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CORRUPTION AND REFORM: AN INTRODUCTION

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ABSTRACT

The United States today, according to most studies, is among the least corrupt nations in the world. But America's past was checkered with political scandal and widespread corruption that would not seem unusual compared with the most corrupt developing nation today. We construct a "corruption and fraud index" using word counts from a large number of newspapers for 1815 to 1975, supplemented with other historical facts. The index reveals that America experienced a substantial decrease in corruption from 1870 to 1920, particularly from the late-1870s to the mid-1880s and again in the 1910s. At its peak in the 1870s the "corruption and fraud index" is about five times its level from the end of the Progressive Era to the 1970s. If the United States was once considerably more corrupt than it is today, then America's history should offer lessons about how to reduce corruption. How did America become a less corrupt polity, economy, and society? We review the findings and insights from a series of essays for a conference volume, *Corruption and Reform: Lessons from America's History*, for which this paper is the introduction that attempt to understand the remarkable evolution of corruption and reform in U.S. history.

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I. Political Corruption: Today and Yesterday

To most Americans today, corruption is something that happens to less fortunate people. A growing literature in economic development has documented the extent and consequences of corruption in transition economies and poor nations. Corruption harms economic growth, as demonstrated by a number of studies using cross-national data.¹

Most international measures of corruption rank the United States today among the lowest 10 percent of corrupt countries worldwide. But America's reputation as an untarnished republic is a modern phenomenon. Conventional histories of nineteenth century America portray its corrupt elements as similar, and at times equal, to those found in 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 given to elected officials, and these governments gave away public services for nominal official fees and healthy bribes.² As late as the 1950s, notes Robert A. Caro (2002), cash-filled paper bags floated in the hallowed halls of the U.S. Senate. Harry S. Truman made it into the Senate as an agent of the notoriously corrupt Pendergast machine (McCullough 1992). Some of the greatest U.S. higher educational institutions 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.

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

¹ The literature begins with Mauro (1994) and includes, for example, Hellman, Jones, and Kaufman (2003), and Leite and Weidmann (2002). Another part of this literature has examined the extent and consequences of corruption within a country (e.g., Di Tella and Schargrodsky 2003; Gaviria 2002; McMillan and Zoido 2004; and Swenson 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 (1905).

early twentieth century—Progressivism—was dedicated to the elimination of corruption. From 1901 to 1917, under Presidents Roosevelt, Taft, and Wilson, a legislative and administrative agenda was justified in part by a need to reduce corruption. On a more local level, throughout the twentieth century municipalities and states regularly elected reform slates that promised to exercise a strong hand to root out corruption. Crusading journalists and ambitious prosecutors have also frequently taken aim at corruption. While scholars can debate the impact of these various forces, there is no debate that U.S. history offers many examples of reform movements that claimed as a primary goal to reduce corruption, just like reformers in developing countries today.

In the volume *Corruption and Reform: Lessons from America's History* for which this essay is an introduction, we take stock of corruption and reform in American history.³ The essays address different aspects of understanding corruption. John Wallis, Rebecca Menes and this introductory essay all discuss what we mean by "corruption." Conceptual clarity is a precondition for measuring the amount of corruption over time and space. This introductory essay, the Menes paper and that by Engerman and Sokoloff, all address the difficult problem of measuring the extent of corruption over time. Because corruption is generally illegal, or at least embarrassing, it tends to be hidden, and as the modern cross-national empirical literature has found, measurement is difficult. We will argue 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 ante-bellum era with much temporal variance. We have better evidence documenting a decline in American corruption from the mid-1870s to the 1920s.

After discussing the meaning and measurement of corruption, two of the essays in *Corruption and Reform* address the consequences of corruption or of weak legal regimes more generally. Lamoreaux and Rosenthal discuss the rise of corporations during the late nineteenth century and how the rise was accompanied by decreased protection of minority shareholder rights. Cutler and Miller look at the spread of clean 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

³ See the end of the Reference list of this essay for the titles of the conference papers to which we refer.

nineteenth century exploded, despite inadequate protection of minority shareholders, because returns to scale in production increased. Cutler and Miller argue that 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.

After addressing corruption, the essays in *Corruption and Reform* turn to the causes and consequences of reform. Bodenhorn's essay reviews one of the first episodes of anti-corruption reform in U.S. history: the fight against corruption in the chartering of New York banks during the late 1830s. He argues that this reform emerged from political competition and a desire of the Whigs to deprive their opponents—Van Buren's Democratic Regency—of the rents of patronage. Deregulation, therefore, was the weapon of choice against corruption since reducing chartering requirements limited the ability of government to corruptly manage their monopoly.

