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Corruption and Reform: Introduction

Edward L. Glaeser and Claudia Goldin

Political Corruption: Today and Yesterday

International measures of corruption rank the United States today among the lowest 10 percent of countries worldwide. To most Americans, corruption is something that happens to less fortunate people in poor nations and transition economies.[1] But America's reputation as an untarnished republic is a modern phenomenon.

Conventional histories of nineteenth- and early twentieth-century America portray its corrupt elements as similar, and at times equal, to those found in many of today's modern transition economies and developing regions. Nineteenth-century American urban governments vastly overpaid for basic services, such as street cleaning and construction, in exchange for kickbacks garnered by elected officials. Governments gave away public services for nominal official fees and healthy bribes.[2] As late as the 1950s, reports Robert A. Caro (2002, pp. 403–13), cash-filled envelopes floated in the hallowed halls of the U.S. Senate. Harry Truman made it into

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1. A growing literature in economic development has documented the extent of corruption in transition economies and poorer nations and its role in reducing economic growth. The literature begins with Mauro (1995) and includes, for example, Hellman, Jones, and Kaufman (2003) and Leite and Weidmann (2002). On the extent and consequences of corruption within a country, see, for example, Di Tella and Schargrodsky (2003), Gaviria (2002), McMillan and Zoido (2004), and Svensson (2003). These empirical papers give support to a theoretical literature (e.g., Rose-Ackerman 1975; Shleifer and Vishny 1993) about the negative consequences of corruption.
2. See, for example, Glaeser (2003), Menes (this volume), and Steffens (1904).

the Senate as an agent of the notoriously corrupt Pendergast machine (McCullough 1992). Some of the greatest U.S. universities were funded by individuals infamous for their roles in extracting public resources through allegedly corrupt political influence—Leland Stanford and George D. Widener, whose surname adorns Harvard's largest library, come to mind. The presidential legacies of Ulysses Grant and Warren Harding were forever marred by the Crédit Mobilier and Teapot Dome scandals, respectively. The list could go on and on.

If the United States was once more corrupt than it is today, then America's history should offer lessons about how to reduce corruption. After all, the dominant political movement of the early twentieth century—Progressivism—was dedicated to the elimination of corruption. From 1901 to 1917, under Presidents T. Roosevelt, Taft, and Wilson, a national legislative and administrative agenda was justified in part by a perceived need to reduce corruption. Municipalities and states throughout the twentieth century regularly elected reform slates that promised to exercise a strong hand to root out corruption. Crusading journalists and ambitious prosecutors have frequently taken aim at corruption. While scholars can debate the impact of these various forces, there is no doubt that U.S. history offers many examples of reform movements that claimed as a primary goal to reduce corruption, similar to the stated goals of reformers in developing countries today.

In this volume we take stock of corruption and reform in American history. Because conceptual clarity is a precondition for measuring the level of and temporal change in corruption, the first three chapters—this introduction, the essay by John Joseph Wallis, and that by Rebecca Menes—each squarely confront what is meant by corruption.

Because corruption is generally illegal, or at least embarrassing, it tends to be hidden and, understandably, as the modern cross-national empirical literature has found, difficult to measure. Time series measurement is yet more difficult. Despite these problems there is great value in searching U.S. history for evidence on corruption and its time trend. Several of the chapters address the measurement of corruption over time. The Menes essay uses information on the number of corrupt mayors and municipal administrations. That by Stanley L. Engerman and Kenneth L. Sokoloff uses evidence on cost overruns for major governmental projects. This introductory essay uses data on the reporting of corruption by hundreds of newspapers for the 160-year period from 1815 to 1975. The contributions by Howard Bodenhorn and Wallis, Price V. Fishback, and Shawn Kantor add evidence on the time path but focus on shorter time periods.

After the discussion of the meaning and measurement of corruption, two of the essays in this volume address the consequences of corruption or of weak legal regimes more generally. Naomi R. Lamoreaux and Jean-Laurent Rosenthal discuss the rise of corporations during the late nineteenth century and how their emergence was accompanied by decreased protection of minority shareholder rights. David Cutler and Grant Miller examine the diffusion of plentiful water in America's cities during an era of legendary municipal corruption. Clearly corruption does not alone determine the extent of public good formation.

According to Lamoreaux and Rosenthal, the number of corporations in the late nineteenth century exploded, despite inadequate protection of minority shareholders, because returns to scale in production increased. Cutler and Miller argue, in a somewhat similar manner, that despite the corruption of municipal governments the increasing availability of municipal credit during the Gilded Age made large-scale water projects feasible. Of course, the increase in municipal credit availability must have had something to do with improvements in accountability, suggesting that some forms of corruption had been curtailed. Both essays suggest that despite substantial corruption in government and fraud in private dealings economic growth was curtailed far less in America than in today's developing economies.

The volume then turns to the causes and consequences of reform. Reform and regulation were often rationalized as tools to protect consumers and workers, but as three of the essays—by Fishback, Bodenhorn, and Marc T. Law and Gary D. Libecap—note, the actual situation was often more complex. Fishback suggests the importance of a Stiglerian view of workplace safety regulation. Workplace safety regulations in the manufacturing and mining industries, he finds, were supported by unions and opposed by certain manufacturers. Because workplace safety laws in manufacturing disproportionately raised costs for small firms, the laws were championed by large firms. Because they were perceived as protecting workers, the laws were supported by unions.

