DIGGING THE DIRT AT PUBLIC EXPENSE:

CORRUPTION IN THE BUILDING OF THE ERIE AND OTHER NEW YORK CANALS

by

Stanley L. Engerman

University of Rochester and NBER

and

Kenneth L. Sokoloff

University of California, Los Angeles and NBER

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It is generally accepted that no human society, at least since the early days of the Garden of Eden, has been free of *corruption*. Although conceptions of what range of behaviors is encompassed by the term vary widely, there is a grand tradition of laying responsibility for many social ills on it. One such social ill is the lack of economic growth, and economists have in recent years sought to elucidate mechanisms through which various forms of corruption might prevent a society from fully realizing its productive potential, at a point in time or over time. Among the many so identified are: how corrupt or irregular protection of property rights might deter individuals from exerting effort or investing in physical or human capital; how corrupt practices can distort prices, restrict entry, and otherwise generate a misallocation of resources; and how the attractions of securing returns through rent seeking can divert talented individuals from engaging in activities that would generate more positive externalities (such as invention or innovation) for society overall. Despite agreement on the theoretical importance of corruption for economic performance, empirical studies of their relationship have been largely confined to establishing strong correlations in contemporary data. This work has been very informative, but skeptics argue that the results might be due to high levels of performance leading to less corruption, either through institutional change or though affecting perceptions, rather than by exogenous low levels of corruption bringing about better economic outcomes.

It is not surprising that many scholars are turning to economic history to improve our understanding of the social processes involving corruption. Extending the study of corruption along a time dimension offers the possibility of obtaining a more precise fix on how important the presence of corruption is for understanding long-run patterns of economic growth, or of performance more generally. It should also allow for a closer examination of where corruption comes from, of which forms of corruption are more destructive of prospects for economic progress, and of whether there are specific types of institutions or conditions that reduce the prevalence of corruption. Although the study of corruption may be much enhanced by turning to history, a key problem remains – that of definition. Where does one draw the line between corrupt and non-corrupt behavior? Can an action that is legal be corrupt? Should private actions that deviate from meritocracy and systematically advantage or disadvantage a particular group be considered corrupt, or should the classification be reserved for behaviors involving the public sector? If the latter, should the standard for corruption be the familiar "taking private advantage of public office"? How about any action by a public official that affects the interests of a party with whom the official has a personal or pecuniary relationship?

Recognizing the difficulty of framing a broadly acceptable general definition of corruption, we choose to focus our study of corruption on a specific context -- the building of the Erie Canal, and of other canals, by New York State. The logic of this approach is that it will be easier to develop a reasonable working definition of corruption in a particular setting, and our goal is to explore the issue of whether corruption in this major public works program of the antebellum era led to a marked misallocation of resources, generated rents for the well connected and politically influential, or otherwise constituted a significant obstacle to economic growth.

The movement by a number of northeastern states during the first half of the nineteenth century to undertake the construction of a massive network of roads, canals, and railroads, in an attempt to attract and gain control of trade with the midwest is perhaps the most dramatic example of the intense competition between states that the federal nature of U.S. government encouraged. Boston, New York, Philadelphia, Baltimore, Washington, and New Orleans (as well as Montreal) all sought to tap the midwestern trade, and did so with various combinations of canals and railroads. The great triumph of New York City is what makes the Erie Canal (but some might say it is the reverse) a critical part of the American historical experience. Much attention, deservedly, is given to its successful construction and operation, as one of the success stories among state economic policies. Less attention is generally given to the importance of political factors in its origins, and to the blemishes in the story of its construction. While clearly a great success in accomplishing the end of making New York City the principal part of the U.S. and in making upstate New York a major agricultural and industrial center for a century, questions about the prevalence of corrupt practices in the development of the Erie Canal and other canals were raised during the era.

