloaded and, to a lesser extent, between learned and developed are very important for the normative judgments of employees, they don’t seem to have any influence on

198 See for example, Robert Kagan and Dorothy Thornton, The Role of Legal Penalties in Regulation: Some Empirical Evidence” Center for the Study of Law and Society Working Papers. In this paper, the authors demonstrate that explicit deterrence (risk perception) was not related to a change in the behavior of factors with regard to environmental compliance. A more rigorous study that challenges the general deterrence model in the context of the nursing industry is John Braithwaite & Toni Makkai Testing an expected utility model of Corporate Deterrence, 25 LAW AND SOCIETY REVIEW 7 (1991).

199 One third of the participants were told about a scenario in which the confidential information disclosed was partly developed by the departing employee, a second third were told that the information was downloaded by the employee, and the final third were told that the information was memorized by the employees (see methodology part A for a full description).
the perceived likelihood of legal costs. The formal and social controls clearly display differences in sensitivity to the act’s severity – this means that the two sets of controls will not contribute to one another. Because social controls were found to be stronger than formal controls, the lack of mutual contributions will thus harm the effectiveness of formal controls to a greater extent.

Table 3: Effect of ‘Severity’ of Activity on Employees’ Attitudes toward Trade-Secrets Sharing (ANOVA)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>F(2,102)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention to share</td>
<td>5.114</td>
<td>.008</td>
</tr>
<tr>
<td>Perceived Fairness of the law</td>
<td>8.635</td>
<td>.000</td>
</tr>
<tr>
<td>Perceived Descriptive norm</td>
<td>3.792</td>
<td>.026</td>
</tr>
<tr>
<td><strong>Perceived Legal cost</strong></td>
<td><strong>1.171</strong></td>
<td><strong>.314</strong></td>
</tr>
<tr>
<td>Perceived Approval of others</td>
<td>4.964</td>
<td>.009</td>
</tr>
<tr>
<td>Perceived Psychological contract</td>
<td>7.275</td>
<td>.001</td>
</tr>
<tr>
<td>Perceived Moral norm</td>
<td>4.523</td>
<td>.013</td>
</tr>
<tr>
<td>Perceived Career effect</td>
<td>6.865</td>
<td>.002</td>
</tr>
</tbody>
</table>

As is evident from Table 3, the only factor which is not responsive to the effect of activity is “perceived legal costs.”

F. Failures of formal controls: the ambiguous definition of trade secrets

1. Perceived Certainty about the Law was Positively Related to Respect for Trade Secrets

Another failure that I have discussed in the context of the formal enforcement of trade secrets is that many employees do not know which information falls into the legal definition of trade secrets, and this ambiguity reduces the likelihood of efficient formal enforcement as well as of effective interaction between formal and informal social controls.

To test for the relationship between certainty about the law’s meaning and normative evaluations of confidential know-how sharing, I have conducted a zero-order correlation analysis between certainty about the law and employees’ attitudes toward the sharing of trade secrets. As can be seen from Table 4 employees who were more certain about the meaning of trade secrets were less likely to share confidential know-how information with their new employer.

Table 4: Correlations between Employees’ Certainty about the Meaning of the Legal Definition of “Trade Secrets” and their Social Judgments of Know-How Sharing

<table>
<thead>
<tr>
<th></th>
<th>Approval of Moral norm of others</th>
<th>Psychological contract norm</th>
<th>Descriptive norm of violating the law</th>
<th>Perceived Fairness of the career effect</th>
<th>Intention to share</th>
</tr>
</thead>
<tbody>
<tr>
<td>r</td>
<td>.244***</td>
<td>.203**</td>
<td>.162*</td>
<td>.378**</td>
<td>.215**</td>
</tr>
<tr>
<td>N</td>
<td>227</td>
<td>228</td>
<td>227</td>
<td>225</td>
<td>228</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

200 Certainty was measured by participants’ perceived clarity of the law and their perceived certainty as to what “trade secrets” means.
2. Greater Perceived Uncertainty Led to Greater Reliance on Social Norms

Uncertainty about the law’s meaning led not only to less respect for trade-secrets protection, it has also led to a greater reliance on social norms. I have found that, while there was no interaction between certainty and legality when the dependent variable was intention and WTP, certainty about the law moderated the relationship between descriptive norms and individual judgments of morality, and fairness of trade-secret laws.

Table 5: Interaction of Descriptive Norms and Certainty about the Law With Regard To Moral Norm.

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Beta</th>
<th>t(102)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptive norm (centered)</td>
<td>.618</td>
<td>7.079</td>
<td>.000</td>
</tr>
<tr>
<td>Certainty (centered)</td>
<td>-.018</td>
<td>-.209</td>
<td>.835</td>
</tr>
<tr>
<td>Interaction factor descriptive X certainty</td>
<td>.161</td>
<td>1.958</td>
<td>.053</td>
</tr>
</tbody>
</table>

Table 6: Interaction of Descriptive Norms and Certainty about the Law With Regard to Fairness of Trade-Secret Laws.

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Beta</th>
<th>t(100)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptive norm (centered)</td>
<td>.280</td>
<td>3.020</td>
<td>.003</td>
</tr>
<tr>
<td>Certainty (centered)</td>
<td>.298</td>
<td>3.297</td>
<td>.001</td>
</tr>
<tr>
<td>Interaction factor descriptive X certainty</td>
<td>-.200</td>
<td>-2.287</td>
<td>.024</td>
</tr>
</tbody>
</table>

Furthermore, as demonstrated elsewhere, only for employees who were not told about the legality of their action was there a significant relationship between the norm and their WTP. For those who were told that their action was illegal, there was no relationship between perceived norms and WTP. This goes well with our previous finding, since both findings suggested that, lacking clear knowledge about the law, people will allow norms to take on the role of the law, guiding their behavior. This is the precise argument that was made in the third section: lacking clear guidance from the law people will proceed to look for behavioral cues from those around them.

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201 This is only one theoretical explanation. When analysis product-term interaction of two measured continuous variables, I cannot tell whether certainty moderated norms, or norms moderated certainty, from a statistical perspective, both stories are possible, I argue for the theoretical supremacy of my interpretation of this interaction.

202 Moreover, as predicted by the relationship between injunctive/descriptive normative/informative distinctions, the impact of injunctive norms was not moderated by uncertainty about the law.

203 This analysis was conducted only for those participants who were in the non-legal group, since they were the participants for whom knowledge about the law was expected to influence the amount of information needed from the social environment. Those participants, who were in the legal group, were informed that the described behavior was illegal and hence, were less likely to look for cues from their social surroundings even if they were less clear about the meaning of the law. Furthermore, when adding the dummy codes for ‘downloaded’ and ‘developed’ the interaction factor became insignificant. Since the dummy codes themselves were not significant, however, and were not shown to contribute to the individual uncertainty about the law, they were removed from the equation.


206 Since, saliency of legality was manipulated I can talk about moderation with more confidence, although there was only a marginal linear interaction between legality and norms. (P=.08)
If the law had been sufficiently clear from the outset, however, they would have had no need to resort to norms.207

It would be germane at this point to combine these findings with those reported on page 60 regarding the structural failures of norms, and findings reported on page 75 regarding the misperception of norms and the probable exaggeration of the amount of know-how sharing in Silicon Valley. When considered in tandem, the findings may suggest a potential path for those with a limited understanding of the legal definition of trade secrets wherein the puzzled individual is led to rely more on exaggerated and misperceived norms, and will tend to share even more confidential information.

3. Actual Knowledge of Employees about the Meaning of Trade Secrets

Perceived-certainty about trade-secret laws seems to be related, then, not to the actual clarity of the laws but to employees’ lack of interest in studying them or to some cognitive dissonance that followed their past behavior with regard to trade-secrets sharing. In lieu of this, I have decided to examine employees’ actual knowledge about the law. As can be seen from Table 7 there is great uncertainty among engineers about the most basic definitions of trade secrets. With regard to the last two questions the majority of participants were either wrong or uncertain about the legal status of behaviors that, one has to assume, many of them engage in their professional life.

<table>
<thead>
<tr>
<th>Question</th>
<th>Legal</th>
<th>Illegal</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is it legal for a departing employee to share confidential know-how information she had downloaded?</td>
<td>30.6%</td>
<td>66.1%</td>
<td>3.2%</td>
</tr>
<tr>
<td></td>
<td>(correct answer)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is it legal for an employee to program in Java if he learned to do it from a competitor?</td>
<td>65.1%</td>
<td>34.9%</td>
<td>-----</td>
</tr>
<tr>
<td></td>
<td>(correct answer)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is it legal for a departing employee to share confidential know-how information that she memorized?</td>
<td>26.2%</td>
<td>44.3%</td>
<td>29.5%</td>
</tr>
<tr>
<td></td>
<td>(correct answer)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is it legal for a departing employee to share confidential know-how information with a company that doesn’t compete with her previous employer?</td>
<td>31.1%</td>
<td>34.4%</td>
<td>34.4%</td>
</tr>
<tr>
<td></td>
<td>(correct answer)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These results suggest a dire situation, in which only a minority of the participants was aware that taking confidential information that had been committed to memory, or sharing confidential know-how information with a company that is in direct competition with their previous employer is prohibited. Moreover, while a consideration of the tangibility of the information (downloaded vs. memorized) did dramatically reduce the number of people who were uncertain about the correct answer, for both questions around 30% of the participants thought that it is legal to take confidential information, whether in one’s hand or on one’s personal computer.

207 See Feldman, Expressive law, when I suggest four potential explanations for the “crowding out of norms”

208 Percentage is based on valid cases only.
An anomaly from the other side of the equation relates to the fact that 35% of the participants thought that it is illegal to program in java, had this skill been learned while working for a previous employer.

Nonetheless, when a new variable was created, this variable, in refutation of my prediction, didn’t seem to be related to any of the factors measured. Thus, I was unable to show that objective knowledge about the law had an effect similar to that of subjective knowledge about the law. The lack of relationship between actual and perceived knowledge might suggest some instrumental rationale that underlies people’s uncertainty about the law. For example, it may be the case that uncertainty is a consequence and not an antecedent of attitudes toward trade-secrets sharing. Hence, participants who have shared trade secrets in the past might have used legal uncertainty as an excuse for their behavior.

G. The Unwieldy Scope of Trade Secrets Definitions

1. Illegitimacy Spillovers That Result From the Broad Nature of Trade-Secret Laws

The previous findings were related to the fuzzy nature of trade-secret laws. The next procedure relates to the other major problem in trade-secrets law - namely, the fact that its definitions are too broad. I have argued that the broader the protection that trade-secret laws give to the secret owner (the employer), the greater the undermining of the overall legitimacy and perceived fairness of trade-secret laws.

The following graph demonstrates this argument.

Figure 2: Comparison of Perceived-Fairness of Trade-Secrets Law in General (1=Fair; 10=Unfair) Among The 6 Groups of The Study. 

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209 The participants who answered all answers correctly received a score of 4, and those who didn’t answer any questions correctly received a score of 0.

210 E.g. cognitive dissonance.

211 Toward the end of the questionnaires employees were asked about their general views regarding how fair the laws of trade secrets are to employees.
When the participants in the non-legal group were asked at the end of the questionnaire about their views regarding the general fairness of trade-secret laws, the scenario type that participants were exposed to (learned, developed, and downloaded) had no bearing on their answers. However, as can be seen from the comparison of legal group participants, being exposed to the three different examples behavior types that are regulated by the law changed their overall evaluation of the fairness of trade-secret laws in general.\footnote{Interaction effect was significant in a level of 0.05.}

For those in the ‘download’ group, being told that such an activity is illegal had caused employees to upgrade their perception of the overall fairness of trade-secret laws. However for those in the ‘developed’ group, learning that such an activity is illegal caused employees to undermine a perceived-fairness of trade-secret laws\footnote{One needs to recognize the possibility that participants were not reading the questions well, and were thinking that they are answering in the general part questions about the scenario specific part. Future research might want to measure participants’ responses, with regard to a more extreme scenario, and see whether these spillovers will occur again.} in general. I interpret this finding to mean that exposure to the narrow definition of trade-secret laws (an employee who shares confidential know-how information that she has downloaded is violating the law) improves employees’ estimations about the legitimacy of trade secrets\footnote{An analysis of variance that was conducted confirmed the significance of the interaction between legality and activity with regard to employee’s perception of the fairness of trade-secrets law in general\textsuperscript{213}.} in general. However following exposure to the broad definition of trade-secrets law (an employee who shares confidential know-how information that she took part in developing is violating the law), employees tended to think that trade-secret laws\footnote{Activity F(2,222)=10.362, P=.00 \newline Legality F(1,222)=2.388, P=.124, NS \newline \textbf{Activity X Legality (2,222) }=.4.843, P=.009} in general are less fair.