Novak's essay describes the legal environment in the late nineteenth century and depicts an era of increasing regulatory activism. The regulation was often rationalized as a tool to protect consumers, but as two of the essays, those by Fishback, and Law and Libecap, note the situation was often more complex. Fishback looks at the rise of workplace safety regulation in manufacturing and mining industries. He finds that workplace safety regulation was supported by unions and opposed by manufacturers in the case of mining. But in manufacturing, workplace safety laws were intended to raise costs for small firms as much as they were to protect workers and were, therefore, championed by large firms. Law and Libecap look at the introduction of the Food and Drug Administration. Passage of the FDA was driven by a combination of producer interests and consumer concerns about food quality. However, there is evidence suggesting that consumer outrage was manipulated and produced institutions that were, at least in the short run, only moderately aimed at protecting their interests. Law and Libecap also emphasize the role played by the press in creating support for state regulation.

The paper by Gentzkow, Glaeser, and Goldin documents the rise of the independent press and the remarkable transformation in U.S. newspapers between 1870 and 1920. In 1870, the press was partisan, histrionic, and prone to omit facts that went against acknowledged political biases. In 1920, most newspapers had dropped party affiliations, used more moderate and civil language, and made at least a pretense of reporting the facts of the day without spin. The article argues that the rise of the press 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.

Troesken looks at a particular outcome of these reform movements: public ownership of utilities, specifically water. Troesken discusses evidence that suggests that both the move to public ownership in the early twentieth century and the move away from public ownership 75 years later were associated with gains in service quality. He suggests that the evidence is either compatible 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 an ossification of bureaucracy.⁴

Finally, Wallis, Fishback, and Kantor look specifically at corruption in the provision of public relief such as welfare and unemployment insurance. They argue that the move to federal provision played a major role in reducing the level of corruption in the welfare system. The institutional change came about because the effectiveness and credibility of the Roosevelt administration would have been seriously hampered by allegations of corruption, at the same time that it would not have received the same benefits that local leaders would from having a corrupt system. Because of the separation between national and local authority, Roosevelt had an incentive to put checks on corruption in place and these checks reduced the amount of corruption in the system. This article, and the Bodenhorn essay, suggest the role that separation of powers and inter-governmental competition can play in bringing about effective reform.

⁴ 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."

II. 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 view of corruption changed into a definition 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 an overpayment for a service or public property or an exemption from government regulation. These three forms of corruption, as described by Menes, form the lion's share of what is known about nineteenth century municipal corruption. City governments were corrupt in the purchasing of inputs such as street cleaning or construction services, and bribes were given in exchange for overpayment for these inputs. City governments were also corrupt in the distribution of publicly-owned property such as land or access to a port, all of which were sold not to the highest bidder for the good of the citizens but to 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 accepted bribes for leniency in this administration.

These two views of corruption—the systematic or Polybian type and the venal or bribery form—suggest a definitional synthesis. Corruption is the loss to the public from the subversion of formal, or implicit, rules of government behavior. The losses may involve a classic welfare loss, such as the loss from underinvestment because corrupt judges do not necessarily protect property rights. The loss may instead or in addition be a reallocation from the public to politicians or from the public to bribing businessmen. Within this broad definition of corruption, there are several ways to parse corrupt behavior.

One reasonable division is to separate corruption into that which is legal and that which is illegal. Most modern corruption is viewed as illegal, but there are also prominent forms of legal

corruption. In the framework of the definition, legal corruption involves losses due to the evasion of implicit rules, not formal laws. Thus, going back to the ideas of Polybius, tyranny may reflect an abuse of power that leads to large public welfare losses. But if there are no legal barriers against the king, then the corruption is not illegal. In the more modern context, George Washington Plunkitt's description of honest graft is best thought of as legal corruption. 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.

Since we define corruption as the loss or transfer of public wealth, corruption is "bad," at least relative to some ideal outcome. Of course, in some cases the relevant comparison is not an abstract ideal. For example, as many authors have recognized, in the presence of social-welfare decreasing rules, corruption that relaxes those rules may actually be socially beneficial. Of course, a better outcome for the public would be to change the regulation or auction off permits to violate the regulation where the proceeds from the auction are returned to the public treasury.

