In the Shadow of the State:

Self-Regulatory Trajectories in a Digital Age

Abraham Newman and David Bach

Department of Political Science
University of California, Berkeley

Berkeley Roundtable on the International Economy (BRIE)
2234 Piedmont Avenue #2322
Berkeley, CA 94720-2322

aben@uclink4.berkeley.edu
bach@socrates.berkeley.edu

Paper prepared for the 2001 Annual Convention of the
American Political Science Association

San Francisco, CA
30 August – 2 September 2001

Introduction

Few outside the small community of network specialists and information technology experts knew much about the nature of the Internet when it surged to public prominence in the mid-1990s. Those familiar with the technology asserted that governments did not possess any methods of enforcement in cyberspace because "the Net interprets censorship as damage and routes around it."[1] Some students of politics hailed the rise of the Internet and the image of a networked world as indisputable evidence that the age of the nation state was coming to an end.[2] Global, non-hierarchical and all-inclusive, the Internet represented the prototypical antithesis of the modern territorial nation state. The nation state's authority, it was suggested, would inevitably decline as the Internet penetrated ever more areas of life.

Just a few years into the Internet revolution it is evident that the early notion of a simple zero-sum relationship between Internet reach and state authority is severely flawed. The Internet – and digital network technologies and their applications more generally – certainly destabilized many post-war domestic regulatory bargains, creating pressures for governments to recreate political equilibria in various policy fields. Political debates in areas as diverse as taxation and tariffs, intellectual property protection and contract enforcement, or free speech and privacy protection have been reopened. At the same time, and confirming partially the claims by libertarian technoanarchists, the distributed and largely decentralized character of the underlying technology has undermined many conventional regulatory strategies of government command and control in cyberspace.[3] Moreover, the interpenetration of formerly discrete national markets made possible by their digitization and interlinkage via communications and data networks has transformed many domestic regulatory decisions into actions with international consequences. These challenges notwithstanding, libertarian technoanarchists were simply wrong in their claim that cyberspace permitted no regulatory intervention whatsoever.[4] It is increasingly apparent that it is not a question *whether* regulation will occur, but rather *what type* of controls will appear in a given policy area.[5]

Thanks to Jonah Levy, Po Numina, Craig Pollack, AnnaLee Saxenian, Sara Watson, Steve Weber, John Zysman, and seminar participants at the Max-Planck-Institute for the Study of Societies in Cologne for helpful comments and suggestions on an earlier draft.

[1] See Barlow (1996). The quote is from John Gilmore, as reported in Lewis (1996).
[2] See, for example, Mathews (1997), Ohmae (1999), and Friedman (1999).
[3] See, for example, Johnson and Post (1996). For a discussion of "command and control" regulation, see Baldwin and Cave (1999).
[4] Larry Lessig has written an entire book showing that there is nothing inherent in the Internet and its enabling technologies that makes it free or "unregulable," as he puts it. The character and extent of controls on the web is solely determined by its architecture, both in terms of hardware and in terms of software. See Lessig (1999). See also Marsden (2000).
[5] See Cohen, DeLong, Weber and Zysman (2001), and Marsden (2000).

Over the last few years, policy-makers on both sides of the Atlantic have considered various regulatory alternatives. As is well known, contrasting policy objectives and styles in the United States and Europe have been the source of many recent trade conflicts among the two.[6] The U.S. views many European regulatory initiatives as interventionist and heavy handed while Europeans charge the U.S. government with inaction and overreliance on market mechanisms. Against this background it may surprise that policy-makers in the U.S. and the EU increasingly rely on the same strategy to address a large number of regulatory challenges posed by the "E-conomy"[7]: industry self-regulation. Given the scarcity of single access points for conventional regulatory tools, governments want to rely on the capacity of industry sectors to guarantee the provision of social goods. This does not mean, however, that the state retreats from the regulatory stage, creating a world ruled solely by international business and global markets. To the contrary, meaningful industry self-regulation only happens when firms agree that it is in their self-interest to cooperate with their competitors. And the state plays a critical role in bringing about these "agreements."

The centrality of the state's role in bringing about and sustaining industry self-regulation means that the state must continue to feature prominently in investigations of the changing terms of market competition in a digital age. Analytically, we contend, understanding the role of the state matters even more when self-regulation is pervasive. Conventional government enforcement strategies of command and control tend to be overt and differences across countries can consequently be identified in a straightforward manner (explaining their origin and their implications may of course be much harder). The state's role in the self-regulatory process, in contrast, is both subtler and more nuanced. Extending the work of Fritz Scharpf and his associates, we argue that the *shadow of the state* is a critical stimulus for industry self-regulation.[8] Governments alter firms' cost-benefit analysis, inducing industry cooperation and collective action. Naturally, different states have distinct tools, rooted in various political economic institutions, to encourage self-regulation. Variance across the critical institutions alters the way the shadow of the state is cast over industries and sets states on distinct self-regulatory trajectories.[9] We develop a model of comparative self-regulation that highlights four characteristics of the state/industry relationship that shape the character of self-regulation in political economies: business coordination capacity, strength of the judiciary, carrot

[6] The best-known U.S.-EU trade disputes are certainly in the area of bananas, hormone-treated beef, and genetically modified foods, but disputes have also arisen in the area of online data privacy protection, mobile communications standards, and aircraft noise emission. For an overview, see "At daggers drawn," *The Economist*, U.S. Edition, 8 May 1999.

[7] Cohen, DeLong and Zysman (2000).

[8] Scharpf (1997). See also the contributors to Mayntz and Scharpf (1995).

capacity, and stick capacity. These four dimensions, in turn, produce two ideal-typical self-regulatory images: *legalistic self-regulation* in the U.S. and *coordinated self-regulation* in Europe.

The model helps to explain the persistence of institutionally rooted systems of capitalism despite substantial convergence around industry self-regulation as a preferred regulatory strategy for the E-conomy in the U.S. and EU. Variations in state capacity across the two regions produce distinct shadows, affecting business behavior in unique ways. Not only does the model help illuminate tensions between Americans and Europeans in the area of E-conomy regulation notwithstanding their shared nominal commitment to extensive industry self-regulation, but it also provides a lens through which distinct market trajectories shaped by specific regulatory environments may be understood. While we do not claim to have identified the institutional roots of comparative advantage for the digital age, we suggest that distinct self-regulatory trajectories can contribute to distinct market logics that in turn implicate production possibilities, business strategies, and innovation trajectories.

The paper is organized in four sections. We first briefly define and develop the concept of industry self-regulation before discussing current support among many policy-makers and business leaders for extensive self-regulation of the E-conomy. The following section develops an institutional model of comparative self-regulation. Subsequently, we evaluate the model by exploring some preliminary hypotheses drawn from it in the context of two currently hotly debated E-conomy policy issues: free speech and privacy. In concluding, we briefly examine some implications of distinct, institutionally rooted self-regulatory trajectories in Europe and the U.S. Implications both for the relations among the two regions and the comparative development of E-conomies in the two regions are considered.

This study does not develop robust analytic categories for the study of comparative political economy in a digital age. Neither does it subordinate hypotheses derived from the model to a definitive test of the correctness of our assertions. Rather, our goal is to spark a discussion about the role of differential state capacities in the formation and maintenance of self-regulatory regimes, and the analytic leverage such a more nuanced view offers for the comparative study of "political e-conomy."

E-commerce Regulatory Strategies

Three prototypical regulatory strategies – market, government, and industry self-regulation – set the backdrop for investigating emerging regulatory outcomes in the digital era. Each governance system has distinct features that effect business and innovation trajectories. An extensive literature

[9] For the notion of institutionally rooted development trajectories that set political economies apart, see Zysman

explores the merits and pitfalls of regulating through the market or through government[10], yet self-regulation is often overlooked as the bastard child of the group. Although the market and government modes of regulation will continue to offer appropriate solutions to countless digital dilemmas, we focus here on self-regulation to broaden our understanding of the ever-increasing popularity of self-regulatory schemes in the field of Internet regulation. It is critical to explore the mechanics of self-regulatory strategies so that we might describe how they vary across regional settings and potentially produce differential institutional comparative advantages.

Self-regulation is derived, yet distinct, from market and government modes of regulation. Neil Gunningham and Joseph Rees define self-regulation as "a regulatory process whereby an industry-level (as opposed to a governmental or firm-level) organization sets rules and standards (codes of practice) relating to the conduct of firms in the industry. This definition implies that industry self-regulation requires firms in the industry to decide to cooperate with each other."[11] Acknowledging market failures and government inflexibility, the self-regulation model emphasizes the necessity of industry-wide coordination and cooperation for successful regulation. Quasi-private institutions monitor firm level activity and act as a clearinghouse for consumer concerns. Although states frequently intervene to motivate industry self-regulation, private actors receive primary agency in the process.

In order to understand the political economy of self-regulation, it is necessary to explicate the concept. A legislative, executive, and adjudicative phase of self-regulation can be distinguished. Rules must be created, implemented, and enforced. One of the most common forms of self-regulation, industry codes-of-conduct, typically focuses on rule creation. Some self-regulatory structures, though, have effective enforcement mechanisms which rely primarily on peer pressure and membership exclusion. Instead of the state proscribing outcomes and enforcement mechanisms, industries develop their own processes of achieving socially desirable ends. Additionally, this focus on industry-level rules and self-policing is in contrast to the market mode of regulation, where rules are supplied on the level of the firm and enforced through market competition.

(1994).

[10] For a general discussion of regulatory strategies, see Baldwin and Cave (1999). Swire (1997) offers an insightful discussion of the challenges encountered by pure market and pure government modes of regulation in the case of privacy protection on the Internet. Whereas government enforcement is often hampered by being too slow and too inflexible for rapidly changing technology and business contexts, information asymmetries and externalities generally favor businesses over consumers, rendering pure market strategies ineffective for the provision of many social goods.

[11] Gunningham and Rees (1997), p. 365.