Bodenhorn's essay emphasizes that reform can be the result of self-interested, competing politicians. He analyzes one of the first episodes of anticorruption reform in U.S. history—the fight against corruption in the chartering of New York State banks during the late 1830s. Bodenhorn argues that reform emerged from the Whigs' desire to deprive their opponents—Van Buren's Democratic Regency—of the rents of patronage. Deregulation was the weapon of choice against corruption since reducing chartering requirements limited the ability of government to manage their monopoly in a corrupt manner.

Law and Libecap analyze the origins of today's Food and Drug Administration (FDA) and also emphasize the political roots of reform. Passage of the Pure Food and Drugs Act (1906), which gave rise to the FDA, was driven by a combination of producer interests and consumer concerns about food quality. But concerns about food quality were based more on stories promulgated by political entrepreneurs and the press than on any objective reality. Moreover, political entrepreneurs appear to have manipulated consumer outrage to produce institutions that were, at least in the short run, only moderately aimed at protecting consumer interests.

Corruption is often kept in check by the media, and the role of the press is directly confronted in the chapter by Matthew Gentzkow, Glaeser, and Goldin. In 1870, the press was partisan, histrionic, and prone to omit facts that went against acknowledged political biases. But by 1920, most newspapers eschewed party affiliations, used more moderate and civil language, and made at least a pretense of reporting the facts of the day without spin. The chapter argues that the rise of the independent press and the remarkable transformation in U.S. newspapers between 1870 and 1920 was fundamentally the result of the increasing financial returns to selling newspapers rather than placating politicians for patronage and other reasons. While the essay does not document the impact that the press may have had on corruption, it does discuss circumstantial evidence suggesting that the rise of the independent press was an important factor in movements to reform American political corruption.

A particular outcome of these reform movements—the public ownership of utilities, specifically water provision—is examined by Werner Troesken. Troesken's evidence suggests, paradoxically, that the move to public ownership in the early twentieth century *and* the move away from public ownership seventy-five years later were both associated with gains in service quality. As Troesken notes, the evidence is consistent either with the view that ownership was productive during the earlier corruption but less productive today, or with Mancur Olson's (1982) view that change in any direction reduces corruption, at least in the short run, because of the ossification that all bureaucracies incur after some time.[3]

Wallis, Fishback, and Kantor, in the last chapter of the volume, look specifically at the presence of corruption in the provision of public relief, such as welfare and unemployment insurance. The move to federal provision in public relief, they argue, played a major role in reducing corruption in the welfare system. The institutional change occurred because the effectiveness and credibility of the Roosevelt administration would have been seriously hampered by allegations of corruption. While those in the Roosevelt administration would not have enjoyed the benefits that local leaders would from a corrupt welfare system, they would have incurred most of the costs. Because of the separation between national and local authority, Franklin Roosevelt had a strong incentive to place checks on corruption. These checks, it appears, substantially reduced the amount of corruption that developed. This chapter, and that by Bodenhorn, suggest the roles that separation of powers and intergovernmental competition can play in bringing about effective reform.

3. Thomas Jefferson's often-cited quotation makes a similar point: "The tree of liberty must be refreshed from time to time with the blood of patriots and tyrants."

Corruption: Definitions and Theory

As Wallis's essay makes clear, the term *corruption* has its origins in an analogy between the state and the human body. In its first incarnation, corruption referred to the process by which a well-functioning system of government decays into one that fails to deliver and maltreats its citizens. According to the Greek historian Polybius (c. 200–120 BCE), monarchy corrupts into tyranny, aristocracy into oligarchy, and democracy into mob rule.

During the nineteenth century, the definition of corruption morphed into one specifically related to the bribery of public officials by private agents. Bribery was generally an illicit payment in exchange for some government controlled resource, such as a service, a public property, or an exemption from government regulation. These forms of bribery, detailed in the chapter by Menes, form the lion's share of what is known about nineteenth-century municipal corruption. City governments were corrupt in the purchase of inputs, such as street cleaning or construction services, and bribes were routinely given in exchange for overpayment for these inputs. City governments were corrupt in the distribution of publicly owned property—land or access to a port—that was sold, not to the highest bidder for the good of the citizens, but to the most generous briber for the benefit of the few. Finally, city governments were corrupt in the administration of rules, such as prohibitions on gambling and prostitution, and officials accepted bribes for leniency in the administration of such regulations.

In this volume we will use the word *corruption* to refer to what Wallis terms "venal corruption." We view corruption to have three central elements: (a) payments to public officials beyond their salaries; (b) an action associated with these payments that violates either explicit laws or implicit social norms; and (c) losses to the public either from that action or from a system that renders it necessary for actions to arise only from such payment. Two examples from the volume illustrate how these elements describe corruption.

