AMERICAN ECONOMIC DEVELOPMENT, MANAGERIAL CORPORATE CAPITALISM, AND THE INSTITUTIONAL FOUNDATIONS OF THE MODERN INCOME TAX

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I

INTRODUCTION

1909 was a critical turning point in the development of American tax law and policy. In that year, Congress enacted a national corporate tax at the same time that it introduced a constitutional amendment permitting a federal personal-income tax. The corporate tax, which was framed as a “special excise tax” on the privilege of doing business, had an immediate, albeit modest, impact on federal revenues, accounting for nearly $21 million of the $289 million of total internal revenue for fiscal year 1910.

The constitutional amendment, by contrast, languished in the halls of state legislatures for several years before it was finally ratified in 1913. Once it was adopted, the Sixteenth Amendment nullified the U.S. Supreme Court’s 1895 invalidation of the nation’s first

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peacetime national income tax\(^3\) and paved the way for the subsequent development of the modern American income tax.

Although the corporate tax and the constitutional amendment were presented together in 1909, the amendment garnered much greater attention among contemporary commentators and modern scholars. And for good reason. Ratification of the Sixteenth Amendment had far-reaching consequences for American law and political economy. It not only overturned the most serious legal obstacle to the adoption of graduated individual-income taxes, it also emboldened social groups and political reformers to demand the first permanent federal income tax, which was enacted within a year of the amendment’s ratification.\(^4\)

Yet the corporate tax may have played an equally important, though more subtle, role in American political and economic development. Together with the personal-income tax, the corporate levy helped generate substantial government revenue throughout the twentieth century—revenue that has been critical to the growth of the public sector.\(^5\) Despite the uncertain incidence of the corporate tax, some scholars and commentators have also depicted it as an effective regulatory tool used to curb the abuses and increasing power of Big Business.\(^6\) As a result of these dual functions of raising revenue and regulating economic power, many historically minded scholars have tended to subsume the corporate levy as part of the Progressive Era’s overall tax reforms. The Sixteenth Amendment, the personal-income tax, and the corporate tax are thus all frequently viewed as part and parcel of one grand narrative in which the social and political demands for greater tax equity are the key determinants of the dramatic, early-twentieth-century transformation in American tax law and policy.\(^7\)

A singular focus, however, on social and political factors, especially one that subordinates the corporate tax to a minor role, provides only a partial account of the history of the modern American income tax. This article offers a broader

\(^3\) Pollock v. Farmers’ Loan & Trust Co., 157 U.S. 429, 586, modified on reh’g, 158 U.S. 601 (1895).

\(^4\) Tariff of 1913, Pub. L. No. 63-16, § 2, 38 Stat. 114, 166 (1913). For more on the ratification process and why the corporate tax and the constitutional amendment were packaged together as part of a political compromise, see John D. Buenker, The Income Tax and the Progressive Era 55–59 (1986).

\(^5\) Like the personal-income tax, the corporate tax initially raised a relatively small amount of revenue, until the mid-1940s, when corporate-tax revenues peaked and accounted for nearly 7% of gross domestic product (GDP). Since the 1950s, however, corporate-tax revenues have diminished steadily, hovering in the low single digits as a percentage of GDP. Joel Slemrod & Jon Bakija, Taxing Ourselves 22–23 (2007); Alan J. Auerbach, Corporate Taxation in the United States, 2:1983 Brookings Papers on Econ. Activity 451, 453 (1983).


\(^7\) See infra text accompanying notes 17–29.
explanation by moving beyond the social and political determinants to ask, What were the economic forces that facilitated the adoption of the modern graduated income tax? How did these economic factors shape the institutional framework that gave rise to direct and graduated taxes? And what role, if any, did the early corporate tax play in the creation and elaboration of the modern U.S. income tax?

This article investigates two particular economic factors. First, it explores the broad, long-term, structural transformations in the American economy that fostered the development of the modern progressive income tax. Between the end of Reconstruction and the onset of the Great Depression, the American economy underwent dramatic changes. Mass migration, rapid urbanization and industrialization, and tremendous economic growth transformed what was by most accounts a peripheral New World republic into a geopolitical and economic power. These structural changes had important ramifications for American public finance. As the pace of urban–industrial capitalism accelerated, an increasing amount of output and income moved through the market, mainly because of the actions of large-scale industrial corporations. The expansion of the market as an institution, and the concomitant growth in cash transactions, were thus critical to the evolution of the modern income tax. Because the market’s cash nexus permitted more and more individuals to derive a greater portion of their income and wealth from the sale of their labor services or the deployment of their physical and financial capital, lawmakers were able to more easily measure and tap the growing tax base. Consequently, the national tax structure began to shift away from a reliance on indirect levies, namely import duties and excise taxes on alcohol and tobacco, toward more-direct and graduated taxes on income and wealth transfers.