The idea and practice of self-regulation reaches back historically to at least the guild and merchant systems of the Middle Ages. Curiously, however, the literature on regulation rarely gives much credence to its potential effectiveness. Proponents argue that it is an especially appropriate regulatory solution for many challenges posed by digital technologies. First, the dynamic nature of high technology and the volatility of business practices in this era of experimentation mandates flexible governance structures. Self-regulation provides industry experts substantial say in rule-making and offers flexibility in the adaptation of standards to changed market conditions. Second, self-regulation is often seen as beneficial for industry reputation. Consumers recognize industry efforts to meet their demands, increasing confidence in the sector. Finally, self-regulation avoids many of the political and financial battles surrounding government regulation.[12]

It is no surprise then that both U.S. and European policy-makers have embraced widespread experimentation with self-regulation in many areas of e-commerce. In 1997, President Clinton and Vice-President Gore presented the U.S. government's *Framework for Global Electronic Commerce* and took the stance that the private sector should attempt to self-regulate the new economy as much as possible in order to ensure maximal flexibility and adaptability as well as minimal obstruction of new forms of business and technology. The report states "governments should encourage industry self-regulation wherever appropriate and support the efforts of private sector organizations to develop mechanisms to facilitate the successful operation of the Internet. Even where collective agreements or standards are necessary, private entities should, where possible, take the lead in organizing them."[13] These principles have since guided the work of many U.S. Government bodies, including the Federal Trade Commission and the Department of Commerce, who have supported self-regulation of many issues related to the Internet and e-commerce.

E-conomy policy-making in Europe to date has largely taken place on the level of the European Union. Since many regulatory challenges posed by digital network technologies and their applications are faced by all EU member states, and because many challenges concern areas of concern to the EU's Single Market, the European Commission has asserted its leadership role in this domain based on the principle of subsidiarity and its role as the guarantor of the Single Market.[14] A

[12] For the merits and disadvantages of self-regulation see Baldwin and Cave (1999), p. 60-61.

[13] The first three principles of the document demonstrate the reliance on self-regulation, "1. The private sector should lead 2. Government should avoid undue restrictions on electronic commerce. 3. Where governmental involvement is needed, its aim should be to support and enforce a predictable, minimalist, consistent and simple legal environment for commerce." See Clinton and Gore (1997).

[14] Simply put, the "principle of subsidiarity" enshrined in the Maastricht Treaty states that policy-making should occur at the lowest level of governance suitable to the problem at hand. Community institutions may only take action in an area that is not already exclusive EU domain (such as external tariff policy, for example) if a problem

few early unilateral initiatives notwithstanding, member states have largely concurred and are coordinating the contours of policy responses on the EU level. Over the past few years, the European counterpart to Washington D.C. in this policy area has therefore been Brussels, not London, Paris or Berlin.

Having experimented with self-regulation on the European level in the context of harmonizing rules and standards for the Single Market,[15] the European Commission in particular has strongly embraced self-regulatory strategies to meet the challenges of the digital age. Responding to the Clinton and Gore paper, Europe's then-Commissioner for Telecommunications, Martin Bangemann, suggested in the fall of 1997 that business should take the lead in developing an internationally coordinated, legally non-binding "International Charter for Electronic Commerce" that would rely heavily on "market-led, industry-driven self-regulatory models."[16] Reaffirming the commitment to self-regulation, Bangemann's successor, Erkki Liikanen, argued that "we should have regulation where it's necessary, and where it's not necessary we can trust self-regulation."[17] Most strongly making the case for self-regulation, Robert Verrue, the Commission's Director General for the Information Society, maintains, "Any detailed regulations are rapidly overtaken by events and can often easily be circumvented. A more flexible approach is therefore necessary … More and more we are exploring, together with industry and user communities, the possibilities afforded by self-regulation and codes of conduct."[18]

Although there thus appears to be a consensus on opposite sides of the Atlantic that self-regulation combines the advantages of the market and government modes of regulation, making self-regulation work is an extremely complex task that requires an agreement by formal competitors to engage in cooperative behavior. Often lamented as a face saving tool of powerful industry groups, many fear that self-regulation benefits firm image while actually permitting the wolf to guard the sheep. Industry newcomers might worry that self-regulation allows dominate player to dictate market terms stifling innovation and entry. Even assuming participants have good intentions, as Mancur Olson and others have shown, the constant, latent threat of defection frequently undermines collective

---

cannot be adequately solved by the member states and if the implementation of an EU-wide solution promises greater success than member state solutions.

[15] See Majone (1996) on the Commission's early failure to harmonize through superimposition of common standards, and its subsequent strategy to harmonize through EC-wide quasi-private self-regulatory bodies.

[16] Bangemann first suggested the development of an "International Charter for Electronic Commerce" at a speech in Geneva in the fall of 1997. The idea was then developed further and published in February 1998. See European Commission (1998a), and European Commission (1998b). The quotation is from the latter.

[17] Erkki Liikanen as quoted in Bloomberg News, 30 November 1999.

[18] Verrue (1999).

action of this kind.[19] Collectively rational behavior becomes individually irrational and public goods are underproduced, the famous "Tragedy of the Commons."[20] Reaching back to the work of Coase, researchers have attempted to describe situations when collective action is possible, identifying several preconditions. Self-regulation is then most likely when companies agree that cooperation is in their mutual benefit, that a large share of companies in the industry are willing to comply with the set standards, and that a robust monitoring and credible enforcement system exists which enables punishment of those that do not play by the rules.[21]

Given this complexity one might ask why, when, or how effective self-regulatory systems come about. Aside from the infrequent but possible case where an entire industry faces ruin if companies fail to cooperate,[22] what makes self-regulation work? Faced with this puzzle, it is our contention that researchers can gain purchase on this problem by examining the role of the state in self-regulatory regimes. Specifically, we borrow from Fritz Scharpf and his associates and argue that the "shadow of the state" is critical for successful industry self-regulation.[23] In light of the cost of running a regulatory machine and the constant threat of defection, businesses must be "motivated" to develop and maintain self-regulatory systems whose rules they feel confident will be enforced. The threat of government intervention, statutory standards, or litigation change the cost/benefit calculus for private actors, increasing the robustness of collective action and attractiveness of collective goods provision. The critical question is *how* the state affects the self-regulatory process. Which tools can it deploy? In other words, *how* is the shadow of the state cast, *how* does it shape the relationship of state and industry, and *how* does it affect the dynamics of intra-industry cooperation. In order to understand cross-national differences in self-regulatory behavior, we contend, one must disaggregate the concept of state capacity and allow for institutionally determined variation of the shadow of the state.

A Comparative Model of Self-Regulation in the Digital Age: *Legalistic* vs. *Coordinated Self-Regulation*

Having demonstrated both the reasons for widespread embrace of industry self-regulation of digital technologies in the abstract as well as the concrete support among industry and policy-makers in Europe and the U.S., we proceed by offering a comparative institutional model of self-regulation.

---

[19] Olson (1965).
[20] Hardin (1968).
[21] Coase (1937), Coase (1960), Ostrom (1990), Williamson (1985).
[22] This was most clearly so with the U.S. nuclear power industry after the Three Mile Island accident. The degree of mutual dependence among companies in the industry was so high that Joseph Rees describes companies as being "hostages of each other." Failure to cooperate and produce a comprehensive self-regulatory regime was certain to lead to sweeping government regulation of the industry. See Rees (1994).

The starting point for this undertaking is the recognition that the state always plays a role in the self-regulatory game.[24] The *kind* of role it plays, however, is determined by the tools it has at its disposal. Using the tools casts a shadow over industry: the *shadow of the state*. The role the state plays – and hence the way the shadow is cast – is thus not so much the result of deliberate political strategy as it is the result of institutional legacies and the distribution of state capacity. Variance in those legacies and capacities leads to variance in the character of self-regulatory trajectories.

We distinguish the political economy of the U.S. and the EU ideal-typically in four dimensions that can be grouped in sets of two. First, we look at two particular institutions of political economy, business coordination capacity and the strength of the judiciary. Second, we differentiate two types of state capacity – carrot capacity and stick capacity. Slicing through the institutional landscape in this fashion is not to imply, however, that the four dimensions are entirely distinct and neatly separable. Quite the opposite is true. All can be said to be codetermined, that is, the extent of state capacity in one dimension may be due to the extent in another. Taken together, the four dimensions provide a robust conceptualization of the distribution of state capacity across institutions of political economy in the two cases. These differing regulatory capacities in the U.S. and EU cast distinct state shadows, producing distinct self-regulatory trajectories: *legalistic self-regulation* and *coordinated self-regulation*. Figure 1 previews the findings.

	U.S.	EU
Business coordination capacity	**Low**	**Medium**
Strength of judiciary	**High**	**Low**
Carrot capacity	**Low**	**High**
Stick capacity	**High**	**Medium**

Figure 1: State Capacity and its Distribution

Low business coordination capacity combined with a strong judiciary and a public sector that is better equipped to threaten sanctions than to offer rewards implies that the shadow of the state in U.S. self-regulation is largely cast by the instruments of institutionalized legalism. Industry, as a result, largely conceives of self-regulation in the U.S. as preemptive regulation, that is, regulation *before* the government gets involved. In the EU, conversely, considerable business coordination capacity combined with a relatively weak judiciary and a public sector that can offer substantial rewards but is

[23] Scharpf (1997), particularly pp. 197-205. See also Mayntz and Scharpf (1995).
[24] Price and Verhulst (2000), pp. 58-60. See also Scharpf (1997).

limited in its ability to sanction sets Europe on a path toward coordinated self-regulation. Here, industry's image of self-regulation has a corporatist twist, that is, the public sector is accepted as a *participant* in the self-regulatory process, albeit mostly in a catalytic or facilitative role.

Coordination Capacity and the Strength of the Judiciary

Coordination capacity is a concept we borrow from David Soskice's work.[25] A political economy's coordination capacity determines the extent to which stakeholders can regulate an industry through informal, cooperative venues. Examples of measures of coordination capacity are interlocking board memberships or wage coordination among employers.[26] In either case, a high degree of business coordination capacity is indicated by a considerable amount of noncompetitive interactions among formally competing firms, and by strong participation in, and a prominent role for, business associations.

The strength of a political economy's judiciary is determined by both macro-institutional factors – the positioning of the judicial branch vis-à-vis other pillars of state and society –, and micro-institutional factors – the administrative rules, procedures and norms governing the internal workings of the judicial branch itself. For our purposes, a strong judiciary is one that can significantly and autonomously shape the regulatory environment of an industry.

