National TV broadcasting and the rise of the regulatory state

Bruce Yandle

Received: 30 September 2009 / Accepted: 14 October 2009 / Published online: 28 October 2009 © Springer Science+Business Media, LLC 2009

Abstract Using historical, theoretical and empirical arguments, this paper puts forth the notion that it was the rise of US national TV networks in the late 1960s that led to the expansion of federal social regulation and a simultaneous decline of federal economic regulation in the 1970s. The paper argues that national TV networks changed the relative position of national versus local and regional producers and sellers of goods and services. Instead of preferring state and local social regulation, the emerging national firms preferred federal social regulation. Since national markets were emerging, the same national firms lobbied for regulatory reform in transportation and communication services. The rise of national markets associated with national TV networks also stimulated a demand for mergers and consolidations. Data describing these various phenomena are provided in the paper.

Keywords Regulation · Economic regulation · Social regulation · Code law · Common law

1 Introduction

Examination of the federal regulation heydays of the 1970s and 1980s more often than not focuses on the rise of social regulation and within this, the analysis of particular regulatory episodes. The focus on the large wave of social regulation is understandable. After all, growth of social regulation was the overwhelming phenomenon of the period and easily eclipsed activities in the older economic regulation. By the 1970s, behavior of the Interstate

¹Robert Litan and William Nordhaus (1983, 44–45) describe the situation this way: "The ideological fervor of the interest groups that have supported social regulation, coupled with widespread public support, has helped to produce the recent explosion in such regulation. Although social regulatory programs date from the early 1900s, virtually all of the major regulatory statutes passed between 1962 and 1978 fall into the category of social regulation—from the Food and Drug Amendments of 1962 requiring the pretesting of drugs for efficacy (in addition to the earlier requirement of safety), to the 1966 National Motor vehicle Traffic Safety Act authorizing the promulgation of mandatory automobile safety standards, to the Clean Air Act of 1970,



100 Clemson Street, Clemson, SC 29631, USA

e-mail: yandle@bellsouth.net



Commerce Commission, Civil Aeronautics Board, Comptroller of Currency, and Federal Power Commission was pretty well understood, or at least we thought so. Social regulation that cut across industries, firms, and other social entities was new, far more complex, and therefore a greater challenge to social scientists who wanted to explain the way the world worked. Looking back, it is clear that there was yet one more aspect of the growth in federal regulation that deserves attention. The US was becoming a regulatory state. Federal code law was replacing common law at the margin as the nation's dominant legal system for large categories of economic activity.

Important breakthroughs came in the efforts to understand regulation growth when Stigler (1971) and Peltzman (1976) examined regulation through the lens of demand and supply. Then an analytical supercharger was added to a vast literature when Buchanan et al. (1980) put the spotlight on rent-seeking behavior.² Very quickly, economists introduced rent seeking into models for explaining particular regulatory episodes, and the results were rather impressive. The rent-seeking story helped to explain why businesses and environmental groups would lobby for the same regulatory features when rules were being devised (Tollison 1991).³ Yet all along, the world of regulation was divided into two components: social regulation and economic regulation.

The former, which included environmental, safety, and health regulation, was in a growth phase, while the latter, which encompassed transportation, energy pricing, and communications, was beginning to wither away, or so it seemed. Not much analytical attention was focused on why one part of the regulatory state might be contracting just as the other was expanding. And no one that I know of attempted to explain why these paired phenomena were occurring just when they did, which is to say why the 1970s and 1980s? Why not earlier or later?

This paper develops a theoretical argument that explains some dimensions of the timing and why there was simultaneous demand for an expansion of social regulation and a contraction of economic regulation. The story that follows is driven by the rise of network television, a disruptive technology (Christensen 1997) that accelerated the development of national markets for branded merchandise and services and increased delivery of network processed information to national audiences, a phenomenon that was also occurring in national markets throughout the developed world. For the first time, consumers and citizens nationwide were simultaneously seeing and hearing similar messages. This significant change in information flows generated a restructuring of the US economy and with it, the regulatory state.

I argue that in the United States, the expanded national market depreciated the value of state and local regulation and state common law that previously formed the legal environment for many local and regional businesses and industries that were now being transformed to national players. Expanded flows of information through national networks reduced the domain of rational ignorance for citizens and signaled opportunities for rent seeking at the national level. Political competition in Washington became more intense and focused. In other countries, depending on their legal environment, the integration of national markets

³Yandle (1983) also focuses on the "strange bedfellows" phenomenon in his "bootlegger/Baptists" theory.



and the 1976 Toxic Substances Control Act requiring advance testing and restrictions on the use of chemical substances. In all over forty major pieces of legislation dealing with social regulation were passed during this sixteen-year period. The sheer scale and timing of this legislative effort suggest that Congress has been concerned with more than just correcting a series of run-of-the-mill market failures."