Still, there is always a question of the full social cost of corruption. In some cases, the private returns to corrupt officials may be offset by paying officials lower wages in expectation of corrupt gains (as in Becker and Stigler 1974). In other cases, corruption may ultimately involve a transfer of wealth from one group to another without net social loss. In other instances, corruption of the political system may lead to a breakdown in property rights enforcement that causes economic collapse. Corruption in the education sector in the developing world appears related to under-provision of schooling which may in turn seriously retard long run growth (Reinikka and Svensson 2004). An important question, one that reappears frequently but which is never adequately answered, is what the full cost of American corruption was.

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 has 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 which 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.⁵ 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 simplest 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

⁵ See, for example, Johnson and Libecap (1994).

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 the government is restricted to enforcing 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 if 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 of corruption 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 (as in Glaeser and Shleifer 2003). As we will discuss later, the late nineteenth century was a period of increasingly larger governments, more valuable public assets, more aggressive regulation (as discussed by Novak's essay) and bigger stakes litigation. The potential benefits from corruption rose during the period along almost every dimension.

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 which are in turn a function of information flows, social opprobrium, and the legal system.

The most obvious parameter influencing the cost of legal corruption is the stated legal

penalty for corrupt practices. 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 completely legal during Plunkitt's era. Even the gifts of railway stock given to congressmen during the Crédit Mobilier scandal were perfectly legal at the time. At the start of U.S. history, the number of laws on 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.⁶

Laws always require enforcement, and while the range of legal behavior has generally contracted over time, the time path of enforcement quality is far less clear. Enforcement both requires some form of initial information about the corrupt action—reported either by a government investigator or by some third party—and then a legal proceeding that acts on this information. Public knowledge of corruption has been revealed mainly by third parties or by investigators from some branch of government separated from the actual corruption. As the Gentzkow, Glaeser and Goldin paper reminds us, the press has 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 our own 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 investigators under the national Corrupt Practices Act. The Tweed Ring faced legal prosecution not by local city police, who were generally 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

⁶ RICO is the acronym for the Racketeer Influenced and Corrupt Organizations Act, passed by Congress in 1970.

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 appear in the first place.

To generate legal penalties, the uncovering of corruption must then be followed by successful legal prosecution, which in turn requires an independent judiciary. Effective prosecution requires that judges are willing to convict officials who are proved to be corrupt. 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 quite 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 let him off.

Even if the judicial system is dormant, the revelation of corruption can still create costs if this revelation 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. There are many examples of notoriously corrupt officials being regularly re-elected perhaps because the corruption is funneled back to voters or is offset by other advantages or because voters are sufficiently cynical (or realistic) that they think that political challengers are likely to be no less corrupt than the incumbents. The political career of James Michael Curley, whose corrupt actions eventually landed him in jail, was only really in danger 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.

III. The Time Path of Corruption in the United States

Measuring corruption is a difficult task with certain similarities to the problem of measuring crime. There are three ways of measuring crime: (1) crimes reported to the police, (2) crimes leading to a conviction or trial, and (3) victimization surveys. The primary difference between reported crimes and victimization surveys is that reported crimes are those reported to the police and victimization surveys are crimes reported to surveyors. Victimization surveys are generally thought to be the best measure of crime because they avoid the problem of underreporting particularly in high crime areas. But such surveys are not available for the case of corruption and corruption-related crimes reported to the police are also rare. Reports of corruption generally come from newspaper articles about investigations not from the victims, who are often all of the citizens.

As such, historical research on corruption must turn to other sources and methods. One method, which we follow here, is to use public documents such as newspapers to proxy for reported crimes. While there are no historical victimization surveys or crime reports that can be used, corruption was reported in the press. Obviously, there are many reasons to question the use of newspaper reporting as an indicator of underlying facts (indeed Gentzkow, Glaeser and Goldin emphasize 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.

Another direction is to rely on trial records. The Corporate Crime Reporter (2004) has recently ranked the 50 states on the basis of their public corruption convictions per capita. Given that enforcement is generally federal and may not vary much by state, this measure may capture the degree of corruption by state. The rankings that place Mississippi and Louisiana as the first and third most corrupt states, and Oregon and New Hampshire as the second and third least corrupt states, accord well with standard preconceptions. In principle, it might be possible to collect a data base of public officials indicted for corruption, but that would be difficult.