Much recent comparative work on regulatory systems develops and operationalizes the contrast between the rather informal, cooperative character of much industry regulation in Europe, and the considerably more formal, legalistic relations among state organs and business in the United States. Differences in business coordination capacity and the strength of the judiciary are the key institutional determinants of this contrast. Robert Kagan's work on the institutional roots of American "adversarial legalism" and his recent comparison of national systems of regulation powerfully demonstrates the influence of institutional legacies on the character of a political economy's regulatory style.[27] Embedded in a "political tradition pervaded by mistrust of both concentrated governmental power and concentrated economic power," Kagan argues, American governmental institutions are characterized by deliberate fragmentation of authority and constraints by law, the famous system of checks-and-balances.[28] A lack of trust in the executive's ability or willingness to enforce the law according to Congress' intentions prompted Congress to establish detailed procedures for the formal consultation of regulated interests as part of administrative rule-making and to insert

[25] Soskice (1999), Hall and Soskice, forthcoming.
[26] For the former, see Stockman, Ziegler and Scott (1985); for the latter, Layard, Nickell and Jackman (1991).
[27] Kagan (1997), and Kagan (2000).
[28] Kagan (2000), p. 15.

the right to sue regulatory agencies. The American government's comparatively strong judicial branch therefore assumes a central and powerful role in the field of industry regulation, a role that has been further enhanced by the spread of tightly regulated statutory agencies in the wake of the expansion of federal responsibilities in the 1960s. Within the realm of judiciaries, the U.S. system is characterized by judges that are politically selected, less bureaucratically oriented and consequently far "more venturesome in reinterpreting legal rules and making new law" than their colleagues abroad.[29] Law by legal precedent and the pervasiveness of judicial review award judges and courts considerable policy-making functions. Industry regulation in a system of adversarial legalism thus frequently consists of agency decrees, subsequent legal challenges by regulated interests, and a judiciary that is called upon to arbitrate between government and business.

If regulatory policy-making in the U.S. is largely characterized by adversarial legalism, Kagan describes Western Europe's prevalent mode of policy-implementation and dispute-resolution as a "combination of expert and political judgment…checked by corporatist arrangements in which business leaders (and in some countries, labor leaders) play a strong consultative role."[30] Besides state institutions, the key principal actors in the informal, cooperative mode of regulation are "organizations defined by their common purpose of defending and promoting functionally-defined interests, i.e. class, sectoral and professional associations," as Wolfgang Streeck and Phillippe C. Schmitter have noted.[31] They continue, "the central principle is that of concertation, or negotiation within and among a limited and fixed set of interest organizations that mutually recognize each other's status and entitlements and that are capable of reaching and implementing relatively stable compromises (*pacts*) in the pursuit of their interests."[32] In other words, interests need to be organized hierarchically and organized interests, in turn, need to be connected in networks.

But a network of credible bargaining partners able to guarantee the compliance of stakeholders they represent alone does not make for a system of informal, cooperative regulation. To make this form of policy-making work, state institutions must have the capacity to contribute their share. For one, the state and its credible threat to pursue more formal venues of regulation is considered essential for effective collective action within many associations. Second, associations can only play a meaningful role in the process of regulation if the corresponding state institution has effective power to delegate authority to the association and bring about a constellation that Streeck and Schmitter

[29] Kagan (2000), p. 13.
[30] Kagan (2000), p. 14.
[31] Streeck and Schmitter (1985), p. 124.
[32] Streeck and Schmitter (1985), p. 124.

have labeled "private interest government."[33] Whereas European governments frequently engage in such delegation of regulatory authority,[34] the non-delegation clause contained in the U.S. Constitutions makes such transfers extremely difficult.[35]

When making the case for a relatively large (as compared to the U.S.) extent of coordination for the EU as a whole, the somewhat lower density of stakeholder networks across European borders as compared to within member states needs to be taken into consideration.[36] Despite the lower density of transnational networks, however, existing transnational networks have played important roles in the past, exemplified, for example, by their contribution to the EC92 project.[37] Having realized the important role European business can play as an ally in the quest for an ever-tighter Single Market, the European Commission deliberately seeks to foster the development of transnational European business networks.[38] Moreover, the information and communication technology industry features some of the densest transnational industry networks in the EU, due in large part to institutionalized cooperation over technical standards in the context of European standards bodies and research and development (R&D) programs specifically designed to forge transnational ties, a point to which we return below. Further highlighting the importance of coordination in EU policy-making is the fact that many directives – particularly in the area of high technology market regulation – are broadly constructed to enable implementation through the various national coordination systems.

While the EU as a whole is far from being the sum of its diverse parts, the presence of national institutions of coordination, the increasing density of transnational networks, particularly in the area of information and communication technology, and a "tradition of coordination" justify considering the EU's business coordination capacity greater than that of the U.S.

More generally, with respect to variation in coordination capacity and the respective strength and autonomy of the judicial systems in Europe and the U.S., Kagan best captures the contrast we wish to emphasize. He suggests that "lawsuits, rights, legal penalties, lawyers, and courts – the building blocks of adversarial legalism – have been the American substitutes for the powerful bureaucracies, corporatist bodies, central banks, keiretsu, and social insurance programs that dominate the regulatory

[33] Streeck and Schmitter (1985), p. 134.

[34] Our comparison pitches the U.S. against the EU as a whole. EU member states naturally differ in the extent and mechanisms of delegation to private bodies. See, for example, Soskice (1999), Kitchelt et al (1999), and Levy (1998) for evaluations of such differences and important qualifications of our blanket assertion. While the analysis focuses on the EU level, it is important to refer to national systems of coordination as EU coordination capacity is rooted in large part on national mechanisms of coordination.

[35] For a recent discussion of the non-delegation clause in the context of Internet regulation, see Froomkin (2000).

[36] Streeck and Schmitter (1991)

[37] Sandholtz and Zysman (1989), Cowles (1995).

[38] Authors' interviews with Commission officials in DG3 and DG 13, Brussels, June 1999.

state in other economically advanced democracies."[39] Importantly, Kagan stresses that the differences between the U.S. regulatory system and its counterparts abroad exist regardless of the actual content of rules and regulation. Substantive legal norms in the U.S. and abroad may be very similar, yet differences in "legal and regulatory style," deeply rooted in respective institutional trajectories and political traditions, set the systems apart.[40] Among others, Jospeh Badaracco's work comparing national regulatory response to a common challenge, and David Vogel's study of environmental regulation in Britain and the U.S. confirm the analytic utility of this ideal-typical contrast.[41]

"Carrot Capacity" and "Stick Capacity"

Rather than treating state capacity in the area of industry self-regulation as a unitary whole, we find it useful to distinguish between a government's "carrot capacity" and its "stick capacity." The former is concerned with the government's ability to make individual and collective social actors better off in exchange for particular behavior: "if you do this, we'll have this reward for you." The latter, in turn, addresses the government's capacity to make actors worse off if a particular behavior is not adopted: "if you don't do this, we'll have this punishment for you."

A government's carrot capacity can manifest itself in numerous ways. Toward the lower end of an imagined scale is the government's ability to confer status and recognition in return for actors' participation in public discussions and consultations with regard to desired public policies and regulation. A government can be considered to have greater carrot capacity if it can offer financial and logistical incentives to bring about sustained participation of organized interests in the regulatory process, or to sponsor ongoing self-regulatory initiatives. Toward the high end of a generic carrot capacity scale is a state's ability to effectively delegate regulatory authority to organized private interests, the ultimate incentive for private actors to engage in the regulatory process.

Stick capacity in the area of regulation can also take on various forms with varying degrees of intensity. In essence, a state's stick capacity is higher the easier it is for the state or one of its branches of government to regulate in disregard of some or all organized interests. The easier such

[39] Kagan (2000), p. 17.

[40] Kagan (2000), p. 3.

[41] Badaracco (1985) compares national regulatory responses to a workers' health and safety threat that surfaced in the PVC industry in the 1970s. He finds that national regulation in Britain, Germany and France was the result of informal bargaining between government and industry officials, whereas the same problem in the U.S. was regulated through a two-step process of agency decree and subsequent litigation. Badaracco explains this divergent outcome as the result of institutional structure: strong hierarchies among both industry and government connected by networks in Europe, and the lack of such hierarchies combined with a strong, autonomous judiciary in the U.S. Vogel (1986)

unilateral regulatory action, the more credible the threat, and consequently the greater the government's capacity to "incentivize" private actors to participate in the regulatory process. A state's stick capacity thus varies with the ability and credibility of the state or one of its agents to take unilateral regulatory action.

Assessing the U.S. federal government's carrot capacity, we find that divided government and the popular movement against so-called "Big Government" significantly constrains Washington's ability to lure private actors into the regulatory process and – more importantly – to do so in a way consistent with goals the government considers in the public interest. In an era when subsidies are generally hard to justify politically, federal policy-makers have attempted to instead leverage the purchasing power of the federal government and its various branches to boost market demand for goods deemed in the public interest (such as fuel efficient cars or recycled paper). However, this type of carrot capacity is frequently hampered by conflicts between the executive and legislative branches and diverging interests at the federal and state level. Furthermore, guaranteeing demand does not unify the supply, risking non-pareto-optimal competing standards in markets with network externalities. Alternatively, while presidential summits on policy issues certainly confer status on the participants, initiatives of this kind are generally not accompanied by financial and logistical support to continue the dialog with a particular policy objective defined by the government. In addition, high-profile summits of this kind are far removed from the actual regulatory process dominated by Congress and regulatory agencies that conduct their own hearings. Lastly, as mentioned above, the non-delegation clause in the U.S. Constitution makes effective delegation of regulatory tasks to industry associations or other private bodies virtually impossible.

On the European side, in contrast, the Commission's role as the EU's techno-bureaucratic executive in charge of both the administration of existing EU policies as well as the crafting of new legislation provides for considerable carrot capacity in Brussels. Having the sole right to propose new legislation, the Commission serves as a single locus for informational summits, lobbying, and hearings on the content of regulation pertaining to the EU's Single Market. Furthermore, the Commission administers the EU's vast R&D funds. It commonly uses control over the R&D budget to forge transnational industry networks, to position itself close to such networks, and to rally support for its activities in corresponding policy domains.[42] Lastly, delegation of regulatory authority to private bodies and state sanctioning of industry standards has long been part of European, primarily

---

has found that "regulatory agencies in America take companies to court more frequently than those of any other country; prosecution in Great Britain is extremely rare."

continental European, political economy. The EU as a whole is no different, as the creation of the European Telecommunications Standards Institute (ETSI) in 1988 demonstrates.[43]

Moving on to stick capacity, we find that divided government in the U.S. actually increases the state's capacity to incentivize private actor to play a role in the regulatory process. The ability of branches of government to act independent of one another creates a latent threat of regulatory intervention. The case of the tobacco industry serves as a vivid example. Responding to popular pressure, various branches of the U.S. government have launched a full array of regulatory arrows at the tobacco industry. The out-of-court settlement between several states, the federal government and the tobacco industry in essence constitutes a sweeping regulatory regime for an industry that previously had not been tightly regulated. The threat of even less favorable terms in a court ruling thus forced an entire industry into a stringent set of rules and regulation. The independent, powerful, and entrepreneurial American judiciary is thus an important repository for stick capacity in the U.S., particularly since independent regulatory agencies such as the FCC, FTC or SEC frequently take firms to court.