An analysis of variance that was conducted confirmed the significance of the interaction between legality and activity with regard to employee’s perception of the fairness of trade-secrets law in general\textsuperscript{213}.

Activity F(2,222)=10.362, P=.00
Legality F(1,222)=2.388, P=.124, NS

\textbf{Activity X Legality (2,222) }=.4.843, P=.009

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{chart.png}
\caption{Mean overall fairness of trade secrets}
\end{figure}
IV. Limits of Informal Controls. (Function)

In this section I will argue that, while some norms may be more efficient than the law, a situation in which norms replace law without the agreement of both parties might decrease efficiency. I will try to build the case that norms are limited in their ability to accurately transmit what employees cannot take with them, and in which situations they need to respect the law.

Thus, while most of the legal literature on social norms focuses on the destruction to human capital by the replacement of norms with laws, in this case the question is whether norms have the ability to monitor the behavior of employees in a manner that will ensure that only efficient types of information are transferred between companies when the law is not functioning.

A. Externalities: Information-Accepting Vs. Information-Producing Firms

The normative failure that I wish to discuss in the following paragraphs is related to the market failure that is defined by economists as negative externality (anywhere in the entity that engages in a given activity doesn’t bear all of the costs). The application of externality to failures in norm management is recognized by both McAdams and Cooter, who argue that there are conditions under which the harm will be externalized to groups that are not defining the nature of the norm. This phenomenon seems to be at work in the context of trade-secrets sharing. This is precisely the case when a previous employer who receives the brunt of the harm has little influence on the employee.

The conflict of interests between the information-accepting and information-producing firms will be demonstrated quantitatively toward the end of this section. First, however, I wish to present a short excerpt from a high tech employee’s self-described and unprovoked dilemma with regard to the pressure that is put on employees by previous and current employers.

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214 See, for example, the discussion of the supremacy of extra-legal norm over formal laws in the context of information disclosure in corporate context in Eric Talley, Disclosure Norms, (Symposium on Norms and Corporate Law) 149 U PA L. REV. 1955 (2001) who mentions that without courts, non-disclosure norms could be more efficient in monitoring the behavior of corporate executives than the court system could. Part of the argument in this paper is that in terms of information, courts are not likely to do a great job in signaling to people what they can and cannot do. For a counter-view on the ability of norms to manage executives’ behavior see Marcel Kahan, The limited significance of norms for corporate governance. (Symposium on Norms and Corporate Law) 149 U PA L. REV. 1869 (2001). Focusing mainly of the inability of norms to have a significant effect on executives’ compensation due mainly, in his view, to the fact that those who make the decisions about the size of the compensation are not part of any cohesive group.

215 Since, as I understand it, the norm is argued to be efficient only from a welfare perspective and not from Pareto perspective.

216 Cooter, The New Law Merchant, at 1684-85. Cooter admits that some norms may develop even if they are inefficient. One of his examples is that, the norm of one community may enable it to capture benefits while externalizing costs to another community.

217 Questionnaire collected on October 8, 2002. At the end of the questionnaire there was a place to write down comments. Naturally most participants didn’t write anything, but some did. The comments were not in response to any kind of question, which makes this statement very interesting.
“In general while the scenario here is a violation according to the law you have described and I agree that it’s fair for employers to be protected from such disclosure, I think that most people reveal things in a much more subtle manner. Things they developed not on file in their heads. This happens all the time. I feel that employers have too much leeway in defining what a trade secret is. Each employer defines all of their processes as trade secrets but expects employees to reveal secrets from previous employers (in a subtle way). This puts a squeeze on employees and they pay the price. The system is unfair to employees in general.”

(Emphasis added)

Organizational researchers who study ethical behavior in organizations recognize the special problem of firm-benefiting behavior and the lack of sufficient organizational controls that could monitor such behavior. For example, in taxonomy of the types of ethical misbehaviors in organizations, Vardi and Weiner argue that individuals at a conventional level of morality are likely to engage in organization-benefiting misbehavior. Since the sharing of confidential know-how information benefits the employee’s current firm, I would expect that people who believe that their current employers and employees will approve their behavior are, in fact, likely to engage in such behavior.

Furthermore, an important element in the economic analysis of social norms hinges on peoples’ willingness to punish violators of the social norm. There are many researchers who argue for a “market-like morality”. They claim that behaving in an immoral way might draw a reaction from other actors in the market. However in the context of trade secrets, if the information is valuable enough then law-violators are less likely to be informally punished (the opposite incentive to that which exists under a formal enforcement regime). Thus, one could argue that the firm accepting the information is less likely to impose social sanctions on the sharing of trade secrets beyond a desirable or efficient norm. According to Dunfee, there is enough evidence to show that morality does have some effect on people’s market-like decisions, as in the case of the consumer-boycotting of companies that do business with immoral suppliers. Other researchers point out the difficulties that employees

219 See McAdams (1997), infra note 314.
221 Psychological research about the likelihood of non-formal enforcement suggests a need for strong social ties between the potential-punisher and the peer group of the offender (see Christince Orne, The Enforcement of Norms: Group Cohesion and Meta-Norms, 64(3) SOCIAL PSYCHOLOGY QUARTERLY 253 (2001)).
222 The fact that norms are costly to enforce is not a new puzzle for the economic analysis of social norms. (See, for example, Elizabeth Anderson, Beyond Homo Economicus: New Development in Theories of Social Norm, 29 PHILOSOPHY AND PUBLIC AFFAIRS 170 (2000) especially text near n. 25.) In this context, however, the price that the competing firm is being asked to pay is much higher, on average than that of a regular norm enforcer.
223 Thomas W. Dunfee, Market like Morality within Organizations, In SOCIAL INFLUENCES ON ETHICAL BEHAVIOR IN ORGANIZATIONS infra note 234.
224 See, for example, Michihiro Kandori, Social Norms and Community Enforcement, 59 REV. ECON. STUD., 63 (1992) formally discussing the mechanisms through which the community can get information about the behavior of individuals, and examining the implications of the size
and employers could face in trying to confront unethical behavior within organizations. These studies emphasize the costs of enforcing social sanctions that are overlooked by some scholars. This is not to say that social sanctions don’t exist, but to point out that in many situations—as in the context of trade secrets—the cost of sanctioning might prevent society from enforcing social norms. While on one hand the enforcement of social norms in this context requires not direct confrontation but rather simple avoidance (i.e., not hiring, not going to work with certain employers), this social punishment is far more costly than simply not doing business with someone with a bad reputation. For the future employer, in many cases this confidential knowledge (even at an excessive level) makes the employee more and not less valuable, and not hiring him might be very expensive.

**B. ‘Role Transition’ and ‘Shifting Loyalties’: Why Information-Sharing is a Unique Social Dilemma**

This notion of a conflict of interests between different companies leads to another factor that I want to discuss -- the change in loyalties that an employee experiences when she moves from one company to another. While in most “social dilemmas” literature we focus on the question of when people will work for the collective purpose and when they will focus on their own self-interest, this case is different. An employee who violates the law isn’t, in her eyes, solely pursuing her own self-interest. The disclosure of information could be seen from one viewpoint of the community as well as the types of transactions among community members on community monitoring of deviance from the norm.


226 McAdams (1997) infra note 314 at page 364: “To summarize the model thus far: The key feature of esteem is that individuals do not always bear a cost by granting different levels of esteem to others. Because the cost is often zero, esteem sanctions are not necessarily subject to the second-order collective action problem that makes the explanation of norms difficult. An individual maximizes her utility neither by hording all her esteem nor by granting equal esteem to everyone” – it is not clear to me whether in fact in the context of trade secrets, an honest employer would actually withhold esteem from an employee who offers to use his previous employer’s trade secrets. (emphasis added)

227 For an explanation of why people would sanction others even when such an act is costly for the punisher see Ernst Fehr & Klaus M. Schmidt, A Theory of Fairness, Competition, and Cooperation, 114 QUARTERLY JOURNAL OF ECONOMICS 817 (1999.) For a counter-perspective see Robert Piron & Luis Fernandez, Are Fairness Constraints on Profit-Seeking Important? 16 J. OF ECON. PSYCH. 73 (1995).

228 A related issue that arises here concerns the free-rider problem: each corporation enjoys the norm, but might not be willing to pay all of the costs of not hiring employees with valuable information.

229 Lacking an effective formal law, there is also a counter-argument: an employer will be afraid to hire an employee who brings trade secrets from the previous firm because such an action could be repeated when she leaves her own company.

230 E. Allan Lind, Fairness Heuristics Theory: Justice Judgment as Pivotal Cognitions in Organizational Relations, in ADVANCE IN ORGANIZATIONAL JUSTICE, infra note 250, 56, at p. 61, stating that, “[t]he Fundamental social dilemma is “fundamental” because it reflects one of the most basic aspects of human nature... it is this tension between social impulses and individual interests that forms the contexts of much of our social and organizational existence.”

231 The group-identity explanation is naturally developed by sociologists who try to account for people’s obeisance to social norms. See for example, the development of “collective agency” theories in Margaret Gilbert, ON SOCIAL FACTS (1989).
as sharing a more efficient methodology with the new employer. Such behavior could be perceived as being as cooperative in nature,232 and not stemming from a typically self-interested perspective.233 Research on social influence in organizations suggests that firm boundaries tend to be an extremely efficient means of socializing people into norms that are unfavorable in the outside world.234 Similarly, research on group identity suggests that motives that stem from a desire to belong to the group are developed very shortly after the individual joins an organization.235 Thus I will argue that when an employee has to decide whether she should keep the interest of the previous or the new company, she is likely to opt for the interest of the new company, undermining the damage of her action to the previous firm.236

C. Subjective Norms and the Choice of Reference Groups

As Dunfee237 points out, individuals are especially likely to be influenced by social proof, a commitment to membership in the organization, and the attitudes and behaviors of significant others.

People compare themselves with different reference groups and differing baselines are developed which will, in turn, lead to differing levels of satisfaction under the same conditions. This notion is far from new.238 The more interesting question is what reference group will people use in different situations and, most importantly, are those groups likely to share the interest of society as a whole? Thus, the policymaker should focus on not what most others would approve of what most important others would approve of.

From the perspective of this project, this concept is strongly related to another important issue in the context of trade secrets mentioned above, the distinction between three different possible reference groups: previous employers, new employers, and fellow employees.239 As I mentioned in the previous paragraphs, I


233 See Brenda Morrison, Interdependence, the Group, Social Cooperation: A New Look at an Old Problem in Resolving Social Dilemmas (Margaret Foddy, Michael Smithson Sherry Schneider and Michael Hogg eds.1999) pp 295-308 for a review of the in-group, out-group and group-identity research applications to social dilemmas.

234 See John M. Darley, The Dynamics of Authority Influence in Organizations and the Unintended Action Consequences, in SOCIAL INFLUENCES ON ETHICAL BEHAVIOR IN ORGANIZATIONS, John M. Darley, David M. Messick, and Tom R. Tyler Eds. (2001) pp. 37-52. These authors discuss corporate case studies in which employees were quick to comply with corporate norms such as selling damaged products.

235 See Blake E. Ashforth’s ROLE TRANSITION IN ORGANIZATIONAL LIFE (2001), especially pages 149-199, discussing the situational factors affecting role-learning and innovation in the entry stage of the organization.

236 The best-developed paradigm to explain who people would choose as their reference group is the social network approach. For an empirical demonstration see Herminia Ibarra & Steven B. Andrews Power, Social Influence, and Sense Making: Effects of Network Centrality and Proximity on Employee Perceptions, 38 ADMINISTRATIVE SCIENCE QUARTERLY 277 (1993).