²For an extensive survey of the literature emerging at the time, see McCormick (1984).

arguably affected their common law or code law regulations in similar ways.⁴ At the margin, the economy and the institutions that organized it were forced to restructure.

Just as firms and industries had an incentive to replace multiple layers of state and local regulation with more uniform federal rules, those same firms and industries had an incentive to seek regulatory reform that would reduce transaction and other costs associated with the movement of goods, information, credit, and financial assets in national markets. The rise of social regulation that was related to safety, health, environment, and consumer products smoothed the way for growing national markets. The decline of economic regulation reduced the cost of serving those markets. Because of their magnitude, the impact of these combined forces were observed at the macro level, on productivity, GDP growth, and in financial markets.⁵

The remaining sections of this paper provide supporting documentation for these introductory assertions. In the next section, I provide additional theoretical arguments that relate to the expanding regulatory state; I also provide more detailed discussion of the regulatory phenomena that was occurring along with some supporting data. The paper's Sect. 3 focuses on the United States and reports data on the rise of national TV network broadcasters. The discussion links that data to corresponding data on regulation and mergers.

The paper's Sect. 4 focuses on the macro effects of the new regulatory state that emerged in the 1970s and 1980s and examines three empirically distinct periods of US GDP growth that correspond directly to periods of growth in the regulatory state. Both GDP growth and financial markets data are considered. The apparent linkage between fundamental measures of economic activity and the rise of the regulatory state provides the final evidence that national broadcast television triggered a major restructuring of economic activity and the regulatory state. Section 5 concludes the paper with final thoughts.

2 The rise of a new regulatory state

In a changing political landscape, the US began to emerge as a federal code law country early in the decade of the 1970s. As shown in Fig. 1, which reports the annual count of new Federal

⁵Researchers who focused on post-World War II productivity growth were generally in agreement about the broad contours of labor and total factor productivity. Kendrick (1984) finds that real factor productivity had grown in the 2.0 to 3.0 percent range from 1948 to 1973 but from 1973 to 1981 had barely grown at all. (P. 23) The picture brightened considerably for 1981–1990 with total factor productivity projected to grow in the 1.8 percent. John Kendrick attributes the sharp productivity decline to the stagflation of the 1970s, which led to a reduction in capital investment, rapidly rising energy prices, which made capital obsolete in many industries, and to social regulation, which by definition required expenditures in pursuit of outputs that were not fully registered in national accounting data. In looking ahead to better times, Kendrick saw higher quality labor, growth in technology, greater price stability, and a kind of bottoming out of the growth in social regulation. (32-34) While Kendrick (1984) and others identified social regulation as a drag on economic performance, hardly any attention is focused on the decline of economic regulation and how expansion of market forces in transportation, communication, and banking might bring major economic gains. Litan and Nordhaus (1983, 29–30) note Edward Denison's work that examined the early 1960s to 1973–75 when regulation caused productivity growth to slow by 0.25 percentage points per annum. This compares to a total slowdown in annual productivity growth over this period of approximately two percentage points per annum. They note (30): "Although no complete study has been made of the direct productivity effect of economic regulation, the fragmentary evidence that exists suggests that it has been less significant than social regulation over the last decade." For further discussion, see Wolff (1985).



⁴As Vogel (1996, 11) points out, there was, of course, another force that played through global markets. Firms could engage in regulatory arbitrage, moving their business or capital to the country with the most favorable regulations. The resulting competition made regulatory reform an international phenomenon.

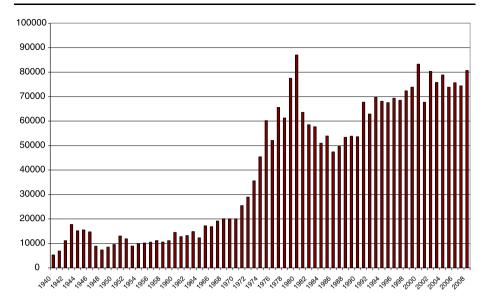


Fig. 1 Federal Register Pages: 1940–2008

Register pages from 1940 to 2008, 1969–1970 marks a rough boundary when dramatic increases in federal regulation emerged on the heels of major new statutes spawning social regulation.

This was the time when the US Environmental Protection Agency was formed along with other new federal regulatory agencies. These new agencies were required by statutes to provide regulatory protection in the environment and for workers in the workplace, to improve conditions that affected occupational health, and to make autos and consumer products safer. What was before a country regulated primarily by diverse state common law, city ordinances, state statutes and regional compacts was to become a nation regulated primarily by federal statutes. The default legal environment changed from diverse state laws and rules to one suits fits all. A centralized effort to manage environmental risks replaced a decentralized federalism that relied more on local control and property rights.