Stick capacity on the EU-level is more limited than in the American case. The EU has neither a central regulator for communications services, nor for commerce within the Internal Market. While the Commission's competition Directorate General has played an increasingly central role as "Single Market enforcer" under Commissioners van Miert and Monti, its ability to intervene autonomously is largely limited to instances of anti-competitive behavior and mergers requiring approval by the Commission.[44] On the legislative side, the EU's peculiar and often cumbersome legislative process, with the Commission introducing legislation and legislative authority divided between the Council of Ministers and the European Parliament, puts limits on the credibility of possible threats of swift, regulatory action to "encourage" self-regulation in a particular vein.

---

[42] Sandholtz (1993), for example, stresses the importance of Commission control over R&D budgets in forging a transnational coalition in favor of liberalizing EU telecommunications markets. See Sandholtz (1992) for a general overview of EU high-technology policy and its instrumentalization for various objectives.

[43] Virtually all of ETSI's members are private actors, businesses as well as non-profit interest groups, and the organization's standards are mandatory for public tenders throughout the EU. See Bach (2000). See also, more generally, Majone (1996).

[44] This regulatory tool can be powerful for sure as the Commission's opposition to the Sprint-MCI merger, its conditions for approval of the AOL-Time Warner merger and its recent investigation into potentially anti-competitive collusion in the area of wireless roaming charges demonstrate. In fact, some analysts believe that competition policy in general will become a central industrial policy tool as network effects create demand-side pressures for concentration and oligopoly or even monopoly formation. See, for example, DeLong (1998) and Lemley and McGowan (1998). Despite the notable increase in the Competition DG's activity and influence, its relatively narrow mandate and the pin-pointed character of its interventions has so far not amounted to the kind of industry-encompassing stick capacity of an FCC or FTC.

In many respects, however, it is precisely the often-ambiguous relationship of national and EU-level decision-making that provides EU policy-makers with considerable stick capacity. The story of the creation of Europe's Internal Market is largely one of harmonization of existing national standards and laws as well as one of dismantling – often against fierce national opposition – non-tariff barriers (NTB). Given that the Internet economy is a largely unregulated domain, the rare opportunity has arisen that a single EU-wide regulatory framework could be established from the outset rather than creating a level-playing field slowly over time as a result of countless rounds of negotiation over harmonization and NTB elimination. The European Commission, the body entrusted with the task of safeguarding and driving the Single Market, thus becomes a natural ally of European e-commerce players worried about the prospect of fifteen different national regulatory frameworks. In other words, the main stick at the EU's disposal is the threat of inaction at the EU-level and the associated costs of regulatory fragmentation. In comparison to the U.S. however, the significance of this threat is dulled by the lack of activist national courts empowered to impose additional litigation costs on top of regional regulatory differences.

Two Trajectories

Differences in the distribution of state capacity across institutions, and across types of capacity, lead the state to play different roles in e-commerce self-regulation in the U.S. and EU. The shadow of the state is cast differently. By affecting the nature of government-business relations and by providing business communities with specific incentives for collective action, the differences in distribution and type of state capacity should shape the respective character of self-regulation. Two self-regulatory trajectories can be identified: legalistic self-regulation in the U.S., and coordinated self-regulation in the EU. Several hypotheses about the role of the state, the role of business, the relationship between the two, and the resulting character of e-commerce self-regulatory regimes on opposite sides of the Atlantic can be derived from this model.

We expect the instruments of institutionalized legalism to shape the dynamics of self-regulation in the U.S. Relations among firms as well as between the business community industry and the organs of the state are likely to be formal, spotty, and frequently adversarial. The state is not likely to actively induce and steer collective action within the business community. The impetus for industry-wide collective action will instead come from the credible threat of unfavorable regulatory terms, supplied either by Congress or – more likely – as a result of agency decrees, court rulings and out-of-court settlements. The more credible the threat, the more likely business will engage in meaningful, preemptive self-regulation. When self-regulation occurs, it will be up to the business community to

create and maintain intermediary institutions that develop, enforce and adjudicate industry codes of conduct. In this environment, splits within the business community and competition among rival self-regulatory initiatives should not surprise. Government attempts to leverage its buying power to create markets for public goods may even enhance competition among self-regulatory alternatives. We expect the state to be limited in its ability to intervene and moderate among different initiatives in such instances.

On the European side, we expect self-regulation to be characterized by coordination and to have a flavor of corporatism. The executive branch in particular and the public sector in general are likely to play a far more active role when compared to the American case. The European Commission will make use of its control over EU R&D funds to sponsor self-regulatory initiatives and to foster the growth of transnational industry networks that can be mobilized for self-regulation. The executive branch is also likely to play a role in the creation of intermediary institutions should business alone fail to overcome collective action problems. It will thus play a facilitative, catalytic role in the process of self-regulation, a stark contrast to the much more hands-off U.S. executive. The judiciary, by contrast, is less likely to play a significant role in Europe, particularly on the EU level. Activist courts and legislatures on the national level, however, are likely to strengthen the link between the Commission and transnationally organizing business in the joint pursuit of coordinated self-regulation.

Which institutional legacies in fact shape self-regulation in a digital age? Can we make sense of divergent developments in digital technology regulation on opposite sides of the Atlantic by looking at them through the lens of legalistic self-regulation versus coordinated self-regulation? The next section begins to assess the utility of the model and evaluate the above hypotheses.

The Cases

Explicating the ideas contained in the model of competing self-regulatory trajectories, we briefly investigate two cases of E-conomy policy issues that have seen considerable regulatory activity: free speech and privacy. The cases do not constitute a scientific "test" but instead what Alexander George calls a "plausibility probe" of the argument developed thus far.[45] In each of these examples, the central characteristics of the legalistic and coordinated regimes assert themselves through self-regulatory mechanisms. In each case, the shadow of the state changed non-compliance costs, encouraging diverse actors to settle on new regulatory bargains. The unique state capacities of

[45] George (1979). See also Eckstein (1975).

different political economic systems cast the shadow in distinct ways, producing distinct industry regulatory solutions.

Dangerous Content

As access to the Internet increased, two features of the technology – cyber-reach and liability – grabbed the attention of individuals concerned with free expression and its associated uncomfortable byproducts. Cyber-reach describes the Internet's ability to extend the impact of one's voice beyond typical real space limits.[46] Individuals disseminate ideas to a wide audience with relatively low transaction costs and new groups of consumers access that knowledge at virtually no charge. Tasks, which were previously restricted to large media conglomerates, are feasible for an individual with a personal computer. This revolutionary feature of the Internet, unfortunately, provides those wishing to disseminate illegal speech the same platform that it provides a socially responsible member of the cyber-community. [47] Additionally, speech that might be banned in one country (e.g. Nazi propaganda in Germany) is now easily accessible through sites hosted in countries where such speech is not illegal, questioning the capacity of existing territorial laws to deal with breaches of national speech law.

A second concern motivating the call for new regulation is the ambiguity of liability in the new medium. Who is the editor responsible for content distributed on the Internet? Liability issues are closely wound up with the Internet's ability to simultaneously serve different communication functions. The same technology could act as print media (publishing web sites), personal communication (e-mail), broadcasting (digital video), and community forum (chat rooms). Depending on the specific use, liability issues shift from the individual author to the Internet Service Provider (ISP). During certain tasks, ISPs act as quasi-public utilities providing a transmission channel (e-mail) but at other times they function more like private actors who might have editorial responsibilities (publishing web sites).

Soon after the commercialization of the web, demands arose to limit the power of cyber-reach and to determine liability. Institutions on both continents began offering various solutions to check the

[46] Harvard Law Review (1999), p. 1610.

[47] The content being addressed is not new in comparison to other communications media. Historically, the primary concern of U.S. free expression regulation has dealt with obscenity. Two categories are regulated: Obscene speech which is illegal for all members of society (e.g. child pornography) and indecent speech which is only criminalized in special circumstances (e.g. playboy is kept behind a counter to prevent access by minors). Although obscenity standards differ in the European Union, the two general distinctions are similarly used. Additionally, many European countries regulate hate speech. In contrast to U.S. freedom of expression clauses, Europeans have at times a less libertarian orientation towards hate speech (e.g. the criminalization of the Auschwitzluege in Germany). These two

new potential threats created by free speech on the Internet. Even though the inevitability of government intervention became increasingly apparent as faith in pure market solutions dissolved, the architecture of the nascent regime remained unclear.

ISP Coordination and Platform for Internet Content Controls (PICS) in Europe

The European debate over Internet content began in November 1995 when Bavarian police searched the offices of a leading ISP, CompuServe, looking for evidence of criminal activity violating German obscenity law. CompuServe claims that they were threatened with prosecution if they did not block access to certain potentially criminal chat sites. In December 1995, CompuServe, lacking the technology to selectively block, banned access to approximately 200 chat groups (all sites with alt.sex in their title) to all of their four million subscribers worldwide. Ignoring CompuServe's claim that they could not be held responsible for third party postings on their server, the Bavarian government prosecuted the executive director of CompuServe Deutschland, Felix Somm. A Bavarian court sentenced Somm to two years probation and a 100,000 D-Mark fine for distributing illegal pornography. [48]

In the wake of the German case, other members of the European Union including France, Belgium, and the United Kingdom began setting up content regulations. Based on unique historical traditions concerning free speech regulation, dissimilar proposals began to arise from nations within the Union. In 1996, France prosecuted its first Internet case and the first private Internet watchdog organization in Europe, the Internet Watch Foundation (IWF), was established in England.

Responding to diverse activity within the Union, the Commission prepared a report to the principal EU institutions on Illegal and Harmful Content on the Internet.[49] Published in 1996, the report proposes general guidelines for free expression regulation within the Union. It highlights the potential economic centrality of the Internet for the European economy and the destructive impact of stringent national regulation. The report argues that the pan-European nature of the technology and its implications for the internal market clearly give the Commission authority to harmonize content control.