237 In market-like morality, supra note 233 at page 224.

238 Much of the scholarship in this context emerged from the work of Merton and Kit, (1950).

239 It should be noted that Paternoster & Simpson infra note Error! Bookmark not defined. at p. 568 have reported that the described common practice within the firm (what sociologists call “the moral climate of the organization”) had a significant effect on employees’ intention to commit a
expect these groups to hold differing views regarding the amount and types of information employees should transmit to their new employers. Furthermore, according to social influence theories, each of the given groups has a different role vis-à-vis the target employees’ interests. These factors make for an almost natural setting in which to study how the descriptive norm (e.g., what other employees do) and the injunctive norm (e.g., what a former/current employer expects one to do) interact. In addition, since future employers have a greater ability to socially deter (fire or not hire), previous employers have a greater ability to formally deter (sue for violation of trade-secrets), and fellow employees have greater expressive abilities, we can see how these different functions of the norm interact.

**D. The Limits of Fairness**

In large-scale social dilemmas in which communication is less likely, one of the most important informal social forces constraining opportunistic behavior is fairness. It has been shown that fairness has a positive effect on people’s decision to cooperate with the collective interest, and many economists realize nowadays that Becker’s original model of compliance is limited. However, due to the common practice in the industry’s effect on employees’ intention to commit a crime was not significant.

In Silicon Valley/ in one’s firm.

For a discussion of “subjective norms” Icek Ajzen, Attitudes, Personality and Behavior (1998). The concept usually means what subjectively important people would want you to do instead of what most people would say, might also be relevant in this context. So far, to the best of my knowledge, no theory in economics offers any treatment for subjective norms. Nevertheless, it seems that even from an economic point of view, one could imagine a reputation perspective that would be relevant to the different groups. A classic example of an interaction between the injunctive norms of one group (one’s family) and the descriptive norms of another (one’s co-workers) in the context tax evasion can be found in L.J., Stalans, K.A Kinsey & K.W. Smith Listening To Different Voices: Formation of Sanction Beliefs and Taxpaying Norms, 21 J. OF APPLIED SOCIAL PSYCHOLOGY 119 (1991).

Moreover, considering aspects of attitudinal change as well as identification aspects of social influence puts fellow employees, who are perceived as closer in status as well as lacking any personal interest, in a much better position to cause the target employees to actually “internalize” what is expected of them.

Another interesting set of theories, which could be used to explain people’s decision-making in a situation of conflicting norms, is Tetlock’s accountability theory (Philip Tetlock, The Impact of Accountability on Judgment and Choice: Toward a Social Contingency Model, in 25 ADVANCES IN EXPERIMENTAL SOCIAL PSYCHOLOGY 331 (M.P. Zanna ed. 1992)). The implementation of this theory in our context might be very interesting, given the different social roles that each group has relative to the employee and their competing interests (see Danielle Beu & Ronald Buckley, The Hypothesized Relationship Between Accountability and Ethical Behavior, 34 J. OF BUSINESS ETHICS 57 (2001) bringing together literatures of accountability, social roles and social networks).


Andres Biel, Factors Promoting Cooperation, in COOPERATION IN MODERN SOCIETY, Mark Van Vugt, Mark Snyder, Tom R. Tyler and Andres Biel eds. 2001).


nature of information, it is not clear that justice is very helpful when people are unaware as to what exactly they are expected to take with them. Because everyone uses some information when moving from one company to another, the effect of fairness will kick in only when there are clearly defined boundaries placed between legitimate and illegitimate usage of information. In other words, the usage of information seems to be a classic example of a situation in which the evaluation of fairness needs a reference point. As Miller and Prentice put it: “there is nothing either good or bad but comparison makes it so.”

Thus, we can expect that an employee will define the fairness of information-usage in terms of the standard psychological contract that exists in a given industry. Uncertainty as to what exactly the individual can take with him upon departure is likely to make it very hard for fairness to serve as an efficient constraint.


249 A similar line of arguments are made by Steven Shavell, Law vs. Morality as Regulators of Conduct, 4 AM. L. & ECON. REV. 227,235 (2002), when he discusses the advantage of regulating behavior through law as opposed to morality given the fact that it is harder to apply morality to more complex situations. On page 254 he argues that when morality is not intuitive it is better to use laws.

On page 242 he discusses another limitation that arises when the regulation of behavior relative to morality occurs in firms where the relationship between morality and the regulation is more complex. On page 247 he points out that in cases where the profit to the wrongdoer is considerable, morality is unlikely to be able to regulate behavior without assistance from the law. Thus it seems that, according to his rationale, the ability of fairness to monitor such behavior is limited.


For a refutation of the universalism of justice and its culture and context dependency see Jerald Greenberg ‘The Seven Loose Can(n)ons of Organizational Justice in ADVANCES IN ORGANIZATIONAL JUSTICE, (Jerald Greenberg and Russell Cropanzano eds., 2001) 245, 260.

251 “…We have already noted that psychological contracts change across times and places, suggesting that justice are relative. All People might share a common interest in fairness, but what they presume to be fair varies widely.” (Robert Folger and Russell Cropanzano, ‘Fairness theory: Justice as Accountability, ADVANCES IN ORGANIZATIONAL JUSTICE, id, 1-56, 23. [emphasis added]) . See also Yuval Feldman, Measuring the Contribution of Fairness to Hi-Tech Employees’ Compliance with Trade Secrets Law: A Three-Fold Model of Normative Control, unpublished manuscript (file with the author).

252 For a demonstration of the importance of social context in the activation of fairness see Bruno S. Frey & Iris Bohnet, Institutions Affect Fairness: Experimental Investigations, 151 JOURNAL OF INSTITUTIONAL AND THEORETICAL ECONOMICS, 286 (1995).

253 See Jones and Lori. When discussing the elements of moral responsibility (at page 671), they argue that moral certainty about the immorality of the action in question is empirically significant in attempting to predict the ability of morality to have any effect of one’s decision making. Thus, uncertainty reduction is important from a policy perspective not only in an informative cognitive context, but also in social normative context.
E. Initial Limit of Fairness Relevance in the Context of Trade Secrets

Even disregarding the relationship between fairness and the psychological contract in a given industry, one should note that the relevancy of the legal requirement’s fairness might be initially constrained in the context of trade secrets. All leading theories of procedural justice - resource dependency, group identity or information heuristics - would agree that people would care less about procedural justice after having chosen the exit option. Such a limitation is also predicted by the social network perspective of ethical behavior of employees in organizations. Thus, it is not clear whether an application of Tyler’s argument - that organizations will benefit if instead of threatening or awarding employees, they try to approach their internal value of justice - would prove wise in cases where employees had already planned to leave the company. My suggestion that the fairness of the law plays a role in each of the three models of social norms might, then, face some difficulties, and it is important that the employer be aware of these difficulties ex-ante given her need to recognize the limits of fairness and to choose other means of social enforcement.

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254 It should be noted that there is another kind of trade secret that could be violated by employees who remain with the company. In this project, however, I will focus on trade-secrets violation relative to the move between companies.

255 Tom R. Tyler, Robert Boeckmann, Heather J. Smith, Yuen J Huo, SOCIAL JUSTICE IN A DIVERSE SOCIETY (1997). People care more about justice when they care about the organization. See also Joel Brockner, Tom R Tyler & Rochelle Cooper-Schneider, The Influence of Prior Commitment to an Institution on Reactions to Perceived Unfairness: The Higher They Are, the Harder They Fall, 37 ADMINISTRATIVE SCIENCE QUARTERLY 241 (1992). The bond between the individual and the group impacts his willingness to sacrifice for the group. Recently, Tyler has developed an organizational commitment perspective that views a separate role for organizational identity, again with a potentially limited import in the “exist” stage. Tom Tyler, Why People Cooperate With Organizations: An Identity-Based Perspective 21 RESEARCH IN ORGANIZATIONAL BEHAVIOR 201 (1999).

256 Daniel J. Brass, Relationships and Unethical Behavior: A Social Network Perspective, ACADEMY OF MANAGEMENT REVIEW (1988). (This paper argues that the perspective offered by social network theorists is the most comprehensive one in terms of its ability to explain how social norms are transferred. In any case, after taking the exit option, under this structure, the ability of the network to actually work to prevent unethical behavior is limited, especially due to the conflict of interests between the information producing and accepting firms.


258 A counter-argument might be that sometimes departing from one’s current company only makes sense if a trade-secrets violation is considered, as in the example of spin-offs. Thus, fairness considerations might affect the employee’s decision to leave the company. In such a scenario, my argument weakens.
F. Limits of Non-Formal Controls: Findings

1. The Temptation to Use Trade Secrets

54% of the participants in the study thought that refusing to share trade secrets is more likely to harm their career than not. (52% (downloaded) vs. 54% (memorized)).

58% of the participants in the study thought that sharing trade secrets is more likely to help their career than not (53% (downloaded) vs. 60% (memorized)).

61% of the participants in the study thought that sharing trade secrets is more likely to improve their chances of getting hired than not. (43% (download) vs. 70% (memorized)).

These findings give a very clear indication that price-related social forces are unlikely to result in employees abstaining from the use of trade secrets. On average most employees thought that sharing trade secrets would improve their ability to get hired, and that refusing to do so would harm their career. Furthermore, saliency of legality failed to change employees’ belief that sharing trade secrets is required of individuals seeking to improve their employability. On the other hand, the extant gap between downloaded information and non-downloaded information (learned + developed) suggests that employees recognize, at least to some extent, that the effects of trade secrets sharing will vary relative to the level of violation that accompanies each instance. Hence, they are aware of the increasing social costs associated with the wrong-doing of their behavior.

Consequently, one might look to the following numbers as evidence that the social mechanism does work! especially given that the value of the secrets is probably greater when the employee bring the actual copy with him. Nonetheless, given that I have only three types of activities manipulated, I don’t have sufficient evidence to speak about an ‘order without law’ and it is hard to tell whether indeed norms could stabilize equilibrium around some efficient level. Further evidence about the limits of fairness, and the misperception of norms, support the line that I emphasize in this paper regarding the failures which will prevent norms from efficiently monitoring behavior, without the formal support of the law, will be presented in the following sections.

259 Since there was no difference with regard to this factor, between leaned and developed, I have combined both groups into one group of ‘memorized’.

260 See discussion in the third part about this question.

261 And none is clearly excessive.

2. Externality: Choice of Reference Group – Which Group's Approval Will Predict the Intention of the Employee?  

The main failure discussed in this section is that one’s previous and current employers might not perceive the sharing of trade secrets in a similar way. If the employee cares most about her current employer, and the interests of the current employer are not in congruence with the interests of the Valley, we could say that there is some failure in the employee’s choice of reference group.

Our findings demonstrate that most employees thought that their previous employer would not approve of a violation of trade secrets. However with regard to current co-workers and current employers there was a mixed message, leaning towards the approval of trade-secret violations on all behavioral levels.

Table 8: Means And (Standard Deviations,) Of The Likelihood Of Approval Of Trade-Secret Violations By Previous Employer And Current Employers And Co-Workers (1= Unlikely To Approve; 10= Likely To Approve).

<table>
<thead>
<tr>
<th>Type of activity</th>
<th>approval of of previous approval of current employer approval of co-employees employer employer</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learned</td>
<td>Mean</td>
<td>6.6627</td>
<td>(2.7017)</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>83</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>(2.7017)</td>
<td>(2.4969)</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>5.1220</td>
<td>(2.8258)</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>(2.8258)</td>
<td>(1.9522)</td>
</tr>
<tr>
<td>Downloaded</td>
<td>Mean</td>
<td>6.9390</td>
<td>(2.4361)</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>(2.4361)</td>
<td>(2.3186)</td>
</tr>
<tr>
<td>Developed</td>
<td>Mean</td>
<td>6.4249</td>
<td>(2.7670)</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>(2.7670)</td>
<td>(2.2761)</td>
</tr>
<tr>
<td>Combined</td>
<td>Mean</td>
<td>6.2429</td>
<td>(2.7670)</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>(2.7670)</td>
<td>(2.2761)</td>
</tr>
</tbody>
</table>

The fact that there are differences between the perceived views of the previous employer and the current co-employees and employer is less surprising. The failure stems from the fact that employees’ reported intentions to violate the law were related to the injunctive norm of the current employers, but were not related at all to the perceived injunctive norm of the previous employer. (See Figure 3)

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263 The concept of “subjective norms” offered by Isaac Ajzen Theory Of Planned Behavior, 50 ORGANIZATIONAL BEHAVIOR & HUMAN DECISION PROCESSES 179 (1991) in pp. 195-197 -- what important people to you would say as opposed to what most people would say -- might also be relevant in this context. So far, no theory in economics offers any treatment for subjective norms. Nevertheless, it seems that even from an economic point of view, one could imagine a reputation perspective that would be of import for the different groups;

264 When presenting the results in terms of proportion of those who are more likely to approve than not (>5) rather than in terms of comparison of the means of each reference groups:

50% of the participants in the study thought that their current employer is more likely than not to approve their bringing trade secrets with them.