There has been a considerable historical literature devoted to corruption in the economy in the postbellum United States. Colorful terms such as "The Robber Barons," "The Great Barbecue," and "The Gilded Age," have been applied to the late nineteenth century links between government and the economy, and texts are filled with the story of the Union Pacific, the Chapters of Erie, and the great battles among the railroad tycoons seeking advantageous routes and rates. Curiously, however, despite some attention to the operation of the so-called "spoils system" and legislative bribery in chartering banks and other businesses, most scholars have treated the antebellum era as relatively corruption free. Such a perspective can be traced back to Tocqueville, with his emphasis on high rates of citizen participation in local affairs, competition between different communities and states, and an ideology celebrating democracy and open access. In such a setting, opportunities for rent seeking might be expected to be rather limited. Whether this judgment reflects the reality, or whether corruption by large railroads and manufacturing firms merely provides a more exciting story than those forms of corruption that occur in smaller decentralized units is an issue deserving of more investigation.

II.

Canals were only one of a large range of economic activities, most notably in the provision of social overhead capital, provided or permitted by state governments during the antebellum era. Unlike the railroads that would come later, canals were generally both built and operated by the governments. Railroads may have been granted state charters (allowing them to raise funds in private capital markets) as well as awarded subsidies in the forms of land, bonds, or cash, but most were privately owned, built, and operated. Given the central role of government in canal construction and operation, as well as the pronounced geographic patterns of the benefits they yielded, it is easy to understand how the political factors involved in making decisions and in obtaining the necessary votes to implement them could have raised overall costs even in the absence of outright fraud and corruption. How was the route of the Erie Canal (or other canals) selected? How was legislative approval of the plan for the rules and regulations controlling the actual construction and operation of the canal accomplished?

The great commercial success of the Erie Canal and its contribution to the growth of New York City often leads us to overlook the uncertainty and political controversy that surrounded the project. Not only was the Erie Canal a public project of an unprecedented scale (at least in the experience of the Americas), but the route was also not the obvious first choice for a canal to link Lake Erie with the Hudson River. The cheaper and more certain route would have linked a canal around Niagara Falls with one leaving Lake Ontario for the Oswego Canal. Indeed, this was the preferred canal in New York State described by Albert Gallatin in his Report on Canals in 1808, a report which otherwise did an excellent job in detailing a plan for the antebellum canal network that would ultimately be constructed.[1] There was a strong logic for the Erie route, however, especially from the point of view of the state government. Not only was there a possibility that the canal Gallatin proposed might lead to a diversion of midwestern produce to Canada, not New York City, but the Erie route would bring considerable new land in western New York into profitable production, permitting a higher payoff for the canal. Indeed, the funding of the Erie Canal was aided by substantial land grants from the Holland Land Company, and others, as an inducement to build the canal through their lands.

The Erie Canal was well short of being voted in unanimously, as the issue came to be entangled in sectional and political disputes. The mid-Hudson valley farmers were opposed to the canal because of the threat of extensive Midwestern and upstate produce entering into New York City. The opposition of New York City is a bit more difficult to comprehend. In part, given the great uncertainty of whether the stimulus to economic development would be sufficient to justify such a massive public work -- almost 10 times the then longest canal in the western world -- economic success was not obvious beforehand. Even Thomas Jefferson, whose

[1] The building of a link between the Hudson and Lake Erie also presented a choice of methods. Clinton advocated a waterway, while Morris – another powerful member of the State Commission favored an inclined plane from Lake Erie to Albany.

boldness and vision was reflected in the Louisiana Purchase, considered the project one century ahead of its time. With those in New York City fearful that they would bear a heavy tax burden for a social investment with little return, it is perhaps reasonable that their representatives stood fast against the construction of such a large-scale public work. A second reason for a negative vote from New York City reflected the intense political disagreements within the state. With Governor De Witt Clinton and his followers pushing vigorously for the canal to generate economic growth, and perhaps to further his political interests, the Democrats, in control of the city, were instinctively opposed so as to prevent any political credit accruing to their rival party. This political struggle continued in debates over the political patronage of canal employment and expenditures on canal repairs and enlargement.