Engerman and Sokoloff discuss overpayment in the construction of antebellum U.S. canals. Corruption, if it occurred, would take the form of excessively large government payments for inputs that would be accompanied by bribes to legislators and a waste of government funding. Notably, if government pays too much for a project relative to a private purchaser but the overpayment was not accompanied by payments to government officials, corruption (according to the definition) has not occurred. Government inefficiency and bureaucratic stupidity are not equivalent to corruption. We believe this definition of corruption accords well with common usage.

The Bodenhorn essay discusses how state banks received charters in the 1830s after paying bribes to the New York Regency machine. In this case, payments were made to public officials. Although the actions taken did not violate any existing law, they did, it appears, infringe upon a social norm concerning quid pro quo exchanges of cash for licenses. The social losses did not, it appears, come from the act of chartering, which was probably beneficial, but from the system that made charters valuable by limiting entry into the banking sector.

Within this broad definition are a number of different types of corruption. Most modern corruption is illegal, but there are forms of legal corruption. One prominent example of the latter is given by George Washington Plunkitt's description of honest graft (see Riordon 1905). Honest graft, in Plunkitt's terminology, is the gain of wealth by public officials through private information, such as the proposed route of a new highway. The expropriation of this information involved a loss of wealth to the public, but it was not necessarily illegal. However, as shown by Plunkitt's need to defend his actions and by Progressive Era outrage at actions of this nature, Plunkitt's dealings were in conflict with social norms. Plunkitt's form of corruption involved payments to public officials, losses to the general public (if Plunkitt had not bought the property, its prior owner would have benefited from the public purchase), and a violation of a social norm. In general, as societies develop and as social norms get transformed into formal rules, we expect the share of corruption that is illegal to rise.

While the three-part characterization—excessive payments, violation of a law or social convention, and social losses—may serve as a reasonable definition of corruption, it is only a beginning in helping us measure corruption. The definition suggests ways of measuring the extent of corruption. First, in principle, one can measure corruption by the payments to public officials, perhaps relative to the formal payments received by the same officials. McMillan and Zoido (2004) use this type of methodology in their study of corruption in Peru. This measure would provide some sense about the importance of corruption in the public sector, but it might correlate only weakly with the social costs of corruption.

A second method of measuring corruption would focus on the frequency with which laws are violated. Studies that focus on corruption convictions (such as Glaeser and Saks 2004) attempt to measure corruption by counting the number of times a court finds that corruption laws have been violated. Since we have no natural measure of the number of possible opportunities to be corrupt, the measure lacks a natural denominator, although the size of government might be used.

A third approach is to focus on the social costs of corruption. Even though the social costs from corruption are potentially quite large, measuring them is near impossible. In the developing world, for example, corruption in the education sector may retard long-run economic growth (Reinikka and Svensson 2004). Corruption of the political system may lead to a breakdown in property rights enforcement causing enormous social losses. Payments to officials may be measurable, but those payments are generally transfers, not social costs, and losses to the public coffers may be offset by the payment of lower salaries to officials (as in Becker and Stigler 1974). And even if the social costs of corruption could be measured, one must decide whether to deflate by the size of the economy, the potential size of the economy, or the size of the government, among other reasonable deflators.

A difficult question that reappears throughout this volume, but which is still inadequately answered in the literature, is what the full cost was of corruption in U.S. history. The irony may be that corruption was large as a fraction of government, particularly in the late nineteenth century, but that the economy prospered nationally and locally.

The Determinants of Corruption

The economic approach to corruption (as in Rose-Ackerman 1975) starts with the costs and benefits facing potentially corrupt public officials. Since economics predicts that we should expect to see corruption when the benefits are high and costs are low, it is worth analyzing what factors should impact the benefits and costs of corrupt behavior by a government official. The benefits from being corrupt are determined by the ability of a government official to increase someone's private wealth; the costs come from the expected penalties from being caught.

What determines the ability of a government official to increase someone's private wealth? The most obvious means is to pay the person out of the public purse. In extreme circumstances, the person can just be the official himself; embezzlement is one example of corrupt behavior. More usually, paying someone out of the public purse occurs in exchange for services of some form, either labor or subcontracting. If fees are close to the costs of contracting firms or the opportunity costs of workers, then the opportunities for corruption are limited. If fees are significantly above free market prices, then there is opportunity for corruption in the assignment of work. High public-sector wages and discretion over hiring have traditionally created some of the best opportunities for corrupt earnings.

This simple analysis helps us to understand some of the most popular reforms attempted to arrest corruption. Civil service reform that would take patronage out of the hands of politicians and replace discretion with test-based rules would naturally serve limit the opportunity for corruption, especially when combined with a rigid pay scale for civil servants.[4] Rules concerning procurement fees have also tended to be a popular tool against corruption. Competitive bids for public projects linked to the requirement that the government accept the low cost bid is one of the sim-

4. See, for example, Johnson and Libecap (1994).

plest means of limiting corruption in administration of government projects. The approach relies on the existence of a competitive supply of contractors.

The second means that public officials have to create private wealth is to transfer government property to private individuals for their own profit. The transfer of government land to traction companies was a popular form of corruption in the nineteenth century. Information about future government actions is a more subtle form of in-kind transfer. The returns to corruption in these cases depend on the size of the assets at the government's disposal and the discretion that individuals have in the distribution of these assets.