55% of the participants in the study thought that their co-workers in their current firms are more likely than not to approve of a situation in which they bring trade secrets with them to their new company.

Only 13% of the participants in the study, however, thought that their previous employer will approve of a situation in which they take trade secrets from the company.
To isolate the contribution of the approval of the previous employer to the intended behavior of the employee I have conducted a hierarchical regression, in which I have first put saliency of legality into the equation, then added the approval of the current employer and co-employees, and then in a third step I have added the approval of the previous employer to determine what this level of approval contributes when controlling for the approval of the current employer and employees. The beta coefficient and especially the $R^2$ change in the third step will allow us to examine how much the employee would care about her previous employer’s position when confronted with the approval of the current employer and employees – this is the basic dilemma the employee faces in the context of trade secrets.

For participants in the Learned Group

Table 9: Standardized Regression Coefficients and $R^2$ Change of the Relationship Between Approval and Intention to Share Information.

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Beta</th>
<th>T(74)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>saliency of legality (dummy)</td>
<td>.120</td>
<td>1.433</td>
<td>.156</td>
</tr>
<tr>
<td>approval of present co-employees</td>
<td>.419</td>
<td>3.327</td>
<td>.001</td>
</tr>
<tr>
<td>approval of current employer</td>
<td>.321</td>
<td>2.561</td>
<td>.012</td>
</tr>
<tr>
<td>Step III</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>saliency of legality (dummy)</td>
<td>.110</td>
<td>1.316</td>
<td>.192</td>
</tr>
<tr>
<td>approval of present co-employees</td>
<td>.399</td>
<td>3.168</td>
<td>.002</td>
</tr>
<tr>
<td>approval of current employer</td>
<td>.295</td>
<td>2.337</td>
<td>.022</td>
</tr>
<tr>
<td>approval of previous employer</td>
<td>.117</td>
<td>1.317</td>
<td>.192</td>
</tr>
</tbody>
</table>

$R^2$ change Step II (approval of present employers and co-employees) = .479, $F (2, 75) = 35.074, P<.001$

$R^2$ change Step III (approval of previous employer) = .012 $F (1, 74) =1.733, P=.192$ NS
For participants in the “Download” Group

Table 10: Standardized Regression Coefficients and R^2 Change of The Relationship Between Approval And Intention to Share Information

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Beta</th>
<th>t(76)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salience of legality (dummy)</td>
<td>.142</td>
<td>1.508</td>
<td>.136</td>
</tr>
<tr>
<td>Approval of present co-employees</td>
<td>.356</td>
<td>2.956</td>
<td>.004</td>
</tr>
<tr>
<td>Approval of current employer</td>
<td>.256</td>
<td>2.129</td>
<td>.036</td>
</tr>
<tr>
<td>Step III</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salience of legality</td>
<td>.137</td>
<td>1.466</td>
<td>.147</td>
</tr>
<tr>
<td>Approval of present co-employees</td>
<td>.328</td>
<td>2.727</td>
<td>.008</td>
</tr>
<tr>
<td>Approval of current employer</td>
<td>.216</td>
<td>1.769</td>
<td>.081</td>
</tr>
<tr>
<td>Approval of previous employer</td>
<td>.159</td>
<td>1.583</td>
<td>.117</td>
</tr>
</tbody>
</table>

R^2 change Step II (approval of present employers and co-employees) = .306, 
F (2, 77) = 17.501, P<.001

R^2 change Step III (approval of previous employer) = .021, F (1, 76) =2.507, 
P=.117, NS

For Participants in the “Developed” Group

Table 11: Standardized Regression Coefficients And R^2 Change Of The Relationship Between Approval And Intention To Share Information.

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Beta</th>
<th>T(74)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salience of legality (dummy)</td>
<td>.130</td>
<td>1.428</td>
<td>.157</td>
</tr>
<tr>
<td>Approval of present co-employees</td>
<td>.461</td>
<td>3.623</td>
<td>.001</td>
</tr>
<tr>
<td>Approval of current employer</td>
<td>.178</td>
<td>1.394</td>
<td>.168</td>
</tr>
<tr>
<td>Step III</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salience of legality (dummy)</td>
<td>.151</td>
<td>1.662</td>
<td>.101</td>
</tr>
<tr>
<td>Approval of present co-employees</td>
<td>.479</td>
<td>3.788</td>
<td>.000</td>
</tr>
<tr>
<td>Approval of current employer</td>
<td>.205</td>
<td>1.614</td>
<td>.111</td>
</tr>
<tr>
<td>Approval of previous employer</td>
<td>-.154</td>
<td>-1.628</td>
<td>.108</td>
</tr>
</tbody>
</table>

R^2 change Step II (approval of present employers and co-employees) = .356, 
F (2, 74) = 21.631, P<.001

R^2 change Step III (approval of previous employer) = .021, F (1, 73) =2.639, 
P=.108, NS (negative!)

3. Could The Norm Itself Remedy This Externality?

There appears to be an increase in how much the employee cares about her previous employer’s approval only in the download condition, in which the activity (the downloading) is carried out within the boundaries of the previous employer, but even in that case the approval of the previous employer was not significant. The main change is in the gap between the approval of the previous and current employers, which is minimal in the download condition. Hence, from this perspective, that means that even the norm in itself is able to curb itself, since the individual, places similar importance to the approval of the new employers, when the type of activity becomes more severe. Another interesting finding in this context is the fact that downloading the information was only significantly changing the approval pattern of the new employer, but not that of the previous employer. Hence, while on one hand, we see that in the download condition the approval of the previous and the current employer are equally strong, the reason for closing the gap between the approval of both

265 Note that the insignificance of the predictor of approval of new employer seems to appear insignificant due to the fact that it is highly correlated with the approval of the workers in the new firm. (multicolinearity)
employers comes from the fact that both the employee and the new employer have changed their views, which became closer to the ‘constant disapproval’ of the previous employer. Thus, even without the law, and even though the sharing seems to benefit the new firm, and in contrast to the main story I am trying to tell in paper about the potential for normative failures, the norm seem to be sensitive to the severity of the act.

4. Could The Law of Trade Secrets Remedy This Externality?

In a second step, I have attempted to examine whether saliency of legality has moderated the effect that the previous employer’s approval has upon the employee’s intention to share information. The obvious rationale here is that filing a suit is a formal solution to the market failure of negative externalities. I have speculated that for the legal group, the impact of the previous employer’s approval will increase, given that his ability to sue the departing employee. To examine this possibility I have created a product-term interaction factor of legality X approval of the previous employer. If the strength of the relationship between the approval of the previous employer and intention varies across the two levels of legality, this interaction factor will add a significant incremental contribution, above and beyond the variance explained by other factors. This interaction factor was shown to be completely insignificant, hence legality led to no increase in the strength of the previous employer’s approval.

Table 12: Standardized Regression Coefficients of the Relationship Between Social Approval and Intention To Share Information.266

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Beta</th>
<th>t(74)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>download dummy coded</td>
<td>-.100</td>
<td>-1.725</td>
<td>.086</td>
</tr>
<tr>
<td>developed dummy coded</td>
<td>.022</td>
<td>.382</td>
<td>.703</td>
</tr>
<tr>
<td>approval of present co-employees</td>
<td>.402</td>
<td>5.753</td>
<td>.000</td>
</tr>
<tr>
<td>approval of current employer</td>
<td>.247</td>
<td>3.467</td>
<td>.001</td>
</tr>
<tr>
<td>approval of previous employer (centered)</td>
<td>.071</td>
<td>.889</td>
<td>.375</td>
</tr>
<tr>
<td>legality dummy coding</td>
<td>.121</td>
<td>2.451</td>
<td>.015</td>
</tr>
<tr>
<td>interaction factor legality x previous employer</td>
<td>-.040</td>
<td>-.519</td>
<td>.604</td>
</tr>
</tbody>
</table>

Another means of determining whether legality can remedy the ‘externality problem’ is to examine whether legality can change people’s estimation of their new employer’s approval. In a regression analysis, however, it was shown that legality had no effect on the approval pattern of the new employer.267

Thus, as opposed to the covenant-without-a-sword theme advocated by Orbell et al268 as the new model of economic analysis of social norms, the “sword”, at least in this context, seems to influence the choice of reference group. The clear choice of reference groups that emerges from this study supports the classical rational actor assumption. People will tend to care more about the approval of those with the power

266 Only the fourth (last) step of the hierarchical regression is presented.
267 Beta=.16, t(240)=.260, NS
to affect their career. They do not care about those who haven’t any sword, whether legal or social, with which to enforce their wish.

The only factors that point to legality as a potential remedy for this externality come to light elsewhere, for there we establish that legality maintains its effect on intention even when controlling for social costs. Hence, the law can change the intention of the individual above and beyond the variance explained by the approval of the new employer.

5. Flaws in the Functionality of Fairness and Morality

While the main argument in this section was that employee will tend to choose her current employer and current co-employees as her reference groups and will tend to ignore the approval of her previous employer, I have also argued that the internal social controls of fairness and morality will not be sufficient to remedy this failure and therefore cannot serve as independent effective social constraints. In a related paper, I engage in a more rigorous comparison of the mechanisms at work in the relationship between Silicon Valley’s norms of know-how sharing and both employees’ perceptions of the fairness of trade-secret laws and the guilt associated with sharing trade secrets. In this section, I wish to focus on the fact that the choice of reference groups is not likely to be made via an internal mechanism of control such as moral norms, given that the approval of the previous employer is more weakly correlated with the moral norm than it is with the approval of the current employer and co-employees. The importance of the current - as opposed to the previous - employer’s approval is due not only to his ability to affect the employee’s career; it is related also to the morality of the employee himself.

As can be seen from Table 13, while all three measures of approval are related to morality, the approval of the current employer is more strongly related (using z-fisher) to the moral judgment of the employee than is the approval of the previous employer. Moreover, when controlling for the relationship with career effect, the relationship between morality and the approval of the previous employer disappears, while the approval of the current employer remains significant.

<table>
<thead>
<tr>
<th></th>
<th>approval of co-employees</th>
<th>approval of current employer</th>
<th>approval of previous employer</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>.506**</td>
<td>.457**</td>
<td>.192**</td>
</tr>
<tr>
<td>N</td>
<td>239</td>
<td>237</td>
<td>238</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).

Moreover, when controlling for the relationship with career effect, the relationship between morality and the approval of the previous employer disappears, while the approval of the current employer remains significant.

---

269 Given that saliency of legality didn’t seem to empower the previous employer.
270 See Feldman, Expressive Law,
271 Yuval Feldman Measuring the Contribution of Fairness to hi-tech Employees’ Compliance to Trade Secrets Law: A Three-Fold Model of Normative Control, unpublished manuscript.
272 There is a correlation of .44** between perceived proportion of people who share confidential information and the morality of sharing confidential information.
Table 14: Partial Correlation between Approval of Three Reference Groups and Moral Norms, When Controlling For Career Effect.

<table>
<thead>
<tr>
<th></th>
<th>approval of co-employees</th>
<th>current approval of employer</th>
<th>approval of previous employer</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>.321**</td>
<td>.274**</td>
<td>.0883</td>
</tr>
<tr>
<td>N</td>
<td>227</td>
<td>227</td>
<td>227</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).