A key issue was, of course, how to finance the canal. While the federal government had earlier expressed a willingness to provide support for interstate public works, a formal request for assistance from New York State was rejected by the national government on the grounds that funding the project would be inappropriate because the benefits would go to residents of only a limited area. New York then organized a petition asking for a general program to help states finance public improvements, but this too was turned down. New York State also attempted to raise funds from those states that would presumably benefit from building the canal, but the effort yielded only moral support. Finally, in April 1817, the year after Clinton had been elected and six weeks after President Madison had vetoed legislation that would have provided New York with some funds, the state legislature adopted a measure calling for the building of the canal and accepting that New York would bear full responsibility. The five canal commissioners who had prepared an extraordinarily detailed plan, including the route, technical specifications, and estimates of cost, were vested with the authority to direct the construction and to borrow the money on the credit of the state for that purpose. The law provided that this debt would be paid off from a canal fund, overseen by all of the officers of the state except the governor. The revenues for this fund were to come from tolls from the canal, a tax on salt manufactured in the state, duties on good sold at auctions, a tax on steamboat passengers, grants, donations, and a tax on real estate located within 25 miles of the canal. The need to levy taxes within New York State led to inevitable conflicts between those who expected to receive direct benefits and those who expected not to benefit, and a tailoring of revenue enhancements; for example, an initial proposal to raise funds through a more general tax on property was voted down. Another method of attracting votes from the representatives of those not located in a position to directly benefit from the canal was the use of traditional logrolling to provide assurances that their support would be remembered in decisions about future transportation projects. Thus, in 1875, the Canal Investigation report notes, that the 'lateral canals, has been the sole cause of the fact of the present indebtedness of the State by reason of the canals."

The payment of bribes for legislative approval and financing of the Erie Canal was never mentioned in the extensive legislative hearings on the construction and operations of the canal, nor in the subsequent literature so that, unlike the description of bribes for the bank chartering by sale and repurchase of securities, this form of corruption seems not to have taken place. Where corruption and fraud was a concern of the state was in the construction and operation of the canal. The state government's policy was not to have the construction undertaken by state employees. Rather they contracted out to private individuals. Since no firms at this time were large enough to deal with large portions of the canal, the policy was to allow for many contractors to handle limited mileage. This policy also meant that expenditures were widely spread to benefit many contractors in local areas.

Despite strict monitoring of the quality of the work performed by each of the contractors, facilitated both by stringent procedures and by the ease of detecting stretches of canal below standard, and cost over-runs that seem quite modest to modern sensibilities, legislative concerns about fraud and corruption in the building process arose. The Assembly and/or Senate held a number of major hearings on these issues, published in 1847 (1242 pages), 1851 (328 pages), 1868 (1010 pages), 1875 (677 pages), and 1876 (770 pages), and in less complete reports in other years. In total, over 4,000 pages were filled with testimony and analysis. The conveners of these hearings appear to have been zealous about "investigating frauds in the expenditures of the public moneys upon the canals of this state," and desirous of identifying problems that would attract public attention and require resolution by new laws and procedures.

The major sources of corruption highlighted in these hearings were: fraud in allocating contracts to "friends, acquaintances, and neighbors," forging of vouchers for reimbursements of materials, padded payrolls, stolen materials, and use of claims concerning the need for extraordinary repairs to circumvent state limits. Charges of financial corruption came rather early in the operations of the council. Myron Holley, one of the first council commissioners, was changed in 1824 (and admitted to) being unable to account for some public funds, part of which he had used to purchase land in the canal region. Also of note was the discovery that the books of the canal commission for the period 1822-1828 were missing, or at least no records were kept during this period. And, in the hearings of 1846 several individuals asked to testify declined to do so. The 1876 Report reported on the following "various forms of mismanagement, neglect, fraud, and malfeasance": (a) the approval or toleration of "unbalanced bids"; (b) improper action of commissioners in making new contracts, and in extending or canceling old ones; (c) agreement to contracts that were adverse to the interests of the State, and for the benefit of contractors; (d) blind, hasty or corrupt legislation in making appropriations for repairs, claims, and awards; (e) failure of engineers to make true cost estimates, and connivance with bidders or contractors in making false ones; (f) carelessness or neglect on the part of the Canal Board in ascertaining whether proposed work had proper legal sanction; (g) appropriation of property of the State by contractors, or by superintendents; (h) approval, by superintendents, of bad or worthless work; (i) wrongful or careless awards by canal appraisers; (j) the legal fiction of "extraordinary repairs" which misstates a matter of fact, misleads successive Legislatures, and prevents the completion of the enlargement; and (k) the lack of responsibility on the part of canal officers, owing to a defective system of subdividing duties, which rendered it difficult to hold a wrong-doer to strict account.