The third primary means that governments have to create private wealth is the manipulation of legal rulings or the enforcement of rules, such as regulations. Rules banning gambling and prostitution, for example, create the opportunity to extract bribes from potential providers. These bribes can be extracted by any and all members in the chain of enforcement. As the amount of regulation increases, the opportunity to extract bribes also rises and leads reformers to fight against regulation and government monopoly (as in Bodenhorn's essay). Conversely, the connection between the intrusiveness of regulation and the ability to extract bribes creates an incentive for politicians to push for further regulation.

Even in a libertarian's dream world where government is restricted to resolving disputes over property rights, there would still be considerable scope for corruption in the arbitration of these disputes. Every dispute over ownership creates the possibility for a corrupt ruling. After all, a corrupt judge can extract bribes even when he rules in favor of the rightful owner. As the legal system has the ability to redistribute all of the wealth in society, the opportunities for corruption within the system are enormous. As corruption within the courts destroys the clear definition of property rights, this corruption has the potential to turn the libertarian dream into a Hobbesian nightmare. In practice, this ability may be limited by the ability of private litigants to rely on private arbitration and avoid a corrupt legal system.

Together these factors suggest that the benefits from corrupt practices for bribe-taking politicians or bribe-giving businessmen will rise with the size and discretion of the government and the amount of social and economic regulation. Benefits from corruption will also rise when the size of assets or damages involved in property rights disputes increases (Glaeser and Shleifer 2003). The late nineteenth century was a period of increasingly larger governments, more valuable public assets, more aggressive regulation, and bigger-stakes litigation. The potential benefits from corruption rose along almost every conceivable dimension. The prediction is an absolute increase in the total amount of corruption (measured in either bribes given or in social losses). But the increase in corruption might not translate into an increase relative to the size of government or the size of the economy.

The limits on corruption have customarily come from three sources: legal penalties, career or social costs, and internal psychic pain. Thus, the overall costs of corruption come from the size of the potential penalties and the probability that these costs are imposed that are in turn a function of information flows, social opprobrium, and the legal system.

The most obvious parameter influencing the cost of illegal corruption is the stated legal penalty for corrupt practices (the cost of corruption that violates social norms, but not laws, will not be connected to legal penalties). While this is certainly obvious, it is also important to remember that these penalties have changed significantly over time. For example, while Plunkitt's honest graft—the use of insider information by politicians to enrich themselves—was surely corruption, at least by our definition, it was fully legal during Plunkitt's time. Even the gifts of railway stock given to congressmen and others during the Crédit Mobilier scandal were perfectly legal at the time. In the 1790s, the number of laws regarding corruption was so modest that legal penalties against corruption were often negligible. Since that time, there has been a steady increase in the range of behaviors by public officials that are punishable by law and a steady increase in the attempt to craft laws, such as the RICO statute, that render illegal as yet unspecified forms of corrupt behavior.[5]

Although the number of political activities proscribed by law has generally increased with time, the trend of enforcement is less clear. We do not know the probability of being convicted for a corrupt practice in the past as well as today. Even when we know the number of convictions, we do not know the number of corrupt actions that could have led to a conviction. Enforcement requires both an initial report informing the police or the public about the corrupt action and a legal proceeding that responds to the report. Initial reports informing the public about corruption have been made mainly by third parties or by investigators from some branch of government separated from the actual corruption. As the Gentzkow, Glaeser, and Goldin chapter reminds us, the press played a major role in exposing scandals like Crédit Mobilier and Teapot Dome. However, in some cases, such as the famous exposure of the Tweed Ring's corruption by the press, exposure was initiated by a rival politician. In the more modern era, journalistic careers, such as those of investigative reporters Robert Woodward and Carl Bernstein, writing for the *Washington Post,* have been made through intrepid uncovering of governmental malfeasance.

Government does, however, occasionally police itself. Today there are hundreds of prosecutions of state and local officials by federal investiga-

5. RICO is the acronym for the Racketeer Influenced and Corrupt Organizations Act, passed by Congress in 1970.

tors under the national Corrupt Practices Act. The Tweed Ring faced legal prosecution not by local city police, who were often part of the ring, but rather through prosecution by officials of New York State. Today, perhaps 80 percent of public corruption prosecutions are brought by federal officials (Corporate Crime Reporter 2004). Separation of powers and federalism create rivalries between different government actors, and these rivalries create incentives to uncover and prosecute corruption. Of course, the true importance of self-policing is understated because in cases where internal monitoring functions well, corruption is unlikely to occur.

To generate legal penalties, the uncovering of corruption must be followed by successful legal prosecution, which in turn requires an independent judiciary and judges who are willing to convict officials found guilty of corruption. Conviction will occur if the legal system is itself free from corruption. But even if judges are themselves corrupt, they may still be willing to convict corrupt politicians if their political interests conflict with those of the accused politicians. Judges appointed by a Republican machine, even if they were completely complicit in that machine's corruption, would still be willing to convict a corrupt representative of an urban Democratic machine. The rise of professionalism in the judiciary has meant that it is increasingly less likely that a corrupt politician can count on a friendly judge to be lenient.