Thus, even though morality is significantly related to the behavior of the employee, it can be demonstrated that the employee’s views of morality are more consistent with the approval patterns of the current employer than with those of the previous employer. Hence, based upon these findings it appears unlikely that morality will lead the employee to favor the interests of the previous employer over those of the current employer.

As in our previous discussions of the limits of social approval, legality was here able to suggest a remedy to the situation. In the second chapter, I demonstrate that in a between-subject design, participants considered the sharing of trade secrets to be significantly less moral than the sharing of confidential know-how information. While the size of the effect was small, it might be related to the limited credibility of trade-secrets laws. Even so, the fact that employees do change their moral views when reminded of the illegality of this shared practice despite the current status of trade-secrets laws demonstrates the clear advantage of formal laws over social norms, even with regard to their effects on internal motivation.

v. Bounded Rationality-Driven Normative Failures. (Perception)

Additional sets of enforcement failures might arise not only from the structure of the market but from people’s bounded rationality and from limitations in their ability to accurately perceive the norm. I will argue that the limits of social norms relative to their ability to maintain efficient normative control could be aggravated both by people’s uncertainty as to the normative definition of their behavior, and by their potentially biased estimation of the norm itself. A systematic bias (as opposed to a mere uncertainty) in the perception of the norm might lead to a situation in which there is an actual shift in the norm. If a norm is being changed based on inaccurate appraisals of reality, there is a good chance that it will lead people to disclose information in an inefficient way.

A. The Miscommunication between Behavioral Law and Economics, and the Law and Economics of Social Norms

One of the most recent key developments in the economic scholarship is the behavioral criticism of the neo-classical model of the rational person. This scholarship is based mainly on the work of the cognitive psychologists Kahneman and Tversky, who presented a systematic study of collective cognitive biases in calculating losses.
and gains. The law and economics scholarship has started to build a market-failure approach, which tries to take these imperfections into account.

Christine Jolls, in a review of Becker and Murphy’s book, criticizes Social Economics for failing to discuss any of the findings of behavioral economics, which attempt to formalize the social factors that affect the individual’s behavior. The lack of fruitful discourse between social and cognitive psychology with regard to behavioral law and economics is the subject of Section IV of this part of the dissertation. On the one hand, theories in cognitive psychology that focus on mechanisms such as anchoring, selective accessibility and representation are celebrated in the JDM context. On the other hand, these same theories, when applied by psychologists in the context of the cognitive and affective impact of social comparison standards and social norms, received no attention from behavioral law and economics — an astonishing omission given the fact that some of the central scholars in behavioral law and economics are also the leading scholars in the LEN scholarship. Ironically, given all of the progress that has been made in the behavioral analysis of law and economics, when it comes to the study of social norms the “rational actor” assumption is still dominant. This assumption is based on the belief that people are able to calculate the expected social costs of their actions when violating a given social norm.


276 “Notwithstanding the virtual absence of behavioral economics from Social Economics, many of the areas discussed by Becker and Murphy are importantly illuminated not only by these authors' insightful examination of social forces but also by behavioral economics.”

277 E.g. assimilation vs. contrast

278 Thomas Mussweiler & Fritz Strack, Consequences of Social Comparison, Selective Accessibility, Assimilation and Contrast, in the HANDBOOK OF SOCIAL COMPARISON THEORY AND RESEARCH, Eds. Suls and Wheeler (2000) on page 253. They argue that accessibility mediates the effect of comparison on behavior and judgment. The choice of a comparison standard makes different types of information accessible from one’s memory and is going to affect the judgment that one makes.

279 As a matter of fact, some of the above-mentioned studies regarding the biases in the perception of norms are attributed to Kahneman and Tversky, the founding fathers (at least from the psychology side) of behavioral economics. See, for example, their studies (1972) that suggest that the relationship between similarity and representativeness is likely to lead to an assimilation process, when the accessible knowledge seems to be representative. Amos Tversky and Daniel Kahneman, Subjective Probability: A Judgment of Representativness. 3 COGNITIVE PSYCHOLOGY, 430 (1972). See also their work on anchoring was repeated in the context of social comparison and was found to have an effect on the social comparison processes. (Amos Tversky and Daniel Kahneman, Judgment under Uncertainty: Heuristics and Biases. 185 SCIENCE 1124 (1974) (e.g. if your comparison standard was a heavy user, you will tend to estimate that you are a heavier user than you would if you had first been asked to compare yourself with a light user. Thomas Mussweiler, Fritz Strack, The Relative Self: Informational and Judgmental Consequences of Comparative Self Evaluations. 79 J. PERSONALITY AND SOC. PSYCH. 23(2000).

280 McAdams make the following assumptions in his model of competition for esteem: “the existence of this consensus and risk of detection is well-known within the relevant population.” McAdams (1997) at p. 358. At the same time, it is important to recognize that some economists who write in this tradition (Robert Sugden, Normative Expectations; the simultaneous evolution of institutions and norms, in ECONOMICS VALUES AND ORGANIZATIONS, supra note 1, at p 73), have specifically acknowledged that when they discuss normative expectation they don’t
B. The Importance of Other Employees’ Behavior in the Context of Trade Secrets 281

Naturally, for many social contexts, the individual’s perception that he can rely on others to cooperate with him is considered a major factor in the promotion of cooperation. In the context of trade secrets, however, the behavior of others is even more crucial. If people think that most of their friends are engaging in confidential know-how information sharing, an unwillingness to disclose the information in question will tend to appear futile. In all social dilemmas, people tend to cooperate more when they think that others will also cooperate. In the context of trade secrets, then, the behavior of others will tell people whether they are entitled to use the information or not (it will define the psychological contract) and it will force them to question whether it even makes sense to keep information in confidence if everyone around them will disclose this information anyway. Moreover, if people feel that many others are using confidential know-how information in order to be hired, they realize that not disclosing information will decrease their marketability when it comes time to compete for their next job.

C. Overestimation of Excessive Trade-Secrets Disclosure – A Pluralistic Ignorance Perspective

In order to build the argument that, lacking institutional guidance, employees would overestimate the proportion of employees who disclose trade secrets I will mean that people are actually making a cost-benefit analysis of the approval and disapproval of others. Instead normative expectations are being defined as a general belief that others are tending to follow conventions and that they disapprove of people who do not follow conventions. Nonetheless, even those who discuss normative expectations as an independent motivation force exceeding the traditional expected-values approach, have to recognize that the perception of the number of people who would come is crucial to people’s willingness to comply. See also the discussion in Feldman, Expressive Law, with regard to non-cost-related mechanisms.

281 In the second part I examine in a more rigorous manner, the relationship between the increase in the perceived consensus and the increase in the benefit that the individual will get from behaving in accord with others. See Robert Cooter and Yuval Feldman, Misperception of Norms and Equilibrium Analysis, paper in preparation.

282 The effect that the perceived number of people engaging in a particular behavior has on people’s willingness to engage in that behavior was recognized as being one of the main problems in juvenile delinquency. This phenomenon usually referred to as ‘social modeling’ is a process by which observation of others’ enactment of a behavior (e.g., heavy drinking) is thought to increase the likelihood of the observer adopting that behavior. Mark D Wood; Jennifer P Read; Tibor P. Palfai, & John F Stevenson, Social Influence Processes and College Student Drinking: The Mediation Role of Alcohol Outcome Expectancies, 62 J. STUDIES ON ALCOHOL 32 (2001).


285 For a discussion of the notion that following others’ behavior could also be the most efficient step to take in an organizational setting see Robert E. Kraut, Ronald E. Rice, Colleen Cool & Robert S. Fish, Varieties of Social Influence: The Role of Utility and Norms in the Success of a New Communication Medium, 9 ORGANIZATION SCIENCE, 437 (1998).
briefly review two psychological phenomena - pluralistic ignorance and availability bias.

Pluralistic ignorance is a theory referring to people’s inability to accurately estimate both the level of acceptability that is enjoyed by a norm, and the private beliefs of their fellow employees relative to that norm. Prentice and Miller have drawn on this theory to explain why college students overestimated the amount of alcohol consumed by their fellow students. The main reason for this overestimation seems to be related to the fact that over-drinking is much more vivid and salient than average drinking. Consequently, not only were people under the impression that their peers are likely to engage in over-drinking, but they themselves started to drink more. This is what Prentice and Miller called the cycle of normative influence: the more time people spent in college the more likely were they to over-drink.

I will argue that the excessive disclosure of trade secrets could follow a pattern to that found for the over-consumption of alcohol. In order to detect a norm regarding information sharing from watching others’ behavior, an employee needs to look at other people and deduce – by observing what they do or don’t do - the legitimate amount of information that she can take with her upon leaving her current employer. Situations in which fellow employees move to competitors or create spin-offs that produce similar products can make the attribution of motives fairly

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287 For a discussion of the characteristics of events which are likely to be more easily accessible see Paul. Slovic, Baruch Pischoff, B., & S. Lichtenstein, Facts versus Fears: Understanding Perceived Risk, In JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES (Daniel. Kahneman, Paul. Slovic & Amos. Tversky eds. 1982) at p 463; Timur Kuran and Cass R. Sunstein: Availability Cascades and Risk Regulation 51 STAN. L. REV. 683 (1999). These authors develop the idea that, because certain behavior might seem riskier than others, there is a danger that efforts by citizens and government will be moved in the wrong direction.

288 Another less innocent type of ignorance might occur in the context of trade secrets, and that is strategic ignorance. Darley (John M. Darely How Organizations Socialize Individuals into Evildoing, In CODES OF CONDUCT: BEHAVIORAL RESEARCH INTO BUSINESS ETHICS 13. David M. Messick. & Ann .E. Tenbrusel eds. 1996)) describes how individuals in organizations who wish to prevent the organizational pressures associated with certain organizational ethical codes might intentionally choose ignorance when these codes contradict the individual’s self-interest.

289 Miller and McFarland suggest that pluralistic ignorance is “a state characterized by the belief that one’s private thoughts, feeling and behavior are different from those of others, even though one’s public behavior is identical.”

Dale T. Miller, & Cathy McFarland, When Social Comparison Goes Awry: The Case of Pluralistic Ignorance, In SOCIAL COMPARISON: CONTEMPORARY THEORY AND RESEARCH, infra note 302 at p. 287. Similarly Janis in his studies of decision-making in groups, has found a bias toward the assumption of a group consensus due to the fact that one has over-sampled the share information rather than of focus on the differences among group members. Irvine L. Janis, GROUPTHINK: PSYCHOLOGICAL STUDIES OF POLICY DECISIONS AND FIASCOS (1982 2nd Ed). At p. 39


291 McAdams, infra note 314, in n. 224, suggest that the law might help people to overcome the problem of pluralistic ignorance; the preliminary data that comes from my study suggests that the law of trade secrets, at least, is not very helpful in this regard.
simple. Moreover, the greater the violation, the greater the vividness of behavior and the clarity of attribution. No such clarity exists in the opposite scenario. Even if the individual could establish that her fellow workers intentionally avoided possible gains garnered from the violation of trade secrets, the motivation for such avoidance is ambiguous. Thus, individuals are more likely to make inferences about descriptive norms of legal disobedience than about descriptive norms of legal obedience. They will thereby tend to underestimate the effect that trade-secret laws have on people’s decisions on whether or not to disclose trade secrets.

The overestimation of the amount of shared information might be related to the dynamic described in the previous section regarding the differences in interests between the information-accepting and information-producing firms. Know-how information goes with a departing employee from Firm A to Firm B. Colleagues in Firm B are very likely to hear about the new information that has arrived, since this information could change their current methodology. The newcomer might not feel a need to conceal the disclosure because their action is benefiting the current company. His peers in the current company (B) might not be able to determine how protected the information was in the previous company and how important it was to the company, so the social status of “theft” is not salient in the social interaction. Hence, because the activity of disclosure occurs in the information-accepting firms, the activity will not be disguised and is likely to be widely diffused.

Consequently, individuals might underestimate the cost and overestimate the benefits associated with using trade secrets. Such a bias is even more likely, in consideration of the social influence element of learning from success.

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292 Since there is no gap between public behavior and private attitude when someone is violating the law it is possible to infer what they think about the law; however if someone doesn’t violate the law this inference is no longer possible.