The Communication concludes that a two-pronged response is necessary to resolve many of the emerging free speech concerns. First, European wide standard need to be created that help

---

content areas – obscenity and hate speech – have and will continue to be the focus of governmental free expression regulation in the U.S. and Europe.

[48] The perceived credibility of the government's threat of prosecution is further demonstrated by Deutsche Telekom, Europe's largest ISP, banning access to Web Communications, an on-line server that rents space to an expatriate neo-Nazi who lives in California, in 1997.

[49] Commission of the European Communities (1996).

individuals filter out undesirable speech. Looking to technological solutions like the Platform for Internet Content Controls (PICS)[50], the Commission called for self-regulatory solutions that empower consumers.[51] Second, the report encourages national governments to move away from ISP liability legislation and toward hotline/watchdog organizations. Hoping to take advantage of diverse national capacities ranging from neo-corporatist institutions in Central and Northern Europe to vibrant NGO communities in Anglo-Saxon countries, the Commission supported the establishment of content monitors at the national level capable of preventing Bavarian-esque solutions to content problems.[52]

Hoping to avoid costly litigation and further delays in e-commerce penetration, the Union actively supports the two arms of its content strategy. The Multiannual Community Action Plan on promoting safer use of the Internet, first adopted in 1999, actively promotes PICS development and public awareness, provides research grants to allow for development of the system, and includes project monies for the creation of national hotlines.[53] Internet Content Rating for Europe (INCORE) and Internet Hotline Providers in Europe (INHOPE) were created and funded by the Commission as coordination mechanisms for filtering and rating solutions. In promoting filters and PICS, the Commission, later supported by both the Parliament and the Council, acted to bolster market interests and to undercut government regulations which might produce inefficiencies and conflict. The three major documents produced by European Institutions after the CompuServe case all return to PICS and voluntary restraints as their recommended solution and push for cooperation over aggressive government intervention.

The institutional capacity of the European Commission enables it to take on the role of facilitator in a system of coordinated self-regulation. The Commission is constrained by national government legislation but is in a position to foster standards and to promote alternatives to national policy. As such, it can leverage the unappealing prospect of regulatory fragmentation within the Single Market

[50] PICS contains three components. The most basic feature is a list of descriptors. These descriptors form a standard list of vocabulary which content providers use to label their sites. Once sites are labeled they become like tagged animals which can be easily tracked. Third parties then construct the second feature of the system, templates. Competing firms produce software using templates that are able to block sites based on differing combinations of descriptors. Finally, companies develop "white lists" of sites that should never be screened. This last feature prevents informational sites from being blocked although they might technically be considered inappropriate by the template (e.g. a newspaper which contains violent material about a war).

[51] See Commission of the European Communities (1996). A fund was established with 7 million ECU that was to be used to fund filtering research and watchdog support.

[52] Responding to the Commissions call for negotiated solutions to the content conflicts, Germany's parliament passed Europe's first comprehensive Internet regulation in 1998. By criminalizing known transmission of illegal material, encouraging hotlines, and quasi-private watchdog organizations, the ICSB creates a typical German tripartite arrangement between ISPs, concerned NGOs, and the government. Individuals who find offensive material on the Net have the ability to report sites to hotlines or NGOs that then inform and monitor ISPs. If ISPs fail to act, the government can legally enforce liability penalties. Businesses become integrated into a regulatory regime that attempts to avoid legal action, but disciplines through private actor monitoring and negotiated, corporatist solutions.

to incentivize European business to work with the Commission in developing pan-European codes-of-conduct and self-monitoring schemes. The tools of coordinated self-regulation foster the legislative and adjudicative levels of self-regulation in this instance. The EU financially supports national watchdog organizations and common filtering technology while encouraging national governments to implement legislation that dampens confrontation and promotes flexible, market friendly strategies of control.

Competing Filters and the Courts in the United States

The content debate began in the U.S. in 1994 when federal prosecutors saw an opportunity to extend existing interstate commerce obscenity statutes to the Internet. This occurred in *U.S. vs. Thomas*.[54] A couple from California, who ran an exclusive membership, adult bulletin board, was prosecuted for transmitting obscene images, which when printed in Tennessee violated community standards, and shipping explicit videos to the same Tennessee customer. The court ruled that the tangible nature of the printed material invoked interstate commerce law and that providers of obscene material on the Internet could be prosecuted. The specific circumstances of *Thomas* – the case's close resemblance to a standard obscenity video shipping case -- made it unclear whether the decision implicated anonymous chat groups, ISPs, or other circumstances which are unique to cyber-space. Faced with ambiguity regarding the future legal implications of the decision, other state and non-state actors engaged the regulation process.

Forced to clarify the decision of the court and to respond to public concern over obscenity on the Net, Congress passed the Communications Decency Act (CDA) a month after the District court decision in January 1996. The Act criminalized the distribution to those under eighteen of obscene and indecent speech on the Internet. A Consensus of experts agreed that the bill's use of the overly broad indecent clause made it highly likely that the Act would be declared unconstitutional. Striking down the CDA in 1997, the Supreme Court vigorously defended the Internet and warned against overly restrictive government intervention in this "exciting new world of possibility".[55]

Even though the CDA was struck down it has several important implications for the nascent regulatory environment. First, it demonstrates the volatile regulatory environment for content in the U.S. The passage of the Child Online Protection Act (COPA) in October 1998 and further attempts spearheaded by Senator McCain to require filters in publicly funded institutions indicates

[53] European Communities (1999).
[54] 74 F.3d 701 (6th Cir. 1996)
[55] Petrie (1997).

congressional desire to intervene. McCain's bill leverages federal grants to schools and libraries to impose content restrictions.

At the same time that Congress seems to be tightening content controls, several other U.S. institutions have carved out limited support for self-regulatory initiatives. In striking down the CDA in *ACLU vs. Reno*, the Supreme Court calls for less restrictive means of regulation than Congress's proposal and offers blocking and filtering as potentially less aggressive solutions. The implicit support of business self-regulation and the dismissal of government supported age verification strategies is codified in the decision.[56] *ACLU vs. Reno* sends private interests a strong signal that they should develop less restrictive controls in order to prevent heavy-handed government solutions and closes the door on age verification strategies.[57]

The executive branch, taking a more pro-active approach, promotes filtering technology and, using the bully pulpit, calls directly on the business community to come up with alternatives to government regulation. After the CDA was struck down, President Clinton invited representatives from the major Internet firms to the White House to discuss voluntary restraint options. Clinton received a commitment from business that they would work on providing a viable option to concerned consumers. The White House was also instrumental in the organization of the Internet Content Summit held in 1997 where government officials and business leaders came together to discuss self-regulation. Responding to the summit's pressure, industry announced a list of policies to help the development and promotion of filtering systems: Microsoft and Netscape agreed to integrate PICS into their browsers, IBM gave a grant to RSAC to help the promotion of its rating system, and four search engines agreed to work on rating sites.[58]

These examples seem to indicate that the executive branch took on a limited roll as facilitator in the development of private alternatives to government intervention. Due to the state's inability to use carrots or sticks to force convergence around a single standard, however, diverse commercial solutions are emerging that will compete to meet the demands of content control. The judiciary has been the most active branch, enforcing obscenity standards in the digital realm and obstructing overbroad legislative attempts at intervention. Court action has been a critical incentivizer for private sector filtering innovation in the legalistic self-regulatory system.

[56] U.S. 138 L Ed 2d 877-891.
[57] For the impact of the Supreme Court decision on the future path of Internet regulation, see Lessig (1998).
[58] Beeson and Hansen (1997).

Data Privacy

New fears associated with breaches of personal privacy have emerged as digital technologies diffuse through society. Information technology innovations destabilize the societal boundary between the public and the private sphere and may threaten the further commercialization and spread of these advances. Rising public dissatisfaction with current data transfer policies by private entities and calls for government intervention demonstrate the liminal moment confronting data privacy regulation in many industrialized countries.

Four factors seem particularly troubling. First, the quantity of information that one can accumulate and analyze is increasing exponentially. Individuals generate growing amounts of data in everyday life from web trails to credit card records. With the rise of data banks and data processing programs staggering amounts of information can be stored and dissected into refined profiles of individual behavior. Second, the rise in information gathering changes the quality of collected information. As the capacity of data monitoring improves, new areas of human behavior fall under public scrutiny. Mobile phone location records make sensitive data available for collection and storage that was previously unthinkable. Third, the character of privacy is changing. The U.S. as well as many European nations base privacy protection on the assumption of a "reasonable expectation of privacy."[59] It is not the data itself that is protected but the use of the data in a particular context. Information technology challenges the conception of public and private spheres, requiring a societal dialogue over the appropriate new boundaries.[60] Finally, the agent of privacy intrusion has shifted from government actors to the private sector. The Orwellian vision depicted in *1984* was long heralded as the ultimate justification for privacy protection, but information technology empowers private actors as much as public officials. In a world of deregulation and fiscal constraints, public bureaucracies are increasingly looking to the private sector for information sources. The threat of personal information abuse might transform from a government based surveillance society into something better described by an AOLian world where consumer driven observation expands at rapid speeds.

The decentralization of information exchanges through networked technologies emasculates many early government attempts to control data. The first wave of data protection laws focused on

[59] *Katz vs. The United States.* 389 U.S. 347 (1967).

[60] For a discussion of the effect of the Internet on the first three points see Schauer (1998).

centralized data banks held by powerful bureaucratic officials.[61] Many of these regulatory strategies seem almost farcical as data collection technology is embedded into more and more machines and then connected to an ever-increasing number of networked systems. At the same time, public concern over private sector collection, storage, and analysis of commercially produced information has grown over the last two decades, threatening the future viability of e-commerce diffusion. The first round of data protection regulation has, though, created a basic set of internationally agreed upon principles of data protection known as the Fair Information Practice Principles (FIPP) which inform public and private efforts to manage data protection concerns.[62] Many privacy experts argue that formal government regulation cannot offer the flexibility necessary to meet the challenges posed by distributed data collection, forcing policy-makers to examine alternative implementation mechanisms for the FIPP.[63]

Data Authorities and Privacy Enhancing Technologies (PETs) in Europe

In 1970, the state of Hesse in West Germany passed the world's first data protection act, and has since then been followed over the preceding 20 years by 13 other European countries. These laws are grounded in the Fair Information Practice Principles (FIPP) but adopt specific national implementation mechanisms.[64] European governments enacted legislation assuming that public bodies were the few institutions capable of possessing expensive information technology. The minicomputer and PC revolution made many of these control mechanisms obsolete. Overburdened by licensing or registry duties, data protection officials could not respond to growing concern over private data collection efforts. The diversity of regulatory systems spanning Europe threatened to get more complicated as national governments began debates over new private sector regulation.