Even if the judicial system is dormant, the revelation of corruption can still create costs if the exposure damages a politician's career or social standing. For a politician, career costs typically depend on the willingness of voters to oust corrupt officials. The track record of the electorate is mixed in this area. Many notoriously corrupt officials have been re-elected, perhaps because the corruption is funneled back to voters or because voters are sufficiently cynical (or realistic) that they think that political challengers are likely to be no less corrupt than the incumbent. The political career of James Michael Curley, whose corrupt actions eventually landed him in jail, was in real danger only when he faced political challengers who combined a clean image with the same aggressive Hibernianism—Irish-Catholic jingoism—that Curley championed. Naturally, the role of career concerns suggests that corruption will be more costly in areas with robust competition between two or more political parties.

The Time Path of Corruption in the United States

Because it is important to have a sense of the time trend, we offer our assessment of the relative magnitude of corruption across U.S. history. We know that the evidence we employ is open to discussion and will be subject to debate. But we will argue from several sources that there is reason to believe that corruption increased during the first three-quarters of the nineteenth century or was at a high level in the antebellum era with much temporal variance. The most important of our findings is the decline in American corruption from the mid-1870s to the 1920s.

Our measure uses public documents—newspapers—to proxy for reported crimes. Although there are no historical victimization surveys or crime reports, corruption was reported in the press. There are reasons to question newspaper reporting as an indicator of the underlying facts (the Gentzkow, Glaeser, and Goldin chapter emphasizes the changing bias of the media), but given the absence of other measures, media coverage of corruption offers one possible means of assessing the amount of *reported* corruption.

With the advent of optical scanning technology, there are now a large number of digitally searchable newspapers published in the United States, some going back to the late eighteenth century. The drawback of using newspapers is that reporting often differs from the underlying reality. Changes in reporting can reflect changes in the newspaper market rather than actual changes in corrupt activity.

Our approach is to search for the words "corruption" and "fraud" (and their variants, such as "corrupt" and "fraudulent") and to count the appearance of articles (or pages) containing these words. This count gives us a measure of the amount of space newspapers gave to stories about corruption and fraud. We then deflate these counts by the number of articles (or pages) containing the words "January" or "political" (and its variants). This count gives us a measure of the overall size of the newspaper (in the case of "January") or the overall amount of attention given to politically relevant stories (in the case of "political"). Our results are not particularly sensitive to the exact choice of deflator words.[6] Deflating by the word "political" might be seen as a word count equivalent of trying to measure corruption divided by the size of government. Deflating by the word "January" might be seen as a word count analogy of trying to measure corruption divided by the size of the overall economy.

We use two sources that are available electronically online in fully searchable editions: the *New York Times* (available from Proquest) and a large group of small-town newspapers (available from Ancestry.com).[7] The *New York Times* has several advantages. Because it is a single newspaper, the series does not have a changing composition of papers. The *Times* is among the most serious American papers historically, and by the late nine-

6. The difference between the "January" and "political" deflators is most pronounced in the early, pre-1860 era because the majority of newspaper stories in the antebellum period were political. As newsprint prices plummeted, more attention was devoted to other types of stories and features.

7. By "small-town newspapers" we mean papers such as the *Bangor Daily Whig and Courier* (Bangor, ME), the *Lorain Standard* (Elyria, OH), the *Adams Sentinel* (Gettysburg, PA), the *Janesville Gazette* (Janesville, WI), the *Morning Oregonian* (Portland, OR), and the *Statesville Landmark* (Statesville, NC).

teenth century it was unlikely to have made unsubstantiated claims about corruption or knowingly omitted major stories on corruption.

Relying on the *Times* has the disadvantages that it affords us primarily a picture of New York City. Furthermore, its reporting begins in 1851 with the establishment of the paper. To supplement the evidence from the *Times,* we use a large collection of newspapers available from www.ancestry.com, a website containing sources including the U.S. population censuses and immigration records of particular value to genealogists.[8] The papers are geographically spread throughout the United States mainly from small cities and towns and have fairly good coverage by the early nineteenth century. The disadvantage is that the composition of papers changes over time. Although neither series is perfect, they yield a remarkably similar picture for the century of overlap.

We have presented in figure 1 three series given as three-year centered moving averages to smooth the data. The series that are deflated by "political" are remarkably close in the period of overlap (the correlation coefficient between the two series is 0.943 for the period 1852 to 1960).[9] If the variation in corruption reporting were caused by reporting fads or changes in the market for news, these fads and market changes must have had a remarkable consistency between New York City and small-town America.

One check on the series is to see whether the reporting corresponds well with known facts about corruption. Do peaks in the series occur during periods known to have contained considerable corruption? Table 1 gives thumbnail sketches of the stories during the local peaks in "corruption" and "fraud" in figure 1.

The first great boom in corruption reporting occurred around the 1840 election. Stories of corruption during this period focused on Tammany Hall and also Martin Van Buren, the first president who owed his success to a political machine (for a description of Van Buren's activities in the banking sector, see the Bodenhorn essay).[10] The next peak in corruption reporting occurred between 1857 and 1861 and focused on voting irregularities in Kansas. There is a global peak in the 1870s during the Grant administration. Top stories concerned Crédit Mobilier, the Whiskey Ring, and southern Reconstruction and the Ku Klux Klan. Finally, there is a small local peak in the late 1920s during the era of prohibition and the Teapot Dome scandal. The *New York Times* series is similar and shows basic patterns that conform to our notions about periods of major corruption in U.S. history.