293 Baumart found that more than half of his subjects thought that businessmen in the U.S. are not ethical. R. Baumart, How Ethical Are Businessmen? HARV. BUS. REV. 156 (1961). (Overall, pluralistic-ignorance theorists argue that individuals underestimate other people’s adherence to social motives.)

294 Miller & Prentice supra note 290 argue that the cause of pluralistic ignorance is related to the correspondence bias. That is, people attribute others’ behavior to internal stimuli and not to social motives. The outcome in the context of trade secrets (or in inferring any legal norm form of behavior), is that people are less likely to attribute avoidance of trade-secrets usage to legal norms.

295 A similar hypothesis is suggested with regards to ethics in business by Ronald Buckley, Michael G. Harvey and Danielle S. Beu, The Role of Pluralistic Ignorance in the Perception of Unethical Behavior, 23 J. BUSINESS ETHICS 353 (2001). They suggest that there is an actual ethical majority in the world but a perceived ethical minority, and that society should inform young people about this fact since they will not be able to infer it without such help.

296 See Robert Cooter & Melvin A. Eisenberg, Fairness, Character, and Efficiency in Firms. (Symposium on Norms and Corporate Law) 149 U PA. L. REV. 1717 (2001). For a discussion of firm-specific fairness - that is, norms that benefit only the firm.

297 See Norbert L. Kerr Anonymity and Social Control in Social Dilemmas in RESOLVING SOCIAL DILEMMAS (Margaret Foddy ed. 1999) at p. 103, suggesting that, lacking monitoring by those who can sanction the individual, the fact that the individual can be identified does not ensure compliance to the norm.

298 Cialdini concludes that, given the informative function of descriptive norms, we are much more likely to follow the steps of successful others than of those for whom the behavioral outcome is unknown. Robert Cialdini, Social Influence: Social Norms, Conformity, and Compliance, in the HANDBOOK OF SOCIAL PSYCHOLOGY 151, 155 (1998).
words, even if taking confidential information was an efficient move for some, others might get the wrong impression about the acceptability of such a move and disclose information simply because they failed to discern any normative requirement to act in accordance with the trade-secret laws. Hence employers’ (reputation) cost of punishment diminishes with the increase in the perceived number of employees who obey the norm. Overestimation of the number of employees who take more information than the law/norm allows for will thus decrease the perceived social costs and may, in the long run, have an effect on the types of behaviors internalized by people.

Another factor contributing to the perception that certain negative norms are more salient than positive norms is evident in research showing that deviant behaviors were twice as likely to be publicly shared, especially with regard to “borderline” activities (e.g. marijuana use). Might a similar problem have arisen in the context of trade secrets? Given the private nature of trade secrets, the existence of a “spiral of silence” might cause people to overestimate the degree to which public expressions reflect the distribution of the private behavior of engineers in Silicon Valley.

D. Underestimation of the Abstention of Trade-Secrets Disclosure by Coworkers.

Another type of documented bias in the context of consensus estimation that suggests that employees might overestimate the number of trade-secret violations in Silicon Valley is the uniqueness bias. This bias may emerge in a number of contexts, but the one of interest in our current discussion relates to morally desirable activities. According to the uniqueness bias, people have a tendency to underestimate the consensus of desirable behaviors; Goethals found that this bias was strongest with regard to moral reasoning. Legal theory’s attempt to use norms as a tool to support engagement in socially benefiting behaviors might here face a huge informational obstacle, wherein norms’ ability to draw people away from self-interested behaviors is undermined. Similarly, it was found that people view their good behaviors as unique and their bad behaviors as common. This could mean that even those who would consider abstaining from violations of trade secrets might feel that the consensus is less moral, thereby underestimating the social costs of engaging in immoral acts.

299 See Robert D. Cooter, Decentralized law for a complex economy: the structural approach to adjudicating the new law merchant. (Symposium: Law, Economics, & Norms) 144 U PA L. REV 1643 (1996) at p. 1671: increase in the proportion of enforcers of norms → decrease in the cost of punishment. In our case, it seems reasonable to assume that the cost of punishment will decrease if employers believe that fewer employees will see their move of filing a lawsuit in a negative light.

300 James W. Brown, Daniel Glaser, Elaine Waxer & Gilbert Geis, Turning Off: Cessation of Marijuana Use after College, 21 SOCIAL PROBLEMS 527 (1974). In my view one might wonder whether volunteering to participate in a study amounts to “publicly sharing one’s views.”

301 See Miller & Prentice, Supra Note 290, at p. 808 for a discussion of the role of the media in the phenomenon of the “spiral of silence.”


303 Id at p 37.

304 Gary Marks, Thinking One’s Abilities Are Unique and One’s Opinions Are Common, 10 PERSONALITY & SOC. PSYCH. BULLETIN 203 (1984).
The above-mentioned theories all provide grounds, then, for a market failure in the perception of the norm: employees are more likely to exaggerate, rather than underestimate the amount of information disclosure in Silicon Valley, and hence might change their behavior to meet an even greater level of violation.

1. False Consensus

According to the false consensus effect, people overestimate the number of others behaving in a manner similar to themselves. People whose own views favor the disclosure of trade secrets might engage another type of bias when trying to discern the trade-secrets norms in the Valley. An opportunistic employee might imagine that a greater number of colleagues would act as she herself has chosen to act, thus reducing the efficacy of acceptable norms that were designed to curb opportunistic behavior. As opposed to the somewhat obscure questions asked in the studies conducted by psychologists that people are unlikely to have ever even considered, in the context of trade secrets, we are confronting a situation that people do tend to think about.

Even more problematic from a normative perspective is the fact that people who hold minority views tend to overestimate the content of the norm while those who hold majority views tend to underestimate it. Following the assumption that majority norms are more efficient than minority norms, their overestimation might prevent an effective conversion by holders of those norms. In order for social consensus to change his views, a person needs to know that he is in the minority. If we consider a norm in which the use of courts involves a loss of reputation to companies, individuals in the minority who wrongly believe that their views about trade secrets are dominant might use certain types of trade secrets, even if the norm was against such use.

Many of the biases I have reviewed here, have very recently been beautifully demonstrated in a social dilemma context. Monin and Norton were able to show that people, who comply with a ban on showering, thought that most others complied.

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305 See Table 5 for empirical support of this point.

306 Lee Ross, David Greene, Pamela House, The False Consensus Effect: An Ego-centric Bias in Social Perception and Attribution Processes, 13 (3) J. EXPERIMENTAL SOC. PSYCH. 279 (1977). But see also Anne-Marie de la Haye, A Methodological Note About The Measurement Of The False Consensus Effect, 30 EUROPEAN JOURNAL OF SOCIAL PSYCHOLOGY 569 (2000) (demonstrating the mistakes that Ross et al made in their measurements). In addition Dawes, et al, (Robyn M Dawes, Matthew Mulford, The False Consensus Effect And Overconfidence: Flaws In Judgment Or Flaws In How We Study Judgment? 65 (3) ORGANIZATIONAL BEHAVIOR & HUMAN DECISION PROCESSES 201(1996)) also question the existence of the false consensus effect, basically showing the opposite, i.e. that the more people thought others were like them, the more accurate they were in their estimations of their behavior.

307 Thus if someone tends to violate trade secrets, social consensus alone is not likely to lead him to understand that he is disclosing more secrets than the norm allows for.

308 E.g. willingness to walk in Stanford with advertising board.

310 But see Paul G. Mahoney & Chris Sanchirico Competing Norms And Social Evolution: Is the Fittest Norm Efficient? (Symposium on Norms and Corporate Law) 149 U PA L. REV. 2027 (2001). (Using an evolutionary game theory perspective, they argue that the idea of efficiency of norms is overstated.)

to, but that those who don’t comply with the ban thought that most others also failed to comply. While these authors didn’t take a policy-oriented approach, their findings demonstrate how the false consensus caused a normative failure, since it was precisely those who we wanted to change their views (non-compliers) who believed themselves to be in the majority. Moreover the authors show that, when the ban was in place (making showering an undesirable behavior), all respondents underestimated the number of people who were obeying the ban. Thus, again, only when the ban was in place did people overestimate the number of people who took showers. Once the ban was removed, this was no longer the case.

2. Motivationally-Driven Constructive Social Comparison

The penumbra problem, which some consider to be inclusive of all of the above-mentioned biases, is a form of “constructive social comparison”. This social phenomenon describes, in short, a situation whereby people make false presumptions about how others behave in order to preserve their own self-esteem. With fewer salient and certain social sanctions, people are more likely to invent false realities to preserve their own sense of self-dignity without giving up their own self-interests.

The notion of esteem as a motivating force in obedience to norms and laws has captured the attention of many legal scholars as well as social scientists. Professor McAdams’ widely cited paper examining people’s motivation for obeying social norms focuses on what he calls “competition for esteem.” Similarly, Professor Kahan has used concepts of shaming and shunning as important factors in the social enforcement of laws and social norms. Obviously, constructive social comparison doesn’t eliminate the impact of actual social comparison on people’s behavior; however, given that in most cases people will act based on their perceived social norms, it is important to be aware of the limits of esteem-based sanctions.

First, the concept of constructive social comparison suggests that if people are interested in self-validation they are likely to envision changes in others’ behavior; therefore, competition for esteem doesn’t ensure that people will compete to engage in true socially-desired, behaviors. Second, the assumption that people will

312 Avoiding or inventing social reality when one suspects that the social practice might prevent him from following his own self-interest. Jerry Suls, In search of the false-uniqueness phenomenon: Fear and estimates of social consensus, 52 J PERSONALITY & SOC. PSYCH. 211 (1987).

See also Ladd Wheeler, Motivation as a determinant of upward comparison, 2 J. EXPERIMENTAL SOCIAL PSYCH. 27 (1966)


316 See Chaim Fershtman and Yoram Weiss, Why Do We Care What Others Think About Us? In ECONOMICS, VALUES AND ORGANIZATIONS, Supra note 1, pp 133-150, for a formal analysis of people’s quest for status.

always look to society for cues is far from accurate, especially with regard to situations that might trigger embarrassment when such a comparison is made, since in both adolescence and in adult life, people can socially reward themselves. Third, that people might actually engage in a downward rather than an upward comparison could jeopardize the competition for esteem. In this scenario, people’s need for high self-esteem might cause them to seek out others who behave worse than themselves.

This short demonstration suggests that the policymaker need to ensure an objective parameter (i.e. law) that would avoid a situation whereby people’s self-motivated comparison risks leading them to biased estimations. The state must ensure that norms are viewed as means of avoiding social sanctions and future reputation loss, and not only as a source for esteem which, lacking any incentives for tracking objective reality, might be motivationally constructed. Thus, effective deterrence could improve the expressive function of the law because it could cause people to engage in comparison not only when they are interested in preserving their esteem, but also when they need to determine how to avoid being sanctioned. Social psychological theory teaches us that people will be more accurate in their estimation of the norm if their motivation is to avoid punishment than they will if their motivation is to gain esteem and respect.

3. The Potential Effects of Overestimation on the Deterrence and Internalization Models

Naturally the importance of the accurate estimation of the norm, which is being seen mainly as a coordination perspective, is especially crucial for the expressive function of the law. From a coordination perspective, an overestimation of the number of excessive violation of trade secrets could destabilize any social equilibrium - any perceived shift in the norm could lead to an actual change in the norm, and so on. Nonetheless, it seems that a systematic bias in the perception of the norm is shown by the deterrence and internalization models also to have a potentially devastating effect.

From a deterrence perspective, an overestimation of the number of trade secrets in the Valley would cause people to believe that they are less likely to be socially and/or legally punished. Similarly, if an employer overestimated the number of trade-secret violations that occur in the Valley, she would be less likely to punish others. She would overestimate the reputation costs associated with filing a lawsuit, perceiving the behavior to be more common than it is in reality.

From an internalization perspective, overestimation alters the psychological contract. In the context of trade secrets, it would change the perception of what a

319 For example, Batson et al show the limitations of non-instrumental self-control by focusing on what they call moral hypocrisy– (C. Daniel Batson, Elizabeth R Thompson, Greg Seuferling; Heather Whitney & John A. Strongman, Moral Hypocrisy: Appearing Moral To Ourselves Without Being So, 77 J PERSONALITY & SOC. PSYCH. 525 (1999)); they show that 70-80% of their subjects gave themselves the better assignment, though only 10% thought that this was the moral thing to do.