Realizing that data flows are an essential component of both a modern economy and democratic society, the European Commission began seriously discussing data protection legislation in 1990. Supported by many industries fearing 15 regulatory environments, the EU adopted the Data Privacy

[61] Sweden and France adopted licensing systems that forced data users to apply and register their data banks. These offices have been overwhelmed by the explosion of data collectors and are dismissed by many in the public sector. See Flaherty (1989).

[62] The Fair Information Practice Principles have been stated in numerous documents in slightly different terms. The basic concepts include: Notice – businesses should openly notify consumers of privacy policies; Consent – data should not be disclosed or used for purposes without data subject consent; Security – stored data must be secure from theft or corruption; Access –data subjects should have access to stored data in order to verify validity; Accountability – a procedure must exist to enforce and punish breaches of the principles. See OECD (1980).

[63] A useful overview of regulatory options is provided in Swire (1997).

[64] These laws vary on two fronts. Substantively, some dealt more with the public sector (i.e. Germany) while others only with automated data and not manual files (i.e. the UK). On a procedural level, the implementation mechanisms differ across institutional mechanisms. Sweden requires licenses from data users while Germany's data commissioners serve only in an advisory position. See Bennett (1992).

Directive in 1995, which was to be phased in through national implementation legislation over the following three years.[65] Relying on harmonization rhetoric, the commission was able to create a coalition of support for general legislation that guaranteed national implementation mechanisms for self-regulatory solutions. At the center of the Directive lay a compromise between existing national data protection institutions. The German commissioner model was adopted with a variety of compliance mechanisms including codes of conduct popular in the UK and Netherlands.[66] The Directive requires that all member states create independent authorities that monitor the implementation of FIPP inspired data protection legislation. The vague character of the FIPP and the diversity of private sector data uses means that implementation requires sector specific solutions. The adoption of industry codes of conduct will play an essential component in this emerging regulatory network. Facilitated by national data commissioners, sectors across countries have started the process of formulating privacy standards.[67] Data commissioners have the capacity to monitor compliance within sectors and potentially mediate disputes between private entities.

The EU is simultaneously funding research into technological solutions that have the capacity to guard personal data privacy. Privacy enhancing technologies (PETs), including efforts to enhance anonymity and secrecy, are promoted in the Fifth Framework Research Proposal adopted by the Commission. Additionally, the Commission financially supports the World Wide Web Consortium's efforts to develop a privacy filter standard called the Platform for Privacy Preferences (P3P).

Recognizing that government intervention is unable to control directly the proliferation of decentralized data collection efforts in the private sphere, the EU has created an architecture of control that relies on coordinated self-regulation through data protection authorities. The mandated legislative process has been followed by a self-regulatory implementation phase. The emerging institutions facilitate and monitor the development of sector solutions that rely on industry codes of conduct and privacy enhancing technology. The push by national data commissioners to emphasize self-protection in implementation legislation denotes the shift from imposed regulatory solutions to coordinated self-regulation. According to this strategy, individuals must take responsibility for their information and work with the data protection agencies to identify sector breaches. Using carrots to encourage the development of PETs, the EU is developing a complimentary implementation strategy that combines institutional monitoring capacity with individual enforcement tools.

[65] European Communities (1995).
[66] See Simitis (1995).
[67] The telecommunications sector has some of the most experience in this.

The FTC and NGOs in the United States

The Watergate scandal heightened policy-maker's awareness of information security and data privacy, providing the impetus for the Privacy Act of 1974. The Act limited the government's ability to disseminate and use stored information and in most respects implemented the Fair Information Practice Principles in the public sphere. Instead of creating a neo-corporatist consultative body like many European nations, multiple independent agencies including the OMB and the FTC have jurisdiction over different data protection issues in the U.S. The constraints of the fragmented U.S. political system blocked comprehensive statutory attempts to regulate data use in the private sector, resulting in a limited patchwork of industry rules.[68]

Rising public concern since the commercialization of the Internet highlights the inadequacy of this regulatory regime.[69] Emerging business models increasingly attempt to convert personal data into information capital. Customization and profiling efforts by companies like Amazon and Yahoo demonstrate the potential applications of extensive personal data warehouses. The Clinton administration's support for a market model of control for the digital media left these efforts relatively unconstrained. The Federal Trade Commission (FTC) has testified three times since the announcement of the Clinton-Gore Framework on Global Electronic Commerce in 1997. In both 1998 and 1999, the Commission concluded that little effort had been made by industry to develop coherent and comprehensive privacy protection. A 1999 FTC commissioned study found that only 10 percent of frequently traveled sites have a disclosure policy that speaks to the four basic fair information practice standards. Among the 100 most visited sites still only 20 percent disclose comprehensive privacy policies. In May 2000 the FTC finally reversed its support for pure market controls and advised the administration to intervene in order to properly protect data privacy.[70]

[68] The regulation of the video industry is typically given as prototypical example, Congress past strict regulation of the video industry after the Bork conformation hearings where lists of his video rentals were presented as evidence against his character. Overwhelming negative reaction – public and interest group – provided the legislature the legitimacy to enact a bill that cost the video industry little. Direct marketing proves the counter example. These firms make up a sizable segment of the economy. Their prime source of income comes from data collection and analysis. Despite countless proposals to regulate the sector these firms face no formal regulation. See Schwartz and Reidenberg (1996). The sectoral nature of privacy regulation is demonstrated by the statutory legislation: Right to Financial Privacy Act; Family Education Rights and Privacy act of 1974; Video Privacy Act; Telephone Consumer Protection Act of 1991; Driver's Privacy Protection Act of 1994; Cable Communications Policy Act of 1984; Telecommunications Act of 1996.

[69] Lohr (2000).

[70] Testimony available at www.fcc.gov. Visited 6/14/00

Although several sectors have been subjected to statutory regulation,[71] attempts to adopt comprehensive legislation have failed. This has resulted in two dynamics, consistent with the notion of legalistic self-regulation: first, plenty of agency suits and second, a critical role for the courts to resolve disputes. The DoubleClick case brought before the FTC represents the most glaring example of the first trend. In an attempt to expand its store of information capital, DoubleClick bought Abacus Direct, one of the largest brick and mortar direct marketing firms in the U.S., and began to merge the two databases. A groundswell of public outcry produced an FTC fair trade practices investigation, which then forced DoubleClick to rethink its merger with Abacus. Unable to proactively encourage industry cooperation, the FTC's reactive strategy produces large costs for firms that take the wrong step.[72]

Second, no central monitoring organization exists to oversee industry self-regulation creating a space for NGO and private sector involvement. The failure of the Privacy Act to create a central coordination body leaves the U.S. government institutionally fragmented with the FTC, the Office of Management and Budget (OMB), and the Commerce Department all claiming responsibility for data protection. In contrast to government efforts in Europe to coordinate industry responses, the growing concern over data privacy violations prompted a set of NGOs to offer monitoring and compliance systems. FTC investigations over the last three years no doubt motivate organizations to join NGO inspired self-regulatory efforts. The most well known are TRUSTe and the BBBOn-line,[73] both of which offer a seal demonstrating website compliance with the basic FIPP. Individuals may engage a dispute resolution mechanism if they feel the seal's standards are violated. The organizations also conduct periodic sweeps of members' performance. Some skepticism surrounds seal programs because they have no independent authority until they are well known and may lose members if they handout harsh penalties.[74] Nevertheless, they act to inspire preventative action by those firms enrolled in the program.

Supporting the hypotheses drawn from the model of legalist self-regulation, we see a fragmented government response to growing data privacy concerns. Unable to agree upon comprehensive legislation, Congress has let countless draft bills die. Instead, federal agencies, most notably the FTC,

[71] The most prominent examples are the financial serves sector through the Gramm-Leach-Bliley Act, the medical sector through the recent federal Medical Privacy Rules, and the Children's On-line Privacy Act.

[72] Recently, for example, the FTC launched an investigation into Microsoft's plan to bundle its "passport system" with Windows XP, its new PC operating system. The "passport system" stores a user's personal information, such as passwords and credit card numbers, and has caused widespread concern among privacy advocates. See Steve Lohr, "Privacy Group Is Taking Issue With Microsoft," *The New York Times*, Sec. C, p. 1, 25 July 2001.

[73] TRUSTe was initially created by the Electronic Frontier Foundation (EFF), CommerceNet, and the Boston Consulting Group (BCG). It has several corporate sponsors. The BBBOn-line is run by the Better Business Bureau.

have checked gross abuses of personal data with confrontational investigation, while private bodies are competing with one another to offer companies a defense against continued agency pressure. The recent shift in government ideology through the 2000 election may affect the FTC's willingness to take companies to court and, in turn, weaken the motivation for companies to join seal alternatives. Pressure by data subjects for privacy protection will no doubt maintain industry efforts to develop privacy enhancing technologies.[75]

The Consequences of Distinct Self-Regulatory Trajectories

Disaggregating the concept of state capacity and identifying distinct American and EU self-regulatory trajectories offers substantial analytic leverage over developments in two crucial regulatory areas of the digital age. But what might be some broader consequences of distinct self-regulatory trajectories on opposite sides of the Atlantic? And to what extent do these findings constitute preliminary evidence for the claim that unique historical legacies, institutional trajectories, and political bargains are giving rise to distinct E-conomies in Europe and the U.S.?