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) 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. Our results are not particularly sensitive to the exact choice of deflator words.⁷

We use two sources that are available electronically on-line in fully searchable editions: the *New York Times* (Proquest) and a large group of small-town newspapers (Ancestry.com).⁸ The *New York Times* has several advantages. Because it is one newspaper the series does not have a changing composition of papers. The *Times* is among the most serious American papers and by the late nineteenth 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 and 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.⁹ The papers are geographically spread

⁷ 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 ante-bellum period were political. As newsprint prices plummeted, more attention was devoted to other types of stories and features.

⁸ 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).

⁹ Because the Ancestry.com site is updated almost daily, we did the counts during a short interval. At the time of this writing a yearly membership for the entire website, including census and immigration data, cost \$200.

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).¹⁰ 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 be corruption? Table 1 gives thumbnail sketches of the major stories during the local peaks in "corruption" and "fraud" in Figure 1.

The first great boom in corruption reporting occurs 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).¹¹ 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 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 which conform to our notions about periods of major corruption in U.S. history.

Both series reveal one major trend—reporting on corruption declined between 1870s and

¹⁰ 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.

¹¹ There was also a brief advertising craze concerning remedies for "corrupted livers."

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 first period of sustained decreased reporting on corruption and fraud, from the mid-1870s to 1890, was an era of reform when New York City under Honest John Kelly was far "cleaner" than it had been under Boss Tweed. At the national level, no administration has ever faced the litany of scandal that embarrassed Ulysses S. Grant. 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 sustained 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 data is that even if reform continued, the vast attention paid to corruption by muckraking journalists meant that the series was 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 show 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 significantly during this era. Of course, it is also true 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 this period, reporting on corruption never gets close to the levels of the middle nineteenth century. At least if reporting is any kind of indication, by the 1930s, corruption in the United States was nothing like the corruption of the nineteenth century.

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, 50 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 periods in the nineteenth century is less clear. The year-to-year variation is large and it is hard to uncover any clear secular pattern. If the ante-bellum series are taken seriously (and there is much noise in these figures) then there was a steady rise in reporting about corruption between 1815 and 1850 and no change between around 1850 and 1870. This time pattern corresponds with the views of some historians and it can be connected with the rise in government budgets and the scale of the economy (as argued by Glaeser and Shleifer 2003). While 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.

IV. Reform and the Fight against Corruption

To understand changes in corruption and its prosecution over time, it is vital to have both a theory of corruption as well as one of reform. The theory of corruption is the more straightforward of the two because reform is rarely a unilateral decision. For example, reform has seldom been credited to a particular political leader. There have been exceptions as in the cases of the two Roosevelts and Woodrow Wilson, although even their efforts are best seen as culminations of lengthy reform movements.

The essays in Corruption and Reform 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. The theory has an old pedigree: the reformers themselves argued that their proposed policies would benefit society and the view dominated mid-twentieth century historical writings on reform (e.g., 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 rival's costs. Finally, a third theory (suggested by Law and Libecap), argues that reform is driven by political entrepreneurs who sometimes gain support both through manipulating popular opinion and the tools of government.

The welfare maximizing view of reform was that espoused by the reformers themselves. The rhetoric used by Theodore Roosevelt, Woodrow Wilson, and intellectuals behind reform such as Herbert Croly and John Landis, all suggested that reform was needed to solve a variety of social ills. Some proponents of social choice theory suggest, perhaps optimistically, that political outcomes will tend towards the Pareto frontier. They argue that if there are rents to be gained (as there always are in systems away from the frontier), coalitions will form to extract those rents. Modern work on reform and regulation occasionally adopts this view (as in Glaeser and Shleifer 2003) and views reforms as welfare-maximizing in a world in which all institutions are subject to different forms of corruption.

This view of reform implies that reform movements should arise when the net social benefits of reform outweigh the costs. 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. If this view is correct, we should see corruption-reducing federal control over welfare programs whenever the benefit exceeds the costs of central control, such as a lesser ability to target welfare most accurately or a weighty bureaucracy or the fixed costs of reform itself. More generally, we should expect to see more reform when corruption is high, possibly resulting from an ossified system as in Olson (1965; see also Troesken), or because exogenous variables have increased the returns to corruption (as in Glaeser and Shleifer 2003). This view also predicts 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 wellorganized special-interest groups. In the case of regulation of industry, the relevant interest groups are big firms. This view predicts that regulation will cater to the needs of those businesses. 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.

Of course, business interests and social welfare are occasionally well aligned and in such cases the first and second views of reform are difficult to disentangle. In many instances both business and the public may want to make it difficult for public officials to extract protection money from firms. In some cases, firms may be better off with relatively honest politicians who do not try to extort income from new firms. In such an instance, both firms and society as a whole might be better off with reforms that raise the costs to political actors of accepting bribes.