322 See Cooter (1996) supra note 299. See also the discussion in the first section of Feldman, Expressive law.

323 For a discussion of the interrelationship between the various normative aspects, especially between what would be done and what should be done, see Folger and Cropanzano, supra note 251, at 26-27.
A typical employee could use upon leaving a company. Employees who are told that they are not allowed to use certain types of trade secrets might feel that such demand is unfair given the fact that so many other employees use them. In the long run, biased perceptions of the consensus will change not only the perception of the act’s fairness, which prohibits them, but also the morality associated with disobeying the legal requirement.

E. Empirical Evidence For the Limits of Non-Formal Controls (Bounded Rationality Perspective)

1. Overestimation of the Number of Trade-Secrets Violations in Silicon Valley (uniqueness bias)

44.8% of the participants in the study were more likely than not to violate the laws of trade secrets.

However, when they estimated the proportion of employees in their company who would violate the law of trade secrets, the average answer was that 57% would violate the law.

When asked about the proportion of employees in Silicon Valley in general that would violate the laws of trade secrets, the average answer was that 68% would violate the law.

Figure 4: Perceived and Self-Reported Proportion of Employees Who Share Trade Secrets (in %).

The overestimation was even stronger with regard to trade secrets intentionally downloaded to one’s personal computer.

Only 20% said that they would download trade secrets and use it in a different company. They estimated that 43% of their peers would do so, and that 62% of the employees in Silicon Valley would do so.

In an ANOVA analysis, all gaps between the measures of the co-workers and Silicon Valley employees were found to be significant.


325 See MacCoun (1993) supra note 197, for a discussion of the difference between the morality of the act and the morality of the law.
The gap between the behavior of the individual and that of others was predicted according to the theories reviewed above - in particular the uniqueness bias, which suggests that people will underestimate the morality of their friends. Another interesting significant gap, however, is between one’s co-workers and one’s perception of the norm in Silicon Valley. This gap seems to demonstrate that with less information about the actual behavior of people it is more likely that one will exaggerate the prevalence of unethical behavior. The more people know about the target group (self more than co-workers, co-workers more than general population of Silicon Valley) the less likely they are to attribute unethical behavior. Hence, the cause of this type of normative failure might be broader than simply the gap between self to group, and might imply that with less information about the behavior of other people, individuals will tend to overestimate the amount of support in a population for unethical behavior.

This finding is not conclusive evidence of overestimation for two reasons:
1. My sample is not fully representative. In theory, it could be the case that people were accurate in their perception of the norm and I happened to survey only honest people.
2. Maybe due to social desirability, employees were not honest about their own intentions. They were more likely to be honest about the behavior of others.

2. Overestimation of Trade-Secrets Violation by Violators (False Consensus)

The other overestimation discussed above is related to the overestimation of one’s own views.

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326 This gap could be related to in-group - out-group relations, in which the individual will tend to see his group as superior to the members of the out-group; or it might be related some commitment of secrecy that the individual has made to his own co-workers (i.e. not to report their unethical behavior).

327 Similarly, employees might be more likely to admit that their coworkers share information than they would be to admit that their friends share information.
Figure 5: Relationship Between Participant’s Own Likelihood Of Violating Trade Secrets, And His Estimation Of The Proportion Of Employees In Silicon Valley Would Violate The Law.

As can be seen in Figure 5, employees who were likely to violate the law were more likely to believe that most other employees in Silicon Valley do likewise. Employees who were less likely to violate the law were more likely to think that very few people in the Valley in fact violate trade secrets.

This finding is not conclusive evidence for overestimation, since the causal effect might be reversed. Thus while false consensus means: own behavior--> norm, it could be, in fact: the perceived norm -->behavior.328

Tentative Summary

The main theme that I wanted to develop in this paper is that a situation in which the law forbids common or unavoidable acts might limit the ability of trade-secrets laws to trigger both formal and informal social monitoring. I have argued that when we combine the fact that trade-secret laws are very broadly defined (relative to the norms in Silicon Valley and, consequently, the intuition of high-tech employees there) with the fact that many employees have a very vague notion as to what law says exactly, we find that the effectiveness of trade-secret laws have diminished. Most of the empirical and theoretical arguments in section III have demonstrated how ineffective the laws of trade secrets are from a deterrence and expression perspectives.

328 In general, the effect of false consensus and the means of measuring it are somewhat controversial. See for example Dawes & Mulford, Supra note 306.
Moreover, I have shown that the ambiguity of the law and awareness to legality has led to an increase on the reliance on norms. In sections IV and V I have demonstrated the social and cognitive limitations of social norms, respectively. I have reviewed on the descriptive, injunctive and internal levels what are, in my opinion, the causes of our present situation in which social norms will not operate well, and have done so on the descriptive, injunctive and internal levels. The failures reviewed in these three sections suggest that change must be enacted to remedy some of these failures. Hence, in this section I will suggest a few changes in the law that would improve its deterrence and expressive function and, hence, improve its role in the social monitoring of information sharing. I will focus on the ability of the law to enforce information sharing at a level that even the most liberal supporters of free mobility would agree on as being counter-productive. I think it is impossible to ignore the advantages of free-mobility but find it problematic that, although the proponents of that perspective all admit that some limits should be placed on the amount of information that may be passed between companies, they fail to suggest how such a limitation would be achieved. With the perspective of social enforcement in mind, then, I will now suggest a few preliminary changes in the law that could help to fulfill this mission.

VI. Expressive Implications: Preliminary Suggestions.

A. Putting the Expressive Implications in Context.

Before outlining, in short, some of the expressive implications of the first chapter’s behavioral analysis I wish to contextualize their implications.

First, the reader should be aware that in the second and third parts of the dissertation I revisit these conclusions from a broader perspective. In the second part I discuss the effect of the law on norms, and in the third part I discuss the importance of tangibility and authorship in employees’ perceptions of the prevalence and desirability of trade-secrets sharing. Based on the empirical findings of those chapters with regard to the interaction between the law, the norm and the type of sharing, I reach conclusions regarding the source of the law’s power and the ability of trade-secrets law to change employees’ intention, morality and perception of the consensus, when controlling for various factors. Hence, the expressive implications made here are tentative and reflect the behavioral findings of the research conducted for this chapter.

Second, the suggestions I make here are not only preliminary they are also partial, in the sense that they represent only the behavioral aspects of regulation. As I note at various points throughout this part there are many other policy concerns at stake, such as human capital, efficiency, etc. For example, clarity, though important from a behavioral perspective, might be costly from a human capital perspective, for here ambiguity serves the potentially justified rationale of making it difficult for the employee to plan in advance which part of the capital will stay with her upon leaving the company, etc. The implications outlined here are thus only meaningful to the extent to which they demonstrate the types of changes that would be recommended based on a behavioral analysis that focuses on issues such as legitimacy and norms management. Those changes are based on my previous argument that in the current normative situation, it seems that the law defines many Silicon Valley employees as
being unlawful. I will argue that proponents of free mobility such as Hyde and Gilson should not leave the laws of trade secrets unchanged, satisfied with the fact that social forces have limited the use of trade secrets. People in the “free mobility” camp admit that at some point the cost of violating trade secrets outweighs the benefits of innovation. Since, as I have argued, neither formal nor informal monitoring is likely to signal to people the types of trade secrets that should be kept in confidence, the law should be changed. The new law should more clearly delimit the bounds of acceptable behavior.

**B. Legalizing the Disclosure of Certain Types Trade Secrets**

*First Approach*

The most radical approach is to make enforceability of decisive importance and to make a dramatic policy change wherein all trade secrets that are unenforceable are made legally permissible for transfer between firms.

The lawmakers should consider announcing that certain activities are no longer a violation of trade secrets. While, as I have stated throughout the chapter, the research approach that I have taken in this study enables me to speak only abstractly relative to the relationship between broad and ambiguous laws, norms and behavior, I will mention some concrete examples to illustrate my point. Lacking a strong economic rationale that could determine which information should or should not be disclosed, these examples are only given for illustrative purpose. From an innovation perspective, it seems that the highest value to innovation reaped from the employee’s mobility is that it allows innovative employees to use know-how information that they had developed previously in new companies, but not information that they had simply learned about in their previous companies.  

An additional type of information that might fall under the definition of efficient disclosure is negative information. It seems to be the case that the positive externalities that result from negative information are at such levels as would justify different normative treatment of these types of information sharing. Another example relates to the question of tangibility: Merges argues that all trade-secret lawsuits in California involve tangible assets that were taken from the previous employer. If this is really the case, and employers feel that they cannot succeed in any lawsuit without proving that tangible assets were taken, why not change the law and focus on preventing disclosure of tangible assets only, thereby reducing the social costs imposed by the broad and unpractical definition of trade secrets. An alternative line of reasoning might follow the rationale that exists relative to copyrights, wherein a distinction is made between trade secrets that are appropriated for the production of better products and trade secrets that are appropriated for the production of similar products.  

While such an approach might prove desirable from the standpoint of the law’s ability to enforce both formally and informally the more severe types of trade secrets, it is perhaps too extreme given our lack of data regarding not only enforceability, but also the desirability of the

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329  See Weiss, *supra* note 11

330  See Dam, *supra* note 92, taking into account factors such as: network externalities, de-factor standard, and switching costs

331  Which is usually the case with regard to start-ups who have no other chance to survive.

332  Based on the fact that some of the R&D costs are saved due to the appropriated trade secrets.
disclosure of various types of trade secrets. For example, legalizing the disclosure of memorized information might drive employees to memorize codes, an activity which seems intuitively inefficient.\textsuperscript{333} Hence, it seems that a more balanced approach should be taken.

\textbf{C. Create A Two-Tier System of Trade Secrets:}

\textit{Second Approach}

A less extreme and more balanced solution would be to create two distinctive and identifiable categories for violations of trade secrets. By creating two categories with different names, employers might be able to sue for violation of excessive disclosure, triggering the social sanctions for such violation without incurring the associations of a broad lawsuit. Thus the disclosure types that I submitted above as candidates for legalization ought to be regulated, according to this approach under a different name. This solution is less extreme because it doesn’t mean that previously forbidden activities will become legal. It means only they will be named and treated differently\textsuperscript{334} than other types of trade secrets.\textsuperscript{335}

The normative situation that these two approaches try to achieve is identical. They both advocate for the demarcation of a clear line in the black letter law between the majority of people in Silicon Valley who would share trade secrets at the typical level and those who would share trade secrets in the excessive level. When it becomes clear to all that an employer bringing a suit against a departing employee is doing so under a law that regulates only the severe violations of the current trade-secret laws, far more employees as well as employers will be able to support the formal enforcement process since the law will help them separate themselves from those who are being sued. This support would come both on the level of not sanctioning the employer who brought the legal suit, and socially sanctioning the employee who disclosed those types of secrets. Moreover, the legitimacy of the law will increase, given that the law will not cause as many employees to feel that they are being unlawful. Thus current definitions which attempt to eliminate all loopholes in the flow of confidential know-how information end up creating a huge normative loophole wherein most employees feel that they are being unlawful. On the other hand, by maintaining that even less severe types of information sharing will be protected under the law, we still allow the employer wishing to prevent against the sharing of those types of secrets the ability to do so, if he is willing to pay the formal and informal costs associated with bringing a suit against a popular practice. This approach would

\textsuperscript{333} The transfer of computer $\rightarrow$ memory $\rightarrow$ computer is both labor expensive and subject to a number of errors. If we think that the use of the secrets is efficient, forcing employees to go through this memorizing process seems ridiculous in the so called ‘information-age’.

\textsuperscript{334} While the suggestions presented here are only preliminary, the distinctive means of treating those two tiers could be related to the evidentiary presumptions, the types of remedies, the ease with which the court will issue injunctions, assumptions with regard to third parties who receive the confidential information, and so on.