The wave of regulation that occurred in 1970s and early 1980s is seen more graphically in Fig. 2, which shows Federal Register pages per billion of real GDP.

There are three distinct post-World War II periods depicted in the chart. The first is 1948–1969; then, 1970–1985, the period when growth in regulation activity reaches its peak; and finally, the remaining years. These three periods appear later when GDP growth is analyzed.

But why the post-1970 crescendo?

The rise of the regulatory state has been analyzed rigorously by economic historian Higgs (1987). He discusses at length key forces in the late 1960 and early 1970s that fit his Crisis

⁶Christainsen and Haveman (1984, 60) build three indexes of regulatory intensity for the time periods 1947–1982. One of the indexes, R1, is based on a count of regulation statutes, which rises and falls as regulation and deregulation legislation occurs. They define these periods: Mild Impact: 1947–66. Increasing Impact: 1966–71. Peak Impact: 1971–75. Decelerating Impact: 1975–81. Stable or decreasing: 1981–82. RI reaches a peak in 1971–75 and falls to zero in 1981–82. R2 is real dollar regulatory budgets. These also peak in 71–75. The third is employment in regulatory agency. It too peaks in 71–75.



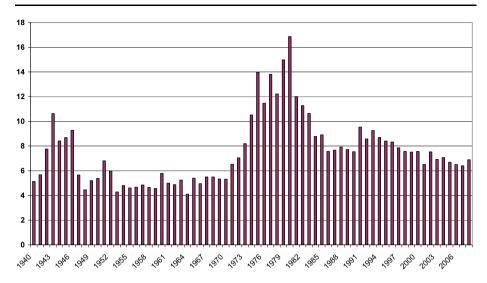


Fig. 2 Federal Register Pages per \$Billion Real GDP 1940-2008

and Leviathan theory of government growth. These social forces include racial disturbances, riots, and the burning of cities; the Vietnam War, which became a morass that destroyed 58,000 American lives, generated a massive peace movement that split the country politically, and led to a political cleansing when the American voter punished the member of congress who had supported the war by "voting them out." With new leadership on the Hill, punishment of the war party continued. This manifested itself partly in an effort to "do something about" serious problems when they emerged. And American voters seemed ready to see something done. There were plenty of problems in the offing.

An Arab oil embargo and accompanying OPEC cartel arrived in 1973 and 1974. A barrel of Saudi marker crude oil rose from \$3.00 to \$11.65 in 18 months (Fischer 1996, 268–269). The new scarcity brought further centralization of the economy with formation of a Federal Energy Office and more regulations. Along with these events came a sudden increase in inflation that emerged in 1967, when the annual growth rate of the Consumer Price Index rose from the previous January 1966 rate of 1.92 percent to 3.48 percent in January 1967. Inflation then rose each year until 1970 saw prices increasing at a rate of 6.18 percent, with inflation eventually hitting 13.91 percent in 1980. For monetarists, the rise in inflation was driven largely by Federal Reserve increases in the money supply. But as Robert Higgs explains, wage and price controls—more regulation—was the remedy proposed by Federal Reserve Chairman Arthur Burns and authorized by Congress when the Economic Stabilization Act of 1970 was passed and then signed by Richard Nixon. And then there was the environment. Viet Nam had demonstrated how modern chemical warfare could destroy major features of the earth. Major episodes of air pollution occurred that could not be adequately explained. Oil spills and the effects of government-sponsored uses of chemicals for

⁸For example, the rate of growth of M1 rose from 3.3% in 1969 to 5.1% in 1970, 6.5% in 1971, and to 9.2% in 1973. (See *Economic Report of the President: 2004* (2004, 365).)



⁷The data used to describe inflation are from Inflationdata.com. Historical US Inflation Rate 1914-Present. http://inflationdata.com/inflation/Inflation_Rate?HistoricalInflation.aspx?dsInflation_current. Accessed 4/15/2007.

pest control emerged. The environment became a dominant theme in songs and literature. Earth Day arrived, and the popular response was massive.

When all was said and done, the period 1964 to 1976 saw major statutes passed that addressed civil rights, highway traffic and auto safety, consumer protection, clean air, water pollution control, energy, consumer products, and occupational safety and health (Higgs 1987, 5). Each of these statutes called for regulatory actions that formed the new social regulatory agencies. These, in turn, produced a massive increase in code law.