One obvious consequence of distinct self-regulatory trajectories has guided this project from the outset: at a minimum, self-regulation on either side of the Atlantic will look different. Self-regulation in the shadow of the American state is likely to feature an active judiciary and regular involvement by quasi-autonomous regulatory agencies. Comparable industry self-regulation in the EU, by contrast, is likely to be characterized by an active, facilitative executive and occasional formal legislation, commonly constructed to encourage and even require self-regulatory structures for implementation. The potential for misunderstanding is high. Data privacy offers the best example. Although all players agree that the FIPP should be upheld, distinct implementation mechanisms for industry self-regulation produce transatlantic confusion and tension. Both sides can legitimately claim to engage in and promote self-regulation. Yet the dynamics are such that Europeans might interpret American reliance on the instruments of legalism as laissez-faire, whereas Americans might interpret European reliance on the instruments of coordination as outright government intervention. The Internet has virtually eliminated the technological obstacles to doing business geographically far removed from one's home market and corporate base. Even the smallest firms can have a global presence. This implies that entrepreneurs will increasingly come in contact with and be affected by foreign

[74] TRUSTe has been blamed for not following up a claim against Microsoft which is one of TRUSTe's largest financial supporters. For an assessment of self-regulation efforts see Campbell (1999).
[75] Whiting (2000).

regulatory systems, systems with which they may not be familiar. Friction is likely in such an environment. Rather than engaging in mutual accusations about the others' regulatory styles, American and European policy-makers should realize their common commitment to self-regulation and take steps to reassure domestic business and consumer communities about the likely compatibility of their interests with the respective other's regulatory regime.

Not only are self-regulatory regimes in Europe and the U.S. certain to look different, but they could also come to shape the logic of emerging digital marketplaces on both sides of the Atlantic. For example, legalistic self-regulation could create market competition among self-regulatory initiatives as seen in free speech filtering systems in the U.S. and coordinated self-regulation may produce single self-regulatory course of action like the focus on P3P or PICS in Europe, having many of the implications evident from comparative studies of technical standardization processes. Should solely the market determine standards? Or is there a rationale for intervention and coordinated standardization? Competition of rival technologies is said to foster innovation and reduce the likelihood of technological lock-in. For markets characterized by network effects, on the other hand, the benefits of single standards are so great that technological fragmentation due to prolonged competition among rival technologies can be considered pareto-sub-optimal. Coordinated standardization of self-regulatory schemes is likely to produce more efficient outcomes than market-driven standardization if stakeholders bet on the right proposal. But what is "right"? The question is therefore not one of better or worse, but rather one about issues such as the speed, flexibility, and the costs of development and enforcement of self-regulatory schemes. Policy-making trade-offs no doubt occur in each system. Badaracco, Vogel, Kagan and other students of comparative national regulation systems agree that industry regulation through the instruments of adversarial legalism is faster than regulation through coordination and intensive stakeholder bargaining. Given that regulated interests play a considerable role in the process of developing regulation in the coordination model, however, they acquire a stake in the outcome that reduces enforcement costs and enhances compliance rates.[76] A similar dynamic will probably ensue in the context of Internet self-regulation.

But the story is likely to be more complicated than a simple extension of arguments about the merits and perils of legalism and coordination to the realm of self-regulation. The efficacy and efficiency of self-regulation in a given policy domain will depend greatly on industry structure. How homogenous are stakeholder interests? How influential are existing industry associations? How easily can intermediary institutions be created if such institutions are lacking or insufficient? These variables will determine what kind of state capacity – or what mix of capacities – is the most potent

[76] See Badarraco (1985), Vogel (1986), and Kagan (2000).

way of incentivizing business to engage in self-regulation. For the relatively small nuclear power industry in the U.S., for example, the credible threat of sweeping industry regulation in the aftermath of the Three Mile Island accident was sufficient to trigger the creation of new intermediary institutions and the development of a comprehensive self-regulatory regime.[77] The large and highly diverse group that has a stake in Internet privacy, by contrast, might necessitate a more facilitative state to lay the groundwork for collective action. It is apparent, then, that private sector capacity is just as important a concept as state capacity when it comes to self-regulation. In short, the match of industry structure and the kind of state shadow cast will in large part determine the efficacy of self-regulation in a given domain. Variance by sector – even within a political economy – is thus very likely.

In the end, how far-reaching are the implications of distinct self-regulatory trajectories in Europe and the U.S. for the emerging E-conomy? Will there be one E-conomy with slightly differently ticking self-regulatory regimes, or will the differences be profound enough to give rise to distinct, regional E-conomies? Needless to say, the character of self-regulation is only one in a number of variables that shape the logic of capitalism in a digital age. Differences in labor market regulation, the structure of finance, education systems, and technological trajectories between Europe and the U.S. are other reasons why we may witness the rise of distinct E-conomies, very much like the divergent production regimes and types of capitalism identified for the previous era. Remarkable is that even when political economies adopt the same regulatory strategy – reliance on industry self-regulation to the greatest possible extent – institutional legacies powerfully shape the respective regional implementation. These institutional legacies may very well turn out to be important determinants of comparative institutional advantage in a digital age.

Conclusion

Over the past two decades, the New Institutionalism in the social sciences has brought the state back in as an autonomous social actor to better understand the political dynamics of economic change.[78] Taking account of the state's dual characteristic as agent and structure, analysts devised the notion of institutionally based, historically rooted, distinct national models of capitalism.[79] Analytic categories such as corporatism, statism and liberalism, or dichotomies of weak state vs. strong state

[77] Rees (1994).
[78] Evans, Rueschmeyer and Skocpol (1985).
[79] See Skocpol (1985), as well as Zysman (1983), Hall (1986), and Albert (1993) among others.

were developed and applied to explain variation in economic performance, international competitiveness, or adjustment strategies. Subsequently, however, some analysts suggested that pressures for change – be they local or global, technological or institutional, political or economic – undermined the utility of state-centered approaches. One strand of this literature argues that states in general are playing a rapidly diminishing role in the economy,[80] while a second strand promulgates the idea that a "neoliberal consensus" emerged around the Reaganesque/Thatcherite non-interventionist state.[81] Advocates of both strands would consider an analysis of emerging market governance systems in cyberspace from an institutionalist, state-centric perspective pointless.

Needless to say, we disagree with both claims. At the same time, however, we find the categorical insistence by some advocates of state-centric approaches that the state's role in the economy remains unchanged misguided. This study carves out a middle ground. We have observed simultaneous efforts by policy-makers in Europe and the United States to minimize direct government intervention into emerging digital markets and to maximize the reliance on industry-designed and -implemented self-regulatory mechanisms. This "retreat of the state,"[82] if you will, does not make the state less important analytically, however. To the contrary, we find that the state plays an important role in the self-regulatory game. Furthermore, because the state's means of influencing industry self-regulation are more subtle than conventional government command and control efforts, understanding exactly *how* the state shapes industry collective action is crucial. Differentiating among several kinds of state capacities, and various channels through which such capacity can be brought to bear on behalf of policy objectives, this study has taken a first step towards a better understanding of the state's role in the self-regulatory process. The question should not be whether state capacity is strong or weak, but what particular objectives are attainable with the particular set of tools policy-makers have at their disposal. And relatedly, how a given toolbox shapes the character and logic of actual implementation. Given the centrality of these and related questions for analyses of emerging governance systems in a digital age, a precise understanding of state institutions is possibly more important today than before the state's "retreat."

This line of questioning may then offer interesting insight into other regions of the world and other economic sectors than those investigated in this initial exploration. How, for example, does Japan fit into the above-developed scheme? Could high levels of carrot and stick capacity produce an additional distinct self-regulatory trajectory? Initial efforts by the Japanese government to deal with

[80] See Ohmae (1996), Ohmae (1999), and Friedman (1999). For more nuanced assessments, see Castells (1997) and Rodrik (1997).

[81] See, for example, the introduction and conclusion in Milner and Keohane (1996). Various "convergence scenarios" are sketched out in Kitschelt, Lange, Marks, and Stephens (1999).

data privacy and content seem to take on a distinct character whereby state agencies actively participate in the self-regulatory process. Similarly, what additional cases might be explored to move past the plausibility probe presented? The feasibility of self-regulatory solutions is currently explored in areas ranging from digital security and authentication, through infrastructure maintenance and universal access, to royalty management for protected digital works and alternative dispute resolution (ADR) for retail electronic commerce. A more comprehensive "test" of the analytic utility of the model developed in the course of this study should draw on these and possible other cases. Will distinct self-regulatory logics be identifiable? And will they follow the legalistic self-regulation vs. coordinated self-regulation dichotomy suggested above? And if so, will these differences be largely a matter of regulatory "style" or will they contribute to distinct E-conomies and the development of comparative institutional advantage in a digital age?

Empirically, we have found several critical policy question opened or reopened by the spread of digital communication technologies and the applications they enable. Hardly retreating from the specter of an uncontrollable, globalizing technology, states on both sides of the Atlantic maintain substantial regulatory influence. Different institutional legacies and differences in the character and distribution of state capacity produce variation in regulatory style. As trade in digital marketplaces expands and network technologies foster the interpenetration of formerly separate markets, distinct regulatory systems will be forced increasingly to finds compromise solutions to allow continued coexistence. The Safe Harbor agreement on transatlantic handling of personal data exemplifies this trend. The commitment, however, in Europe and the U.S. to their respective version of self-regulation demonstrates the continued viability of the legalistic and coordinated self-regulatory models. These differences in style may very well influence the substance of regulation and contribute to the rise of distinct E-conomies with distinct opportunities and constraints. In either case, policy-makers in Washington and Brussels gain little from pointing at each other and accusing the respective other of not living up to the commitment to maximize the private sector's role in regulating cyberspace. Both sides take self-regulation seriously. And both deploy their own tools to make self-regulation work.

[82] Strange (1996).

Bibliography

Albert, Michel. 1993. *Capitalism against capitalism.* London: Whurr.

Bach, David. 2000. International Cooperation and the Logic of Networks: Europe and the Global System of Mobile Communications (GSM). *BRIE Working Paper* 139.

Badaracco, Joseph L. Jr. 1985. *Loading the Dice.* Boston: Harvard Business School Press.

Baldwin, Robert, and Martin Cave. 1999. *Understanding regulation: theory, strategy, and practice*. New York: Oxford University Press.

Barlow, John Perry. 1996. A Declaration of the Independence of Cyberspace. Davos, Switzerland. http://www.eff.org/~barlow/Declaration-Final.html.

Beesom, Ann, and Chris Hansen. 1997. Fahrenheit 451.2: Is Cyberspace Burning? Wye Mills, Maryland: American Civil Liberties Union.

Bennett, Colin J. 1992. *Regulating privacy: data protection and public policy in Europe and the United States*. Ithaca: Cornell University Press.

Cambell, Angela. 1999. Self-regulation and the Media. *Federal Communications Law Journal* 51:711+.

Castells, Mauel. 1997. *The Power of Identity*. Cambridge: Blackwell Publishers.

Clinton, William J., and Albert Gore. 1997. A Framework For Global Electronic Commerce. Washington DC.