Both series reveal one major trend: reporting on corruption declined be-

8. Because the Ancestry.com site is updated almost daily, we did the counts during a short interval.

9. The correlation is likely enhanced by the copying by small-town newspapers from the larger city papers and also by the use of wire services.

10. There was also a brief advertising craze concerning remedies for "corrupted livers."

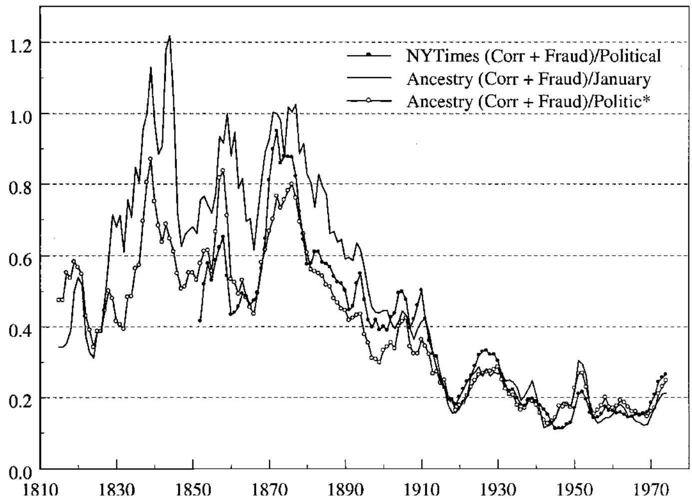

Fig. 1 Indexes of corruption and fraud: 1815–1975

Sources: NYTimes: online, fully searchable edition of the *New York Times* from ProQuest Information and Learning Company, Ann Arbor, Michigan. Ancestry: Ancestry.com, part of MyFamily.com, Inc., Provo, Utah.

Notes: The series for the *New York Times* gives counts of the words "corrupt*" and "fraud*" divided by counts of the word "political," where an asterisk (*) indicates that all variants are selected. The search engine (Proquest) gives the number of separate *articles* containing at least one "hit." The series for Ancestry gives counts of the words "corrupt*" and "fraud*" divided by counts of the word "politic*." The search engine (Ancestry.com) gives the number of newspaper *pages* containing at least one hit. The number of separate newspapers changes over time, as does the mix of papers. For example, the numbers at five-year intervals from 1820 to 1935 are

1820	3	1850	10	1880	42	1910	48
1825	3	1855	16	1885	46	1915	51
1830	10	1860	18	1890	53	1920	47
1835	4	1865	18	1895	53	1925	41
1840	6	1870	19	1900	45	1930	37
1845	8	1875	33	1905	50	1935	33

Because newspapers are constantly added at Ancestry.com, the numbers apply to those as of July 2004. All series in figure 1 are expressed as three-year centered moving averages.

tween 1870s and the 1920s. The decline, moreover, is concentrated in both series from the mid-1870s to 1890 and in the 1910s. In the 1870s our index (deflated by "political") was greater than 0.8, but ever since 1930, the index has hovered around 0.2. If these series reflect anything about reality then it is hard not to conclude that there was a significant secular decline in corruption.

The earliest period of a sustained decline in reporting on corruption and fraud occurred from the mid-1870s to 1890. At the national level, the period begins at the end of the scandal-ridden Grant administration. At the local level, the period was one of reform in New York city under "Honest"

Table 1 **Thumbnail sketches of events during local time series peaks in corruption and fraud activity**

Time period	Index	Corruption and fraud events
1820	0.567	Impeachment proceedings against the governor of Pennsylvania (most of the available newspapers in Ancestry.com were from PA).
1837–45	0.611 to 0.870	Whig accusations of corruption by the Van Buren administration, particularly in 1840 (election year). After Harrison died in office, the Tyler assumption of the presidency brought charges of corruption by those who thought he should be an interim president. Tammany Hall corruption scandals also dotted the news.
1857–59	0.711 to 0.837	Voting irregularities after the Kansas-Nebraska Act. The pro-slave voting by Missourians in the Kansas elections and the "Lecompton Constitution" were deemed fraudulent and corrupt.
1870–79	0.876 to 1.03	Voter intimidation in the South by the Ku Klux Klan. Various aspects of Reconstruction (including carpetbaggers, use of federal money by the Radicals, and the Freedmen's Bureau) were deemed corrupt. The 1872 election, Greeley's alleged connections to Tammany Hall. The Crédit Mobilier corruption scandal and various criticisms of the Union Pacific Railroad. Other corruption during the Grant administration, including the Whiskey Ring. The 1876 Democratic candidate, Tilden, was known for breaking the Tweed Ring and the Canal Ring, and this made corruption a major issue in the presidential election. The election was heavily contested, and although Tilden appears to have won the popular vote a senatorial committee awarded the disputed electoral votes to Hayes.
1893	0.635	No single or major issue. Financial panic appears to have led people to place blame. Three major railroads collapsed, and stock fraud was discussed. Land grant fraud in the Northern Great Plains was alleged. Corrupt appointments in the Cleveland administration were discussed, as were claims that continued exclusion of southern Democrats from Congress would lead to corruption.
1925–28	0.264 to 0.274	The Teapot Dome scandal of the early 1920s was raised during the 1928 presidential election as an indication of Coolidge's corruption. Albert Fall was tried for his involvement in Teapot Dome. Andrew Mellon, treasury secretary, was investigated. Also the barring and subsequent reinstatement of Alfred Smith from his Senate seat for corrupt fundraising. Speakeasies and other "corrupt" ways to get around Prohibition and the power of organized crime. Congress passed the Corrupt Practices Act in 1925 governing campaign expenditures.
1951–52	0.269	Scandal in the Internal Revenue Service (IRS) led to the dismissal of many people and the discovery of misuse of funds in the Reconstruction Finance Corporation. Kefauver headed Senate committee to examine influence of organized crime in the government and exposed many.