From 1970 through 1977, the number of pages in the Code of Federal Regulations rose from 54,000 to 75,000, while the budgets of the new social regulatory agencies rose from \$1,449.3 million in 1970 to \$7,318.3 million in 1977 (Miller and Yandle 1979, 2). While the budget numbers alone are large enough to catch ones attention, they are probably swamped by the compliance costs they fostered. And as Jonathan Hughes points out, this was just one tip of the iceberg (Hughes 1990, 587). Along with the regulations that affected practically every dimension of the market economy came large increases in the budgets of public radio and television, funding for the performing arts, expansion of federal lands and parks, and a new emphasis on what the federal government could do to improve the quality of life.

While social regulation was experiencing explosive growth, old time economic regulation was in a sharp state of decline, an outcome that seemed to be less celebrated by those who were bemoaning the explosive growth of social regulation. Olson (1984, 249) called attention to this in his comments on Reagan regulatory reform and noted that:

One striking example has, wondrously, attracted very little journalistic attention. The Carter Administration and its immediate predecessors made great strides in deregulating many industries, such as trucking, airlines, railroads, securities markets, and banking. This deregulation greatly increased the scope of free markets. It would take us far afield to go into the unfolding empirical evidence about the consequences of this deregulation here, but the preliminary indications are that it has greatly increased the efficiency of the American economy. Most strikingly in the area of trucking, the Reagan administration (at least up the point when this essay is written) has practically stopped this deregulation.

After referring to the idea that the old regulatory commissions had been captured by the industries they regulated and therefore needed reform, Thomas K. McCraw describes the simultaneous counter waves of social regulation growth and economic regulation decline this way (McCraw 1984, 303–304):

Partly as a result of the capture idea, there arose during the 1960s a curious two-pronged reform movement: pointing on the one hand, toward deregulation and, on the other, toward a new wave of large-scale social and environmental regulation. These new rules were to be enforced not by independent commissions of the 1930s variety, which usually administered brief general statutes designed to give broad discretion to a group of commissioners acting collegially; but rather by an entirely different type of agency, with a single executive at it head... and an agenda set in advance by the explicit provisions of extremely detailed provisions of extremely detailed legislation. New laws such as the Clean Air Act and the Occupational Safety and Health Act, often running to scores of pages in length, were calculated to minimize administrative discretion and to close all possible loopholes. Meanwhile, on the other prong, the deregulation movement—whose basic intellectual premise was that economic markets do work well—also advanced simultaneously but contradictorily, gaining momentum alongside the companion movement toward growth of regulation in the areas of social and environmental policy.



Later, when enough time had passed to make a retrospective assessment, Sam Peltzman reviewed reform of economic regulation and called it "a reduction or substantial elimination of regulatory restraints that is unprecedented in American history" (Peltzman 1989, 2). In his view, the economic theory of regulation to which he had contributed mightily seemed ill equipped to serve as a general theory. The theory might do well in explaining regulation, but not so well in explaining deregulation. Peltzman's pessimistic assessment was shared by High (1991, 2) when he suggested that the most pressing need in the theory of regulation is to come to terms with deregulation, a conclusion reached after he had reviewed the significant deregulation of airlines and surface transportation industries.

While general pessimism seems to be order of the day when it comes to explaining deregulation, there are those who hold a different position. Bob Tollison, for one, pointed out that "interest group theory must be able to cope with both regulation and deregulation in an explanatory sense. Interest groups can drive the economy in either direction." Indeed, Tollison's paper in the High volume discusses his and Shughart's 1981 work on liberalization of state chartering laws from 1837 to 1913, which they ascribe to transaction cost differences. They show that liberalization came earlier where transaction costs were higher (Tollison 1991, 63).

But while the undercurrents described by Higgs, McCraw, Olson and others are powerful in and of themselves and perhaps, taken together, somehow cause the early 1970s to be a regulatory breaking point, I believe another phenomenon, one perhaps more fundamental to the overall working of the economy, provided the major centralizing force for social regulation and decentralizing force for economic regulation. This was the development of national network television broadcasting and the accompanying flow of national advertising messages. The 1950–2004 count of TV broadcast stations on line is seen in Fig. 3. A sharp increase in stations is registered in 1970, however, some 90 percent of US families had access to national TV information by the early 1960s.

The data show the build-up that emerged in the post-World War period and the high growth in the 1970s. National TV broadcasters formed a new information highway that could increase the demand for federal regulation.