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 argued by Law and Libecap), 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. One 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. As such, 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. Real reform, therefore, will occur more often when long-standing political control by one party is broken by another (as argued by Bodenhorn).

The view predicts that we should expect to see more reform when there are greater political returns to entrepreneurs who emphasize reform. These returns could be high because of political variables, such as a tight race which might be decided by a group that can be influenced to care about reform. If the returns to government office, or controlling a government bureaucracy, have increased, then this will also increase the supply of reforming politicians. Finally, changes in communications technology that will make it easier to convince people of the benefits of reform (even if those benefits do not exist) will increase the amount of reform.

There is no question that each of these theories has been important during certain epochs of reform. Certain railroad regulations benefited incumbent firms more than they did consumers. Political entrepreneurs spearheaded reforms, like the Food and Drug Act of 1906, and in many cases, the reform appears to have benefited politicians far more than the public at large. There are even cases where public welfare seems to have benefited from attempts at reform.

It is also true that all three theories can potentially explain the broad time paths of reform over the past 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. As such, it is difficult to disentangle the relative importance of the three theories of reform. They are touched on by many of the essays in *Corruption and Reform*.

V. Conclusion

Corruption within the United States appears to have followed something of an arc—an inverted, backwards J-shape beginning at a high level with a small increase and ending with a spectacular decrease. 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 did not increase 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 was 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 were 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.

Because the costs of corruption rose along so many margins, it is hard to determine what

particular factor or set of factors were most important. Still, American history does provide a striking story of a country that changed from a place where political bribery were routine events infecting politics at all levels to a nation that now ranks amongst the least corrupt in the world.

References

- Becker, Gary S., and George Stigler J. 1974. "Law Enforcement, Malfeasance, and Compensation of Enforcers," *Journal of Legal Studies* 3(January): 1-18.
- Caro, Robert A. 2002. *The Years of Lyndon Johnson*, Vol. 3: *Master of the Senate*. New York: Alfred A. Knopf.
- Corporate Crime Reporter. 2004. "Public Corruption in the United States." Report.
- Di Tella, Rafael, and Ernesto Schargrodsky. 2003. "The Role of Wages and Auditing during a Crackdown on Corruption in the City of Buenos Aires," *Journal of Law and Economics*, 46 (April): 269-92.
- Gaviria, Alejandro. 2002. "Assessing the Effects of Corruption and Crime on Firm Performance: Evidence from Latin America," *Emerging Markets Review* 3(3): 245-68.
- Glaeser, Edward. 2003. "Public Ownership in the American City." In *Urban Issues and Public Finance: Essays in Honor of Dick Netzer*, edited by Amy E. Schwartz. Northhampton, MA: Edward Elgar.
- Glaeser, Edward, and Andrei Shleifer. 2003. "The Rise of the Regulatory State," *Journal of Economic Literature* 41(June): 401-25.
- Hellman, Joel, Geraint Jones, and Daniel Kaufmann. 2003. "Seize the State, Seize the Day: State Capture and Influence in Transition Economics," *Journal of Comparative Economics* 31 (December): 751-73.
- Hofstadter, Richard. 1955. The Age of Reform. New York: Vintage Books.
- Leite, Carlos. and Jens. Weidmann. 2002. "Does Mother Nature Corrupt? Natural Resources, Corruption, and Economic Growth." In *Governance, Corruption, and Economic Performance*, edited by George T. Abed and Sanjeev Gupta. Washington, D.C.: International Monetary Fund, pp. 159-96.
- Mauro, Paulo. 1995. "Corruption and Growth," *Quarterly Journal of Economics* 110 (August): 681-712.
- McCullough, David D. 1992. Truman. New York: Simon and Schuster.
- McMillan, John, and Pablo Zoido. 2004. "How to Subvert Democracy: Montesinos in Peru." C.E.P.R. Discussion Paper no. 4361 (April).
- Olson, Mancur. 1982. *The Rise and Decline of Nations: Economic Growth, Stagflation, and Economic Rigidities.* New Haven CT: Yale University Press.

- Olson, Mancur. 1965. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge MA: Harvard University Press.
- Rose-Ackerman, Susan. 1975. "The Economics of Corruption," *Journal of Public Economics* 4 (February): 187-203.
- Shleifer, Andrei, and Robert Vishny. 1993. "Corruption," *Quarterly Journal of Economics* 108 (August): 599-617.