The second set of economic factors that facilitated the development of the modern income tax followed from the first. The structural transformations in the American economy prompted more-specific changes in economic organizations and administrative procedures that gave government authorities new “tax handles” with which to assess and collect personal and business income. As income and economic power became concentrated in larger organizational units, namely integrated, multi-unit business corporations, it became easier to identify and access sources of tax revenue.


9. The term “tax handles” is generally associated with the work of early developmental economists. See, e.g., Richard A. Musgrave, Fiscal Systems 125 (1969); Harley H. Hinrichs, Determinants of Government Revenue Shares Among Less-Developed Countries, 75 Econ. J. 546, 546 (1965). One of the aims of this article is to apply the findings of the literature on development and tax structure to the American historical context.

10. Though scholars have identified large business corporations as crucial intermediaries in the tax-collection process, they have generally viewed their contribution as coming during the second half of the twentieth century. See, e.g., W. Elliot Brownlee, Taxation in the U.S. During World War I: Alternatives and Legacies, in Taxation, State, and Civil Society in Germany and the United
new, colossal organizations implemented more-rational and routinized systems of accounting to accurately calculate their profits and investment returns. Rational calculation is, after all, one of the institutional hallmarks of modern capitalism.\footnote{Max Weber, \textit{Sociological Categories of Economic Action}, in \textit{Economy and Society: An Outline of Interpretative Sociology} 63, 90–92 (Guenther Roth & Claus Wittich eds., 1978).} Although such advanced and systematic computations were frequently undertaken to measure internal production and distribution efficiencies and to attract additional finance capital, these innovations in gathering and processing information also helped tax authorities by reducing the costs of tax collection. As U.S. Treasury officials experimented with early forms of tax withholding, the accounting and recordkeeping of large businesses proved invaluable. Over time, the enactment of steeply progressive tax laws that tapped rising business profits and personal incomes reinforced the need for more-accurate recordkeeping and led to even more-standardized tax-accounting systems.

There was perhaps no greater marker and enabler of these economic trends than the rise of the large-scale, hierarchically managed, industrial corporation, or what business historians have referred to as the advent of American managerial capitalism.\footnote{See generally David Bunting, \textit{The Rise of Large American Corporations}, 1889–1919 (1987); Alfred D. Chandler, Jr., \textit{The Visible Hand: The Managerial Revolution in American Business} (1977); Louis Galambos, \textit{The Public Image of Big Business in America}, 1880–1940 (1975); Martin J. Sklar, \textit{The Corporate Reconstruction of American Capitalism}, 1890–1916 (1988).} The modern business corporation, complete with distinct organizational units run by salaried executives, was both a product of the broader, turn-of-the-century structural changes in the U.S. economy, and an embodiment of the new types of economic organizations and administrative processes. Accordingly, the early national attempt to tax corporations was important for American economic and political development not only because of its revenue-raising or regulatory potential, but also because it was representative of the dramatic changes in the U.S. economy and of the organizational units contained within it. In this sense, the historical significance of corporate taxation rests as much with what it stood for as with what it did. And what it stood for was the notion that the ongoing process of American economic growth was providing national policymakers with new opportunities to transform the U.S. tax system.

Current public-finance scholars have certainly recognized the central role of business corporations in the tax-collection process. As one leading scholar of taxation and development has written, “The key to effective taxation is information, and the key to information in the modern economy is the corporation. . . . The corporation is thus the modern fiscal state’s equivalent of
the customs barrier at the border."13 This article synthesizes the public-finance literature on taxation and economic development with findings from U.S. economic and business history to explain how American economic development and the emergence of managerial corporate capitalism helped create the pivotal institutional foundations for the modern income tax.14

In focusing on the economic conditions that paved the way for the income tax, this article does not contend that social and political factors were negligible or that economic growth inexorably determines changes in tax systems. Political interests and social turmoil were not exogenous variables. Rather, as public-finance scholars have long noted,15 and a new wave of interdisciplinary scholarship has emphasized,16 social and political forces—not to mention cultural influences—have worked in concert with economic factors in shaping tax systems across place and time.17 The central aim of this article is to make a modest contribution to the legal and political historiography of the U.S. income tax by highlighting how changing material economic conditions afforded social groups, political reformers, and lawmakers a unique, historically contingent opportunity to transform the American tax system.