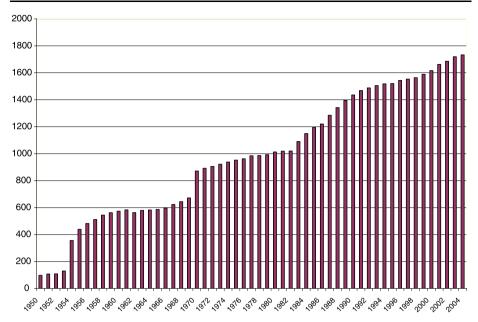
Mashaw and Ackerman (1984, 134) explain how this might happen in their discussion of the relative merits of state versus federal regulation:

(L)et us consider firms that sell in national markets (e.g., railroads, trucking, and telecommunications) and especially those that compete with local firms in some markets (e.g., supermarket chains and producers of beer, mineral water, dairy products, or prefabricated houses). Even if a firm's bargaining power is high in most states, it may still seek national regulation because the benefits of uniformity may outweigh the costs resulting from a higher average level of regulation. National regulation may increase scale economies and thereby provide larger national concerns an advantage over their smaller local or regional competitors. In short, large national firms may actively seek federal preemptive legislation to avoid the cost of diversity.

If weights could be assigned according to importance, TV advertising would rank high among the centripetal forces. The frequency with which concentration has increased among products promoted heavily through this medium attests to the claims of its own salesmen; its success in promoting the sales of sponsors' products vis-à-vis those of competitors has been remarkable.



⁹Taking a traditional structuralist approach, Blair (1972, 601) discusses the importance of TV advertising, not in communicating and informing and thereby forming larger markets, but in assisting firms inevitably to gain market power. He refers to forces leading to monopoly as centripetal. Blair writes:



Source: Broadcasting & Cable Yearbook, 1988, H62, and 2005, Al4.

Fig. 3 US Operating TV Broadcast Stations 1950-2004

While making a point that is central to my argument, Mashaw and Rose-Ackerman then go on to confuse the interplay between social and economic regulation. They say:

The interstate trucking industry, for example, has litigated and lobbied for federal preemption of state laws government such things as weight limits, tandem trailers, and mud guards. Airlines have supported federal preemption of state standards governing airport noise, shippers of hazardous wastes want the EPA and the Department of Transportation to impose uniform, preemptive federal rules governing the manifests required of all shippers, and the chemical industry joined with OSHA to impose uniform national labeling standards.

It is my central claim that the rise of national markets in the 1950s and 1960s supported by national TV broadcasts led industries participating in those expanded markets to demand deregulation of transportation, communications, banking and so on. This marginal increase in deregulation demand was joined in some cases by reform efforts inspired by government itself. Rising inflation, disrupted energy markets, and a resulting restructuring of the economy also contributed to the demand for deregulation. Unlike the situation with social regulation, the regulated industries themselves did not seek reform. ¹⁰

¹⁰Derthick and Quirk (1985, 21) made an in-depth study of regulatory reform for airlines, surface transportation, and communications. They summarize the situation this way: Most certainly, the regulated industries in our three cases did not ask to be deregulated. The airlines all began by opposing deregulation, and only United among the major carriers ever reversed itself, though most others, as we have said, eventually ceased to be active in opposition. The Teamsters Union and the thousands of regulated common carriers that constituted the core of the regulated trucking industry never wished to be deregulated and are no less firmly opposed now that deregulation has actually occurred ... AT&T did not wish to surrender its monopolies and be deregulated.



I argue that the industry component of demand for regulatory reform came from those industries that were participating in the market for national goods and services that had been formed by the expansion of network television. These, the users of transportation and communications services, lobbied for reform.

There is one last feature of the economy to consider in the light of the TV network effects. Since the division of labor is limited to the extent of the market, firms operating in newly expanded national product markets had incentives to restructure. A large wave of mergers and consolidations that might not be explained otherwise followed the network effect. As indicated in a Senate Antitrust Subcommitte report (1971, 2):

In 1968, the merger movement was of such magnitude that in a single year nearly 10 percent of all independent manufacturing corporations in the \$10 million asset class were acquired. Such large corporations as a class, according to the FTC, accounted for 86 percent of all corporate manufacturing assets, and 88 percent of all corporate manufacturing profits ... Prior merger waves, the first in the 1890's and the second in the 1920's, primarily involved horizontal and vertical mergers in distinct industries ... In the period 1966–1068, however, the percentage of horizontal or vertical mergers was only 18 percent of the total.

Along these lines, Bain (1968, 203) discusses the "advantages of large-scale sales promotion" as providing an incentive for mergers. He suggests that firms producing consumer goods are most likely to gain when "the advertising message automatically reaches potential consumers over the entire nation or at least over a substantial region" and indicates that network television is one media form for reducing the cost of serving a national market. To get the benefit of network television and other national media, the firm must "become big—and perhaps bigger that would otherwise be desirable—not only in terms of absolute size of its advertising outlays, but also in terms of its productive capacity" (Bain 1968, 203).