The various hearings uncovered a number of instances of these kinds of fraud, which presumably took place because of breakdowns in controls or lax enforcement. In addition there was likely some confiscation of fees and tolls collected by canal workers. The implication that seems to come through from the published hearings, however, is that although canal costs were clearly increased by these frauds, the amounts associated with each individual instance were small and the cumulative figure less than overwhelming. Even if the entirety of the most generous estimate of the cost over-run (the difference between the \$7.1 million expended and the \$4.9 originally estimated – or roughly 45%) is attributed to fraud, the extent of corruption would hardly seem to have constituted a significant obstacle to economic growth.

III

The problems of corruption in canal construction and operations seem to have grown worse after the completion of the Erie. This first major project was so successful in stimulating economic development along its route, and in generating surpluses from tolls, that state legislators were swept up with a general enthusiasm for constructing many more canals throughout New York with borrowed funds. Within five years, for example, they authorized going forward with the Seneca and Cayuga Canal, the Oswego Canal, the Crooked Lake Canal, the Chemung Canal, and the Chenango Canal. The approvals took place despite reports from canal commissioners that predicted that at least some of the planned canals would not produce sufficient tolls to cover expenses, and a series of increasingly tough warnings from the comptroller and governor about committing to projects without the means of covering costs. By the early 1830s, legislators were resorting to exotic measures to manage the drain on the state budget of constructing the canals without new taxes. Some proposals for new canals were actually defeated, but in 1835 a bill authorizing the enlargement and improvement of the Erie Canal went through easily (as did several other plans for improving other waterways). Circumstances only grew worse after the panic of 1837, and the protracted economic downturn that followed. The Whigs emerged from the election as the dominant party in New York, and they quickly moved to approve a large number of new public works projects. The ability of the state to service its debt and obtain new credit, not coincidentally, eroded dramatically. Yet another problem was that the system of controls suffered, and cost overruns ballooned (the cost of enlarging and improving the Erie was originally estimated at $12,416,150, but ultimately exceeded $30,000,000). The culmination of the fiscal crisis came with the "stop and tax law of 1842" which both assessed a general tax on wealth as well as suspended expenditures for construction on public works (other than maintenance and repairs).

IV

Although New York legislators may have been a bit profligate in their authorization of public transportation projects, and various sorts of petty corruption were no doubt evident in the awarding and enforcement of contracts, it is striking that a potentially more corrosive form of rent seeking appears not to have been a prominent feature in the building of canals. The legislators did not seem to have been generally capable of maintaining tight restrictions on access to valued services such as low-cost transportation facilities. Their failure in enforcing such restrictions, or monopolies, was not because of an absence of advocates for monopolies. The representatives of the areas that already had access to canals were generally amongst those legislators who opposed the authorization of new projects. Similarly, they, as well as others who had interests in canal operations, also sought restrictions on the speed of the expansion of a new competing innovation, the railroad. Various limitations were in fact imposed on the railroads, though they were withdrawn in the early 1850's. First were requirements that they carry only passengers, and passenger baggage, not freight. They were followed by restrictions against railroads operating during the summers when the canals were open, and finally by a requirement that railroads pay canal tolls for traffic carried. Partially offsetting such restrictions were, of course, subsidies to encourage the construction and expansion of specific railroads.

The observation that legislators did not appear to have been able, or inclined, to restrict access is consistent with the traditional hypothesis that the relative equality prevailing among the U.S. population and the open political system made it very difficult for those who sought to obtain and maintain monopolies. The political mechanisms at work may or may not have involved outright political corruption or payment of bribes to legislators, but what seems most important is whether or not the processes yielded a more or less productive economy.

The liberal policy about authorizing canals is not unlike the policies concerning the establishment of banks and corporations. The passage of free incorporation and free banking acts reduced the ability of the legislatures to create highly profitable monopolies by restricting entry. Because the monopoly rents would have gone in large measure to legislators with the power to charter firms, the free incorporation and banking laws meant that the legislators were accepting a lower stream of rents. The social and political pressures that led to such policies may have narrowed the scope for, and economic consequences of, corruption in the antebellum economy.