Coase, Ronald. 1937. The Nature of the Firm. *Economica*.

Coase, Ronald. 1960. The Problem of Social Cost. *The Journal of Law and Economics* 3 (1):1-44.

Cohen, Stephen S., J. Bradford DeLong, and John Zysman. 2000. *Tools for Thought: What is New and Important about the "E-conomy"*. Berkeley: BRIE, University of California, Berkeley.

Cohen, Stephen S., J. Bradford DeLong, Steven Weber, and John Zysman. 2001. Tools: The Drivers of E-commerce. In *Tracking a Transformation: E-commerce and the Terms of Competition in Industries*, edited by The BRIE-IGCC E-conomy Project. Washington, DC: The Brookings Institution.

Commission of the European Communities. 1996. Illegal and harmful content on the Internet. Brussels: European Communities.

Commission of the European Communities. 1998. Globalization and the Information Society: the Need for Strengthened International Co-ordination. Brussels: European Communities.

Commission of the European Communities. 1998. Globalization and the Information Society: the Need for Strengthened International Co-ordination - Suggestions for the discussion by participants in the Round Table. Brussels: European Communities.

Cowles, Maria Green. 1995. Setting the Agenda for a New Europe: The ERT and EC 1992. *Journal of Common Market Studies* 33 (4):501-526.

DeLong, J. Bradford. 1998. What 'New' Economy? *The Wilson Quarterly* 22 (4).

Derthick, Martha, and Paul J. Quirk. 1985. *The politics of deregulation*. Washington, D.C.: Brookings Institution.

Eckstein, Harry. 1975. Case Study and Theory in political Science. In *Handbook of Political Science*, edited by F. I. Greenstein and N. W. Polsby. Reading: Addison-Wesley.

European Communities. 1995. Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data.

European Communities. 1999. Decision No 276/1999/EC of the European Parliament and of the Council of 25 January 1999 adopting a multiannual Community action plan on promoting safer use of the Internet by combating ille gal and harmful content on global networks.

Evans, Peter, Dietrich Rueschemeyer and Theda Skocpol, eds. 1985. *Bringing the State Back In.* Cambridge: Cambridge University Press.

Flaherty, David H. 1989. *Protecting privacy in surveillance societies: the Federal Republic of Germany, Sweden, France, Canada, and the United States*. Chapel Hill: University of North Carolina Press.

Friedman, Thomas L.1999.*The Lexus and the Olive Tree*. New York: Anchor Books.

Froomkin, A. Michael. 2000. Wrong Turn in Cyberspace: Using ICANN to Route Around the APA and the Constitution. *Duke Law Journal* 50:17-184.

George, Alexander L. 1979. Case Studies and Theory Development: The Method of Structured, Focused Comparison. In *Diplomacy: New Approaches in History, Theory, and Policy*, edited by P. G. Lauren. New York: The Free Press.

Gunningham, Neil, and Joseph Rees. 1997. Industry Self-Regulation: An Institutionalist Perspective. *Law & Policy* 19 (4).

Hall, Peter. 1986. *Governing the Economy.* New York: Oxford University Press.

Hall, Peter A., and David Soskice. forthcoming. An Introduction to Varieties of Capitalism. In *Varieties of Capitalism*, edited by P. A. Hall and D. Soskice. Oxford: Oxford University Press.

Hardin, Garret. 1968. The Tragedy of the Commons. *Science* 162 (3859): 1243-1248.

Harvard Law Review. 1999. Developments - The Law of Cyberspace. *Harvard Law Review* 112:1574-1704.

Johnson, David R., and David Post. 1996. Law And Borders - The Rise of Law in Cyberspace. *Stanford Law Review* 48:1367+.

Kagan, Robert A. 1997. Should Europe Worry about Adversarial Legalism? *Oxford Journal of Legal Studies* 17 (2).

Kagan, Robert A. 2000. How much do national styles of law matter? In *Regulatory Encounters: Multinational Corporations and American Adversarial Legalism*, edited by R. A. Kagan and L. Axelrad. Berkeley: University of California Press.

Katz, Michael L., and Carl Shapiro. 1985. Network Externalities, Competition, and Compatibility. American Economics Review 75 (3):424-440.

Katz, Michael L., and Carl Shapiro. 1994. Systems Competition and Network Effects. The Journal of Economic Perspectives 8 (2):93-115.

Keohane, Robert O., and Helen V. Milner. 1996. *Internationalization and domestic politics.* Cambridge: Cambridge University Press.

Kitschelt, Herbert, Peter Lange, Gary Marks, and John D. Stephens. 1999. Convergence and Divergence in Advanced Capitalist Democracies. In *Continuity and change in contemporary capitalism*, edited by H. Kitschelt, P. Lange, G. Marks and J. D. Stephens. Cambridge: Cambridge University Press.

Layard, Richard, Stephen Nickell, and Richard Jackman. 1991. *Unemployment, Macro-Economic Performance and the Labour Market.* Oxford: Oxford University Press.

Lemley, Mark, and David McGowan. 1998. Legal Implications of Network Effects. *California Law Review* 86: 479+.

Lessig, Lawrence. 1998. What Things Regulate Speech: CDA 2.0 Vs. Filtering. *Jurimetrics Journal* 38:629-670.

Lessig, Lawrence. 1999. Code and other laws of cyberspace. New York: Basic Books.

Levy, Jonah D. 1999. *Tocqueville's Revenge: State, Society, and Economy in Contemporary France*. Cambridge: Harvard University Press.

Lewis, Peter H. 1996. Limiting a Medium Without Boundaries: How Do You Let the Good Fish Through the Net While Blocking the Bad? *The New York Times*, 15 January 1996

Lohr, Steve. 2000. Survey Shows Few Trust Promises on Online Privacy. *The New York Times*, April 17.

Majone, Giandomenico. 1996. *Regulating Europe*. New York: Routledge.

Marsden, Christopher T. 2000. Introduction: Information and communications technologies, globalisation and regulation. In *Regulating the global information society*, edited by C. T. Marsden. New York: Routledge.

Mathews, Jessica T. 1997. *Foreign Affairs* 76 (1):50-66.

Mayntz, Renate, and Fritz W. Scharpf, eds. 1995. *Gesellschaftliche Selbstregelung und politische Steuerung*. Frankfurt am Main: Campus.

OECD. 1980. Guidelines on the Protection of Privacy and Transborder Flows of Personal Data. Paris: Organization for Economic Cooperation and Development.

Ohmae, Kenichi. 1996. *The End of the Nation State: The Rise of Regional Economies*. New York: Free Press.

Ohmae, Kenichi. 1999. *The Borderless World: Power and Strategy in the Interlinked Economy*. Rev. ed. New York: Harper Business.

Olson, Mancur. 1965. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge: Harvard University Press.

Ostrom, Elinor. 1990. *Governing the commons: the evolution of institutions for collective action*. Cambridge: Cambridge University Press.

Petrie, Sean. 1997. Indecent Proposals: How Each Branch of the Federal Government Overstepped Its Institutional Authority in the Development of Internet Obscenity Law. *Stanford Law Review* 49:637-665.

Price, Monroe E., and Stefaan G. Verhulst. 2000. In search of the self: charting the course of self-regulation on the Internet in a global environment. In *Regulating the global information society*, edited by C. T. Marsden. New York: Routledge.

Rees, Joseph. 1994. *Hostages of Each Other*. Chicago: University of Chicago Press.

Rodrik, Dani. 1997. *Has globalization gone too far?* Washington, DC: Institute for International Economics.

Sandholtz, Wayne. 1992. *High-Tech Europe: the politics of international cooperation*. Berkeley: University of California Press.

Sandholtz, Wayne. 1993. Institutions and Collective Action: The New Telecommunications in Western Europe. *World Politics* 45 (2).

Scharpf, Fritz W. 1997. *Games Real Actors Play*. Boulder: Westview Press.

Schauer, Frederick. 1998. Internet Privacy and The Public-Private Distinction. *Jurimetrics* 38 (4):555-564.

Schwartz, Paul M., and Joel R. Reidenberg. 1996. *Data Privacy Law*: Michie Publishing.

Simitis, Spiros. 1995. From the Market To the Polis: The EU Directive on the Protection of Personal Data. *Iowa Law Review* 80:445+.

Skocpol, Theda. 1985. Bringing the state Back In: Strategies of Analysis in Current Research. In *Bringing the State Back In*, edited by P. Evans, D. Rueschemeyer and T. Skocpol. Cambridge: Cambridge University Press.

Soskice, David. 1999. Divergent production regimes: coordinated and uncoordinated market economies in the 1980s and 1990s. In *Continuity and change in contemporary capitalism*, edited by H. Kitschelt, P. Lange, G. Marks and J. D. Stephens. Cambridge: Cambridge University Press.

Stigler, George. 1971. The Theory of Economic Regulation. *Bell Journal of Economics and Management Science* 2 (1):3-21.

Stokman, Frans N., Rolf Ziegler, and John Scott, eds. 1985. *Networks of Corporate Power: A Comparative Analysis of Ten Countries*. New York: Blackwell.

Strange, Susan. 1996. *The Retreat of the State*. Cambridge: Cambridge University Press.

Streeck, Wolfgang, and Philipp C. Schmitter. 1991. From National Corporatism to Transnational Pluralism: Organized Interests in the Single European Market. *Politics & Society* 19 (2):133-164.

Swire, Peter. 1997. Markets, Self-regulation, and Government Enforcement in the Protection of Personal Information. In *Privacy and Self-Regulation in the Information Age*. Washington: Department of Commerce - Narional Telecommunications and Information Administration.

Williamson, Oliver E. 1985. *The economic institutions of capitalism: firms, markets, relational contracting*. New York, London: Free Press.

Verrue, Robert. 1999. Electronic Commerce in Europe: The Present Situation. Speech at the Seminar on Electronic Commerce, Kangaroo Group - European Parliament, 20 January, Brussels.

Vogel, David. 1986. *National Styles of Regulation: Environmental Policy in Britain and the United States*. Ithaca: Cornell University Press.

Whiting, Rick. 2000. Mind Your Business - Companies Rethink Their Privacy Policies as Public Concern Grows. *Information Week*, 6 March.

Zysman, John. 1983. *Governments, Markets, and Growth*. Ithaca: Cornell University Press.

Zysman, John. 1994. How institutions create historically rooted trajectories of growth. *Industrial and Corporate Change* 3 (1).