3 An examination of data

I have argued that fundamental changes in the supply and demand for regulation emerged in the 1950s with the rise of national TV broadcasting and that these new forces contributed to a code law regime shift. The first demand shift is associated with the growth of TV broadcast stations that effectively formed a lower cost national media market. This enabled firms and interest groups advantageously to produce, advertise and market national brands. The expansion of production and distribution for national markets, as Adam Smith promised, led to further specialization and division of labor. This, in turn, brought information and production economies that reduced the market share of competing local and regional brands. The effect was the same for environmental organizations and other interest groups, which were local or regional in scope before 1970, as for wine, coffee and machinery producers that served local or regional markets. In the newly shaped political economy, firms that previously lobbied local and state governments for appropriate regulation found themselves playing a new game. A familiar refrain was raised: What was needed was a level playing field provided by federal regulation. A process that had occurred in the late 19th century for railroads, meatpackers, and unions played itself out again for a wide variety of organizations and industries. Washington became the focal point for lobbying. As the number of TV broadcast stations increased, so increased the pages in the Federal Register.

Figure 4 reports some relevant data. Here was see a mapping of annual Federal Register pages to the annual count of new TV broadcast stations that were on the air for the years 1962–2004.



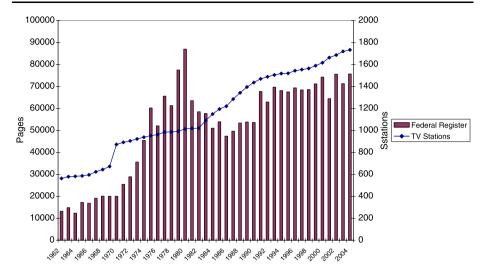


Fig. 4 Federal Register Pages and TY Broadcast Stations 1962–2004

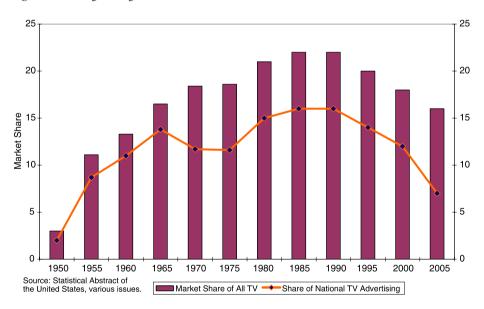


Fig. 5 TV Advertising, Total & National

Of course, the relationship depicted could simply reflect spurious correlation. More relevant, perhaps, is the rise of TV's share in all advertising expenditures and within that the share of TV advertising accounted for by national advertisers. This is shown in Fig. 5. As seen here, starting in 1950 at a low level, in a matter of 15 years, TV broadcasters quickly claimed more than 15 percent of the advertising dollar with the bulk of that accounted for by national accounts.

The rise of national brand markets would theoretically stimulate mergers of every category—horizontal, vertical, and conglomerate. In each case, mergers could enhance the coordination of critical functions that relate to production, marketing, and later, government



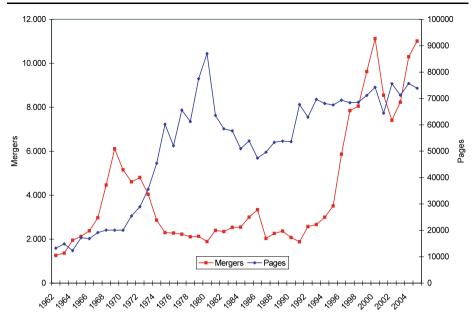


Fig. 6 Mergers and Federal Register Pages 1962–2005

lobbying and rent seeking. Indeed, the newly emerging demand for federal regulation provides an explanation for conglomerate mergers that until now has been lacking.

But as the regulatory state expanded, firms no longer needed to merge in order to coordinate critical production, marketing, and distribution activities. Code law regulation that applied to all firms in an industry could, at the margin, substitute for costly mergers. The code law cartelized industries in ways that were blocked by antitrust laws. Figure 6 shows the count of mergers that occurred from 1961 to 2005 along with another rendering of the count of Federal Register pages.

The chart contains three interesting periods. From 1961 until around 1973, merger activity and Federal Register production run in the same direction. From 1973 until the mid-1990s, code law production flourishes while merger activities languish. Then, most recently, a surge of merger activity has transpired.¹¹

This naive model suggests that merger activity is quite sensitive to equity market conditions and is negatively associated with the number of pages of new or modified code law. The results support the notion that code law was a substitute for mergers.