Because social and political forces did, in fact, play an important role, this article begins, in part II, with a brief recapitulation of the standard sociopolitical accounts of the formation of the American income tax. It then turns in part III to a macro-level analysis of American economic development at the turn of the twentieth century. Using some conventional economic metrics, part III shows how the United States was gradually transformed from a mid-nineteenth-century “developing” nation into the world’s leading industrial power by the start of World War I. Part IV focuses more specifically on how economic growth led to structural changes in the economy—changes that signaled the rise of a new form of capitalism in which salaried business executives employed innovative techniques to manage the processes of mass production and distribution. Part V shows how economic growth and the rise of managerial corporate capitalism helped establish the institutional framework that facilitated the development of the modern income tax. The article concludes in

14. This article uses the terms “institution” and “institutional” broadly to refer to what Douglass North has suggested are the “humanly devised constraints that shape human interaction.” DOUGLASS C. NORTH, INSTITUTIONS, INSTITUTIONAL CHANGE AND ECONOMIC PERFORMANCE 3 (1990).
15. See generally MUSGRAVE, supra note 9; Hinrichs, supra note 9.
part VI with some closing remarks summarizing how American economic development and managerial corporate capitalism helped create the institutional foundations of the modern American income tax.

II

THE HISTORIOGRAPHY OF THE SOCIAL AND POLITICAL DETERMINANTS OF THE MODERN INCOME TAX

Historians of American public finance who have explored the beginnings of the modern income tax have frequently disagreed about its ultimate impact, but nearly all have privileged the explanatory power of political actors and institutions, as well as the social forces calling for tax reform. From the late-nineteenth-century populist demands for graduated income and wealth taxes to the political backlash against the Supreme Court’s decision in Pollock v. Farmers’ Loan & Trust Co.\(^\text{18}\) to the ratification of the Sixteenth Amendment and the enactment of subsequent income-tax laws, the key historical agents in most conventional accounts have been the lower agrarian and laboring classes, and the politicians and lawmakers who have either fought on behalf of these producers or blunted their demands by siding with powerful business and economic interests. Although some scholars have paid passing reference to “stage[s] of economic development,”\(^\text{19}\) the fundamental drivers of historical change have been the social tensions between classes and the mediating role played by politics, especially during national emergencies such as wars and economic dislocations.\(^\text{20}\)

For an older generation of mainly economic and legal historians weaned on the politics of New Deal liberalism, the history of the income tax was very much a morality tale in which the forces of social democracy gradually triumphed over plutocracy. Written mainly as prologues for the victorious arrival of Franklin D. Roosevelt, these teleological interpretations left little doubt that progressive lawmakers were critical to the formation of a new fiscal order. With the leadership of Theodore Roosevelt and Woodrow Wilson, and their congressional allies, fundamental tax reform was not only possible, it seemed preordained. For this older generation of scholars American fiscal history could not be separated from the populist demands of farmers and workers or the progressive political leaders who led the movement for tax reform.\(^\text{21}\)

Whereas these progressive historians equated early-twentieth-century tax reform with the triumphalism of American liberal democracy, a later generation of scholars from both the political left and right inverted the earlier narrative. The earlier generation celebrated the graduated income tax as a signal

\(^{18}\) 157 U.S. 429 (1895).

\(^{19}\) SIDNEY RATNER, TAXATION AND DEMOCRACY IN AMERICA 9 (1967).

\(^{20}\) See generally W. ELLIOT BROWNLEE, FEDERAL TAXATION IN AMERICA (1996).