John Kelly, whose administration was far cleaner than that of Boss Tweed. It seems reasonable that the decline in our index reflects a cleansing of politics, even though the decline occurred during the heart of the Gilded Age.

The first period of decline in our index is followed by one of stability from about 1895 to 1908. The period—a high point of the Progressive Era—does not seem likely to have been a moment when reform stood still. Instead, a more reasonable reading of the evidence is that even if reform continued, the vast attention paid to corruption by muckraking journalists meant that our series is stable despite continuing reductions in corruption. Perhaps it is worthwhile noting that, contrary to the view that Progressive Era muckrakers brought to the media a new awareness of corruption, our series suggests that such attention was much higher before. Our series, however, cannot reveal whether the informational content of the Progressive Era muckrakers was substantially higher than the more histrionic reporting of the earlier era.

The second period of decline occurs between 1908 and 1917. This period was legitimately one of significant reform, and it is certainly possible that corruption dropped greatly during this era. It is also conceivable that increasing coverage of the Great War may well have pushed corruption off of the front pages. After this period, there is a rise in the late 1920s, but even during that period, reporting on corruption never approaches the levels of the middle nineteenth century. By the 1930s corruption in the United States was far lower than in the nineteenth century, if the content of the press is any indication.

The time path shown by these series is compatible with mainstream histories of the period. The traditional view of much of the nineteenth century is that it was replete with great corruption, and the traditional view of the early twentieth century (see, for example, Hofstadter 1955) is that Progressive Era reforms were effective and that corruption actually fell. Furthermore, scattered evidence on conviction in high places also supports the downward trend observed in the index. For example, while charges of venal corruption were regularly leveled against nineteenth-century New York City mayors like Fernando Wood, Oakey Hall (a member of the Tweed Ring), and Robert Van Wyck, no New York City mayor since William O'Dwyer, fifty years ago, has been seriously accused of corrupt activity. Indeed, since Van Wyck more than 100 years ago, only O'Dwyer and James Walker seem to have been notably corrupt.

The time series gives clear evidence for a decline in corruption since the mid-1870s, but the evidence on the early part of the nineteenth century is more mixed. Our point estimates for the antebellum and immediate postbellum era indicate a steady rise in reporting about corruption between 1815 and 1850 and no change from about 1850 to 1870. The pattern is consistent with the rise in government budgets and the scale of the economy (as argued by Glaeser and Shleifer 2003). Although the data are consistent with the view that corruption followed an arc, first rising between 1815 and 1850 and then falling after 1870, the evidence for the early rise is weaker than that supporting the subsequent fall.

The findings on the time path of corruption gleaned from newspaper reporting are corroborated both by the Menes essay and the Engerman and Sokoloff essay in this volume. Menes argues that the history of corruption in urban machines follows roughly the time pattern given in figure 1—first rising and then falling. Engerman and Sokoloff argue that despite widespread accusations of corruption, early canal construction was relatively honest, although later canal construction was probably highly corrupt. Because canals were a large fraction of public projects in the antebellum era, corruption may have been high. Their evidence for the latter period is mixed. Although large public projects in the twentieth century had vast cost overruns, Engerman and Sokoloff find limited evidence of corruption.

Reform and the Fight against Corruption

To understand changes in corruption and its prosecution over time, it is vital to have a theory of reform in addition to one of corruption. Reform is probably the more difficult of the two tasks because it is rarely a unilateral decision.[11]

The essays in this volume deal with three main theories about the rise of reform. The first theory views institutional change as welfare maximizing and argues that institutional reform is more likely to succeed the higher are the social benefits of reform. This view dominated mid-twentieth-century historical writings on reform including the oft-cited volume by Hofstadter (1955). A second, revisionist theory follows Stigler (1971) and emphasizes the power of certain producers in shaping regulation. According to this view, regulation and reform fit the needs of big producers who want to increase their generally smaller rivals' costs. Finally, a third theory (suggested by Law and Libecap in this volume) argues that reform is driven by political entrepreneurs who sometimes gain support through the manipulation of popular opinion and the tools of government.