¹¹In an effort to shed some light on the merger/code law relationship, I estimated an ordinary least squares regression model that used the count of mergers from 1962 to 2006 as a dependent variable. I included the S&P500 composite index and the count of Federal Register pages as independent variables. The estimate, with t-statistics below coefficients, is as follows:

4 Did code law lead to hardening of the economic arteries?

At least one empirical study has compared the economic performance of code and common law countries (Mahoney 2001). Mahoney's research shows that common law countries outperform their code law counterparts. The ease with which contracts can be written, deals made, and the continuing evolving nature of common law provide part of the explanation for the relative efficiency of common law. When this logic is applied to the move to code law in the United States, we should expect to find a change in the overall performance of the national economy. But my story claims that the US GDP growth pattern was driven by a two-headed regulatory reform process that called for increased growth in social regulation in the 1970–1985 period accompanied by simultaneous deregulation of economic regulation in the same period.

I argue that the associated burden formed by social regulation led to a diminution in GDP growth. (If for no other reason than the fact that the benefits of environmental quality and other quality of life improvements do not figure into GDP.) Second, I argue that reform of economic regulation, including particularly the opening up of financial markets and innovations, would reduce transaction costs. This would give a one-time positive and measurable nudge to GDP growth with each major reform and importantly, as suggested by Mahoney, would soften the effects of recessions and shocks that might cause for economic adjustment. In other words, in the post-1985 world, US GDP will be lower and the variance/mean ratio of GDP growth will be smaller than in the 1970–1985 period.

US GDP growth

To test for these effects, I analyzed quarterly GDP annualized growth. Figure 7 shows the data for three distinct periods. I have marked the pre-1970 period as the Common Law Period. The data for 1970 to 1985, which correspond to the build up period for Federal Register pages, are labeled as the Code Development period. The last period, 1986–2006 is the Code Law period.

I have calculated means, variances, and variance/mean ratios for the three periods. See Table 1. The statistics indicate that 1986–2006, the code law period, is associated with slower and less volatile real GDP growth. During 1970–1985, volatility rises in the face of declining GDP growth. The data support the notion that as social regulation took hold, presumably producing benefits not captured in GDP, GDP growth declined.

An examination of movement in the S&P 500 index revealed a different pattern for growth in the three periods but similar changes in volatility. Figure 8 shows the data.

The descriptive statistics for the three periods are shown in Table 2. The mean growth of the S&P 500 index in 1948–1969 is higher than that of the 1970–85 transition period, which is marked with higher volatility. The growth after 1985 is higher than in the two preceding periods and with low volatility. The variance/mean ratios for the three periods indicate that the risk of the S&P 500 index rose during the transition period and recovered to the common law level during the code law period.

Table 1 Variance/mean ratios for GDP growth

	Mean	Variance	Variance/Mean Ratio
1948–1969	4.030	24.185	6.00
1970-1985	3.220	21.796	6.77
1986-2006	3.055	4.118	1.35



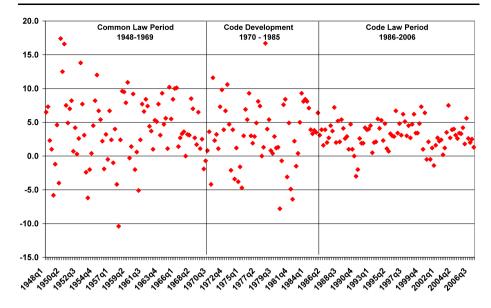


Fig. 7 Real GDP, Quarterly Growth: 1948–2006

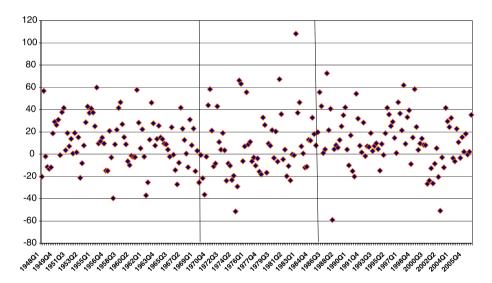


Fig. 8 S&P 500 Annualized Quarterly Growth 1948–2006

Table 2 Variance/mean ratios for S&P 500 growth

			Variance/Mean Ratio
1948–1969	10.725	21.28	1.99
1970-1985	8.156	28.52	3.50
1986–2006	12.456	23.51	1.89



Two macro measures, GDP growth and growth in the S&P 500 stocks, support the notion that something dramatic happened across the three periods analyzed. The pattern of growth reflected in GDP data is consistent with my argument regarding the restructuring of the US economy and the rise of social regulation and decline of economic regulation. The S&P 500 pattern is not as directly consistent with the story, but is somewhat supportive of it.