Steffens, Lincoln. 1904, reprinted 1957. The Shame of the Cities. New York: Amereon.

- Stigler, George J. 1971. "The Theory of Economic Regulation," *Bell Journal of Economics and Management Science* 2 (Spring): 3-21.
- Ritva, Reinikka, and Jakob Svensson. 2004. "Local Capture: Evidence from a Central Government Transfer Program in Uganda," *Quarterly Journal of Economics* 119 (May): 679-706.
- Swenson, Jakob. 2003. "Who Must Pay Bribes and How Much? Evidence from a Cross Section of Firms," *Quarterly Journal of Economics* 118 (February): 207-230.

List of Corruption and Reform Conference Volume Papers

Bodenhorn, Howard (Lafayette College and NBER) "Bank Chartering and Political Corruption in Antebellum New York: Free Banking as Reform"

Cutler, David (Harvard University and NBER) Miller, Grant (Harvard University) "Water, Water Everywhere: Water Reforms in American Cities"

Engerman, Stanley (University of Rochester and NBER) Sokoloff, Kenneth (UC, Los Angeles and NBER) "Digging the Dirt at Public Expense: Corruption in the Building of the New York Canals"

Fishback, Price (University of Arizona and NBER) "Corruption, Capture, and the Development of Workplace Safety Legislation"

Fishback, Price (University of Arizona and the NBER) Kantor, Shawn (UC, Merced and NBER) Wallis, John (University of Maryland and NBER_ "Politics, Relief, and Reform: The Transformation of America's Social Welfare System during the New Deal"

Gentzkow, Matthew (University of Chicago) Glaeser, Edward (Harvard University and the NBER) Goldin, Claudia (Harvard University and NBER) "The Rise of the Fourth Estate: How Newspapers Became Informative and Why it Mattered"

Lamoreaux, Naomi (UC, Los Angeles and NBER) Rosenthal, Jean Laurent Rosenthal (UC, Los Angeles) "Corporate Governance and the Plight of Minority Shareholders in the United States before the Great Depression"

Libecap, Gary (University of Arizona and NBER) Law, Marc (University of Vermont) "Corruption and Reform? The Emergence of the 1906 Pure Food and Drug Act"

Menes, Rebecca (George Mason University and NBER) "Corruption in Cities: Graft and Politics in American Cities at the Turn of the Twentieth Century"

Novak, William (University of Chicago) "Law and the Social Control of Business in the Progressive Era"

Troesken, Werner (University of Pittsburgh and NBER) "Regime Change and Corruption: A History of Public Utility Regulation"

John Wallis, University of Maryland and NBER, "The Concept of Systematic Corruption in American Political and Economic History"

Figure 1 Indexes of Corruption and Fraud: 1815 to 1975



Sources: NY Times: on-line, 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 1825 3 1830 10 1835 4 1840 6 1845 8

1820	3	1825	3	1830 10	1835 4	1840	6	1845	8
1850	10	1855	16	1860 18	1865 18	1870	19	1875	33
1880	42	1885	46	1890 53	1895 53	1900	45	1905	50
1910	48	1915	51	1920 47	1925 41	1930	37	1935	33
D							.1	1	1

Because newspapers are constantly being added at Ancestry.com, these numbers apply to those available as of July 2004. All series are expressed here as three-year centered moving averages.

 Table 1

 Thumbnail Sketches of Events during Local Time-Series Peaks in Corruption and Fraud Activity

Year(s)	Index	Corruption and Fraud Events
1820	0.567	Impeachment proceedings against the governor of Pennsylvania (most of
1620	0.307	the available newspapers in Ancestry.com were from PA).
1837-45	0.611 to	Whig accusations of corruption by the Van Buren administration,
1057-45	0.870	particularly in 1840 (election year). After Harrison died in office, the
	0.070	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	Voting irregularities after the Kansas-Nebraska Act. The pro-slave
	0.837	voting by Missourians in the Kansas elections and the "Lecompton
		Constitution" were deemed fraudulent and corrupt.
1870-79	0.876 to	Voter intimidation in the South by the Ku Klux Klan and various aspects
	1.03	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
1002	0.(25	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	The Teapot Dome scandal of the early 1920s was raised during the 1928
1725-28	0.204 to	presidential election as an indication of Coolidge's corruption. Albert
	0.274	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. Speak-easies 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 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.
	1	