The welfare-maximizing view of reform was that espoused by reformers, such as Theodore Roosevelt, Woodrow Wilson, Herbert Croly, and John Landis. This optimistic view implies that reform movements should arise when the net social benefits of reform outweigh the costs. If this is correct, we should see corruption-reducing federal control over welfare programs whenever the benefits exceed the costs of central control, such as a lesser ability to target welfare most accurately or a weighty bureaucracy or the

11. For example, reform has seldom been credited to a particular political leader. Although there have been exceptions, as in the cases of the two Roosevelts and Woodrow Wilson, even their efforts are best seen as culminations of lengthy reform movements.

fixed costs of reform itself. According to Wallis, Fishback, and Kantor, federal oversight of New Deal relief eliminated corruption that had been endemic to transfer programs at the state and local levels. We should expect to see more reform when corruption is high, possibly resulting from an ossified system as in Olson (1965; see also the Troesken essay), or because exogenous variables have increased the returns to corruption. This view also predicts that reform will occur when the cost of introducing reformed institutions decreases, perhaps due to more-educated and better-informed elites with greater abilities to monitor such institutions.

The second, revisionist, view of reform argues that reform is controlled by well-organized special interest groups. In the case of regulation of industry, the relevant interest groups are big firms. According to this view we should see more reform when the benefits it provides to big firms are greater or when their political clout is greater. One somewhat surprising implication of this Stiglerian view is that it suggests that Progressive Era reform and regulation may not have signaled the triumph of popular sovereignty over business interests but rather the triumph of particular businesses over the state.

The third view of reform looks neither to special interest groups nor to public welfare as a whole, but to political entrepreneurs. According to this view, reforms are put forward by political entrepreneurs who seek either to get elected on a reforming ticket or be appointed to some new administrative body created as a result of reform. In the case of a perfectly informed electorate, this view and the first, welfare-maximizing, view of reform become identical. But in cases where the electorate is less than perfectly informed and its opinions can be shaped by entrepreneurs (as in the Law and Libecap essay), this view of reform yields different positive predictions about when we should expect to see reform. It also yields different predictions about the welfare benefits of reform and implies that reform may be socially costly.

One variant on this theory is that the "cry of reform" is basically the natural complement to accusing one's opponent of being corrupt, and any challenger, unless the opponent is known to be squeaky clean, will be tempted to make the accusation. A natural impediment to the cry of reform occurs when the challenger has been part of the system, and another is that reforms generally reduce rents to politicians when they get elected. Thus, reform is most likely to be championed by political entrepreneurs who have not been part of the system and who are unlikely to be able to take advantage of corruption (as in the Bodenhorn essay).

There is no question that each of these theories has been important during certain epochs of reform, and each of these theories can potentially explain the time path of reform over the last 150 years. Glaeser and Shleifer (2003) argue that Progressive Era reforms were necessary because an increasing scale of enterprise made old institutions unable to handle increasing incentives for corruption. As such, early twentieth-century reform was a response to the increased corruption created by increased scale. A Stiglerian view is that increased scale and business power naturally led to business-friendly reforms. Finally, changes in public literacy and sophistication, the media, the size of government, and the returns to offices might have all acted together to give political entrepreneurs greater ability and desire to sell reform to the public. Therefore, it is difficult to disentangle the relative importance of the three theories of reform. They are touched on by many of the essays in this volume.

Conclusion

Corruption within the United States appears to have followed something of an arc, beginning at a high level with a small increase and ending with a spectacular decrease.[12] The early period in U.S. history was probably a bit less corrupt than the Gilded Age that followed. But rule breaking in the modern era is far more circumspect than in the early twentieth century. If there was a rise in corruption across the nineteenth century, the rise can be easily explained by the increasing scale of both government and the economy. Vast increases in the budgets of local governments greatly increased the potential benefits of corruption. It would be surprising if corruption had not increased between 1800 and 1870.

But the decline in corruption between the mid-1870s and 1920 was not associated with declining returns to corruption. The size of the government continued to rise, and the returns from corruption in the judiciary increased as well. The big change over the twentieth century has been in the costs facing corrupt politicians. In 1900, many actions we would now prosecute were legal. Governments rarely prosecuted themselves, and the higher levels of government were sufficiently weak that they could not provide a check on local corruption. Newspapers had long provided exposure of corrupt practices, but in many smaller cities the news media were sufficiently tied to the political establishment that it was unlikely to trumpet information unfavorable to that establishment.

By the early twentieth century, the full apparatus of modern checks on corruption was in place. Rules had generally replaced discretion in many areas, such as patronage. Different levels of government more effectively patrolled each other. Greater competition and political independence in the news media meant that corrupt activities and charges of corruption were more likely to be reported everywhere in America, not just in the big cities. Finally, voter expectations about corrupt behavior had changed, and revealed corruption was more likely to lead to political defeat.

12. By "corruption" we mean a measure that is deflated by the size of the economy or government.

Because the costs of corruption rose along so many margins, it is hard to determine what particular factor or set of factors was most important. Still, American history does provide a striking story of a country that changed from a place where political bribery was a routine event infecting politics at all levels to a nation that now ranks among the least corrupt in the world.

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