5 Final thoughts

This paper has put forward the notion that the rise of TV network broadcasting generated demand for regulatory reform that on the one hand, replaced state, local, and regional regulations and common law with federal code law. On the other hand, the same social force generated demand for the reform of economic regulation that led to a diminution of code law and an increase in common law activity for that regulation category. On net, the transition from common law to code law reduced the measured growth of real GDP and also reduced the volatility of GDP growth. In building the case for this interpretation of regulatory history, I have identified three distinct periods of post World War II regulation activity. These are 1948–1969, which I call the common law period; 1970–1985, the transition period, and 1986–2006, the code law period.

To support my principal arguments, I have provided a series of empirical reports that show relationships between TV broadcasting, regulation, and mergers. Then, I have reported data on US GDP growth and S&P 500 activity that support the notion of systematic change. While the theoretical arguments I offer may be supported by the fragmented data I present, the matter of whether or not national TV broadcasting induced the assigned regulatory effects calls for deeper, more systematic analysis. Until that work is forthcoming, I leave my arguments on the table for debate.

References

Bain, J. S. (1968). Industrial organization. New York: Wiley.

Blair, J. M. (1972). Economic concentration. New York: Harcourt Brace Jovanovich, Inc.

Buchanan, J. M., Tollison, R. D., Tullock, G. (1980). Theory of the rent-seeking society. Bryan: Texas A&M Press.

Christensen, C. M. (1997). The innovator's dilemma. Boston: Harvard Business School Press.

Christensen, G. B., & Haveman, R. H. (1984). The Reagan administration's regulatory relief effort: a midterm assessment. In G. C. Eads & M. Fix (Eds.), *The Reagan regulatory strategy: an assessment* (pp. 49–83). Washington: The Urban Institute.

Derthick, M., & Quirk, P. J. (1985). The politics of deregulation. Washington: The Brookings Institution.

Economic Report of the President, 2004. Washington: Government Printing Office.

Fischer, D. H. (1996). The great wave. New York: Oxford University Press.

Higgs, R. (1987). Crisis and leviathan. New York: Oxford Press.

High, J. (1991). Regulation: economic theory and history. Ann Arbor: The University of Michigan Press.

Hughes, J. (1990). American economic history. Glenview: Scott, Foresman and Co.

Kendrick, J. W. (1984). The implications of growth accounting models. In C. R. Hulten & I. V. Sawhill (Eds.), *The legacy of reaganomics* (pp. 19–43). Washington: The Urban Institute.

Litan, R. E., & Nordhaus, W. D. (1983). *Reforming federal regulation*. New Haven: Yale University Press. Mahoney, P. G. (2001). The common law and economic growth: Hayek might be right. *Journal of Legal*

Studies, 30, 503–525.
Mashaw, J. L., & Rose-Ackerman, S. (1984). Federalism and regulation. In G. C. Eads & M. Fix (Eds.), The Reagan regulatory strategy: an assessment (pp. 11–12). Washington: The Urban Institute.

McCraw, T. K. (1984). Prophets of regulation (pp. 303–304). Cambridge: Belknap Press of Harvard University.



- Miller, J. C., Yandle, B. (1979). *Benefit-cost analysis of social regulation*. Washington: American Enterprise Institute.
- Olson, M. (1984). Ideology and economic growth. In C. R. Hulten & I. V. Sawhill (Eds.), The legacy of reaganomics (pp. 229–251). Washington: The Urban Institute Press.
- Peltzman, S. (1976). Toward a more general theory of regulation. *Journal of Law and Economics*, 83(August–December), 677–725.
- Peltzman, S. (1989). The economic theory of regulation after a decade of deregulation. Brookings Microeconomic Papers, 1–59.
- Staff, Antitrust Subcommittee (1971). Committee on the Judiciary, House of Representatives, 92nd Congress, First Session. Investigation of Conglomerate Mergers, Washington, US Government Printing Office.
- Stigler, G. (1971). The theory of economic regulation. *Bell Journal*, *Spring*, 3–21.
- Tollison, R. D. (1991). Regulation and interest groups. In J. High (Ed.), *Regulation: economic theory and history* (pp. 59–76). Ann Arbor: The University of Michigan Press.
- Vogel, S. K. (1996). Freer markets, more rules. Ithaca: Cornell University Press.
- Wolff, E. N. (1985). The magnitude and causes of recent productivity slowdowns in the united states. In W. J. Baumol & K. McLennan (Eds.), *Productivity growth and US competitiveness* (pp. 29–69). New York: Oxford University Press.
- Yandle, B. (1983). Bootleggers and baptists: the education of a regulatory economist. Regulation, May/June, 12–16.