\textsuperscript{335} An additional aspect in that context might a reemphasis on the element of wrongdoing in the process of disclosure of trade secrets. Such an alteration could improve the predictability both of the determination of the occurrence of a violation of trade secrets, and of the non-formal social enforcement. It would be another means of separating the “innocent” practices of the majority of Silicon Valley employees from those that we would like to see marginalized.
hence balance the need to legitimize the enforcement of severe trade secrets with the desire to avoid legalizing their disclosure.\textsuperscript{336}  

\textbf{D. Criminalizing Certain Types of Trade Secrets -- The Economic Espionage Act}  

Another policy alternative is to target the use of criminal law in trade secrets. The recent Economic Espionage Act (EEA) passed in 1996,\textsuperscript{337} for example, could be applied to \textit{limited} types of trade-secret violations, rather than invoking the broad approach taken in the current format of the EEA.\textsuperscript{338} A situation in which the EEA is regulating only limited and narrowly defined types of trade secrets could be beneficial\textsuperscript{339} in two distinct ways:  

First, it would enable another distinction among trade-secret violation types. I suspect that if an employee is sued according to the EEA, it will increase the reputation loss of the individual employee and, hence, decrease the reputation loss of the individual employer.\textsuperscript{340} This is probable because the lawsuit would get some legitimacy both from state involvement and from the notion of “general harm” which is associated with criminal laws.\textsuperscript{341}  

Second, it will solve the free-riding problem associated both with the definition of trade secrets and with singly paying all the reputation costs. In criminal procedures, the individual employer is not internalizing all of the costs (legal and social) - the employer gets some sort of subsidy from the state in return for having defined the meaning of trade secrets for other potential law-violators.\textsuperscript{342} Such a move is particularly justified in the context of trade secrets due to the fact that there are large expressive externalities involved, i.e. information conveyed to other employers/employees. Hence, while today some types of trade secrets protected under the law fall under the EEA, following my suggestion the criminal liability

\textsuperscript{336} Given the lack of econometric evidence in support of legalization.  
\textsuperscript{337} 18 USCS § 1831-1839 (2002).  
\textsuperscript{338} Currently the definitions of the EEA are very broad and do not only focus on certain types of information. In fact, to some extent it is even broader than the definition of trade secrets in the (civil) Uniform Trade Secrets Act.  
\textsuperscript{339} But see Geraldine Szott Moolhr, \textit{The Problematic Role Of Criminal Law In Regulating Use Of Information: The Case Of The Economic Espionage Act}, 80 N.C.L. Rev. 853 (2002), who tends to be critical of the usage of criminal law in activities that could improve the well-being of society in general. It seems that part of her critique is based on the fact that the Economic Espionage Act includes all types of confidential information, however.  
\textsuperscript{341} Darley and Robinson (1997) \textit{Supra} note 166, pp 478-479 suggest a critical approach to the blurring of the criminal-civil distinction. One might argue that criminalizing areas that were believed to fall under civil law regime could threaten the credibility of criminal law. However, as mentioned before, my suggestion focuses on a criminalizing of only certain types of trade secrets.  
\textsuperscript{342} The downside of criminal law from a reputation perspective is mainly that the employee might find it relatively easy to insure himself against civil lawsuit, but harder to do so for a criminal charge. If the reputation cost is mainly associated with “scaring away” potential employees, then an employer who is willing to get the police involved might be seen as a less attractive employer to potential employees.
would apply only to the types of information that we would not like to see transferred between companies even according to the proponents of free mobility of employees.

**E. The Social Advantages of Expanding the Lawsuit to Include the New Employer**

The Uniform Trade Secrets Act had made it easier for the hiring company to be sued by the trade-secret owner. According to the Restatement of Torts (1939), there was no way to sue the firm if they did not know that the information consisted, in fact, of trade secrets. This requirement no longer holds under the Uniform Act which has been adopted by most states.

This expansion is being seen primarily as a means of expanding the “pocket” from which the plaintiff could be reimbursed and increasing the impact of the deterrence effect on the new employer. I would like to offer yet another rationale for why it would be better to sue the new employer, following Hyde’s consideration of the reputation costs at stake in the filing of trade-secrets suits. I would argue that a bad reputation is associated with filing a lawsuit against past employees because people disapprove of a situation in which a company is attacking the sources of livelihood of its ex-employees. I am unaware of any bad reputation associated with suing for patent infringement or copyright violations, however, even though such lawsuit could also harm innovation. The reason for this seems to be that a property dispute between two companies is likely to be seen as less shameful for the plaintiff, being much like any other patent infringement. As is evident from studies of jury research, most people tend to identify with individuals to a much larger extent than with corporations. Framing the dispute about trade secrets as a one that exists between corporations could improve the standing of the employer, and reduce the reputation costs that an employer faces.

**F. Why Change The Law If We Can Use Contracts?**

I have argued that, given the small number of cases that reach courts, courts cannot be trusted to give the required information to individuals and, therefore, the law itself needs to be changed to enable a better understanding of what people can and cannot do. The use of contracts, however, could mitigate this lack of guidance, thereby reducing the need for the advocated change in law.

Without limiting the informative value of contracts, I would argue that some of the problems I have mentioned above cannot be solved by contracts alone and, therefore, changes and clarifications in and of the law are still needed.

From the legitimacy perspective of trade-secret laws, a change in the way that NDA contracts are framed would not improve the illegitimacy problem of trade-secrets law in general. It might make it easier for a particular individual to understand what his own company expects him to do, but it is unlikely to improve the degree of legitimacy that an employee would attribute to lawsuits initiated by other companies whose NDA contracts are not accessible to the individual observer.

From the information perspective, employment contracts just aggravate the difficulties involved in clearly defining trade secrets, as they can be generalized across

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different employment relations. Employer-created regulations are even less likely than the law to be suitable for overall clarifications. Moreover, given the limited role of courts in trade-secret enforcement, those outside the firm will be unable to determine whether the departing employee was actually violating any legal obligations in her behavior, and will therefore be even less likely to improve their understanding of the legal status of each activity.

The inability to get accurate information from employment contracts regarding how one can and cannot behave upon leaving demonstrates another failing of contracts, and that is social monitoring. Potential employers and present co-employees cannot know about the specific contract; for example, what the incentive structure of the specific contracts was, what the relationship was like, how specific the requirement not to use the knowledge was, etc. Therefore, it will be very hard for them to interpret whether their colleague’s behavior was allowed or disallowed by the contract and, hence, the ability to improve non-formal enforcement via contracts is limited.

**G. Summary and Conclusion**

In this part I have argued that in the absence of an objective measure such as credible threat of legal action, norms are not likely to prevent opportunistic behavior. Since imposing laws might negatively impact the effectiveness of social norms, there is a need to know, ex-ante, which legal situations are more likely to incur enforcement failures. In the Silicon Valley context, I have questioned those who argue that the limiting of the enforcement of trade-secret laws through social and cultural norms is a cause for “enthusiasm.” I have argued that a situation wherein employers are discouraged from suing their departing employees might, in many ways, reduce the role of the law in the place in where it is most needed. I have showed that the difficulties involved in getting accurate information might make the norm not only unstable, but also biased toward an inefficient disclosure of trade secrets. Particularly in the context of trade secrets I have argued that, even if in some cases the innovative employer could put the trade secret to better use, without accessibility to courts and without objective and permanent costs imposed on those who disclose trade secrets, norms might lead to an inefficient situation. Thus, while I generally tend to agree that the social costs associated with preventing innovative employees from

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344 Transaction costs for employees will especially increase without a unifying standard, due to the high mobility of employees among companies in Silicon Valley.

345 A similar concern, stemming from different reasons, is suggested by David Charny, *Illusions of a Spontaneous Order: "Norms" in Contractual Relationships*, 44 U. Pa. L. Rev. 1841 (1996). Charny describes some of the inefficiencies that could occur due to a lack of sufficient information about the norm, as well as inability to express dissatisfaction about the norm.


347 Hyde, supra note 38.

348 The costs could be in the form of liability rule and not necessarily injunction rule. Without some sort of internalization of the costs by employees, norms alone could not guarantee efficient diffusion of information. That is, without any clear cost to the employee, he might transfer information without considering whether such information transfer is really efficient. By imposing an objective cost, we force the employee to use the information only when the benefit from the disclosure is greater than the cost that he or his new company will have to pay. Ambiguity as to what constitutes a violation of trade secrets and uncertainty about possible social sanctions might lead people to take inefficient steps.
competing with their previous employers are significant, a norm based on a consistent violation of the law and a negative reputation risked in the use of courts might lead to a situation in which people excessively disclose trade secrets at an inefficient level. I have argued that in the current situation there is a good chance that many justified and welfare-maximizing lawsuits might never reach the courts due to the currently ambiguous normative status of trade secrets in Silicon Valley. I have concluded that, without a change in the law that would help people discern unacceptable behavior, norms alone can not ensure efficient monitoring. Thus, the law should be responsive to norms349 in order to avoid being perceived as not credible, not relevant and illegitimate.

H. Future Research

There are number of arguments made in this part that could be greatly strengthened by the following empirical theoretical steps:

First, economists should pursue a more rigorous econometric study in an attempt to ascertain which types of trade secrets should be disclosed. A number of economists currently stick to the traditional economic argument that views the protection of trade secrets as a necessary measure to give employers an incentive to invest in R&D and employee training. Other more “cutting edge” economists tend to focus on the positive effects of inter-firm information sharing for certain industries. While the view taken in this part is that the truth lies somewhere between these two approaches and that enforceability is key, the arguments made in this part could be made much stronger were a clear line to be drawn between permissible and impermissible types of trade-secrets disclosures.

Second, people’s intuitions with regard to efficiency should be measured as well. In this study I have not measured whether people’s perception of efficiency might have any effect on their decisions. In discussing the limits of social norms I have focused on failures that could arise from misperception of the consensus and social costs, as well as the interdependence of the prevalence of the practice and morality, which might undermine the functioning of internal controls (first party enforcement). A different compelling path of analysis would examine whether the efficiency of the practice would have any effect on people’s normative evaluations. For example, we may perceive a difference between the efficiency of sharing customer lists and that of sharing negative information in the sense that the latter might improve the overall efficiency, and the former might not. Hence, it may be important to determine what the potential effect that estimations of efficiency may have on people’s normative evaluations. This line of reasoning potentially suggests a

349 It should be recognized that at this point, I take a more simplistic approach, as compared to the normative puzzle that I present at the end of the dissertation regarding the ability of trade secrets law to lead to a normative change. At the end of the second and third parts of the dissertation I will return to this discussion, treating it from a broader perspective. The approach that I take in Part I is that, given that in its current state it will not be respected by people, the law should be changed. In the second part of the dissertation, however, I show that it is able, even in its current state, to change people’s view of morality. In the third part I show that people see a major difference in employees’ normative evaluations with regard to the different types of information sharing, though it is not clear whether or not these intuitions coincide with the efficiency requirement. Hence I conclude that the power of the law should be perhaps be invoked to change the norm rather than conceding to its supremacy, and I suggest that the current data leads us to no definitive policy implications.
separate first-party enforcement that might be less likely to be effected by the prevalence of the practice than is morality.

Third, further investigation should aim to refine the perceived consensus among high-tech employees with regard to the line between permissible and impermissible use of information. The approach taken in this study, as demonstrated at greater length in the third part of the dissertation, is to examine employees’ attitudes toward three different types of information sharing. The focus on manipulated vignettes carries many advantages that I focus on throughout the dissertation. However, future research could seek to improve our understanding of where employees would draw the line between permissible and impermissible behaviors. This could be achieved by presenting all employees with a large number of behaviors organized on a scale, as opposed to the three manipulated activity types examined in this study. When all participants are presented with a greater number of scenarios, with more refined differences between them, they will be able to make a reasoned decision as to where they think the line should be drawn. By conducting such research, it will be possible to get a much better account of the evolution of norms, that is, where will be the new equilibrium without the law. Will it get to a situation in which any type of sharing is allowed, or will it reach some point in which even the norm in itself will constrain certain opportunistic behaviors. The results I have gathered in this part of the dissertation, suggest that employees were able to recognize that even the information accepting firm will approve in a decreasing level, gross violations of trade-secrets laws. Nonetheless, the fact that I manipulated only three types of activities, without any extreme cases of trade secrets, limit my ability to get a better understanding of what will be the new equilibrium without a law.