\(^{21}\) See generally ROY G. BLAKEY & GLADYS C. BLAKEY, THE FEDERAL INCOME TAX (1940); RANDOLPH E. PAUL, TAXATION IN THE UNITED STATES (1954); RATNER, supra note 19.
achievement for American social democracy, but the new group of corporate-liberal and neoconservative scholars contended that U.S. political institutions and actors could not be trusted to fulfill the will of the populace. Thus, corporate-liberal scholars from the left argued that the income tax was a hollow victory, a subtle and sophisticated form of conservatism, a clever plot to domesticate potentially more-radical forms of wealth redistribution.22 Neoconservative scholars, using public-choice theory, agreed that the state had been captured, not by centrist capitalists, but by special economic interests who exploited the rent-seeking behavior of corrupt politicians.23 Others attached a similar negative connotation to the history of the American income tax; but rather than single out the machinations of political actors, these scholars focused on how the pluralism of American politics and the incrementalism of political change doomed the United States to a dysfunctional income-tax system.24

In recent years, the historical literature on American tax policy has reflected a type of revival of the earlier progressive view, but one that is more attuned to historical contingency and the interactions between institutions and individual agents. Not only has this neoprogressive view informed a robust debate about the constitutional history surrounding the income tax,25 and the importance of modern industrialization,26 it has also led to a new “democratic institutionalist” model of American fiscal history that reemphasizes the relative autonomy of state power and the use of that power in the search for tax equity and social justice.27


27. See generally BROWNLEE, supra note 20; STEVEN R. WEISMAN, THE GREAT TAX WARS (2002); TAX JUSTICE (Joseph J. Thorndike & Dennis J. Ventry, Jr., eds., 2002). In reviving the earlier progressive interpretation of the beginnings of the income tax, more-recent scholars have also provided
Despite the stark scholarly differences over the ultimate meaning of Progressive Era tax reform, what unites these contending interpretations is an unwavering focus on politics, political institutions, and social tensions as the engines of historical change. Even those who examine big-picture changes focus on the political response to industrialization and central state authority. As one leading historian has explained,

[N]o complex of economic factors, narrowly defined, can explain the centralization of government, the shifts in government functions, and changes in the structure of public finance. Explanation of the transitions must rest more heavily on an understanding of fundamental shifts in civic values, bound up in the workings of politics and political institutions, within the context of externally driven social crises.

The workings of politics, political institutions, and social crises certainly go a long way in explaining early-twentieth-century American tax reform. Massive social unrest, changing ideological perceptions, and shifting political power, as well as national emergencies, were all salient features in the development of the modern American income tax, as many of the other articles in this issue illustrate. But complex economic factors, broadly defined, had an equally significant influence. Whether one sees American economic growth as a prerequisite to the ultimate impact of political and social forces, or whether one describes economic development and material changes as working endogenously alongside and in unison with political ideology and social tensions, there is little doubt that the long-term process of American economic development had a resounding impact on the U.S. tax system. To understand the interaction among economic, political, and social forces, it may be useful to first summarize just how the United States progressed from a mid-nineteenth-century “developing” nation to the world’s largest industrial power by the end of World War I.

III

FROM “DEVELOPING” NATION TO WORLD POWER: AMERICAN ECONOMIC DEVELOPMENT AT THE TURN OF THE TWENTIETH CENTURY

During the long nineteenth century, the United States experienced tremendous economic growth. Because the economy generated a standard of strong empirical evidence from congressional roll-call votes to show how lawmakers from agrarian districts supported income taxes. See Elizabeth Sanders, Roots of Reform 226–32 (1999).


30. Richard Musgrave contended that economic growth provided lawmakers with greater flexibility in policy choices, and thus, by implication, fundamental and structural economic changes chronologically preceded the influence of social and political factors. Musgrave, supra note 9, at 125–67.
living that was relatively high, though uneven, the country could hardly be described as a “developing” nation by most present-day measures. To do so would belittle the challenges that continue to plague lesser developed countries today. Still, the United States did not become an international industrial power overnight. Economic growth and development, driven by an abundance of natural resources, technological innovation, and increasing factor inputs and productivity, helped transform an agriculturally based, seaboard economy into the world’s leading industrial, capitalist economy by the second decade of the twentieth century. Well before Henry Luce famously and bombastically predicted the triumphant arrival of the “American Century,” the United States was fast becoming the world’s leading economic power. The process of industrialization, which accelerated during the decades that straddled the turn of the twentieth century, was particularly important in shaping the institutional foundations of the modern income tax.

From a comparative-historical perspective, the U.S. economy by the late nineteenth century had already achieved great success and was poised to become an international leader due in part to a unique array of material, technological, and natural-resource-based circumstances. Although precise historical comparisons across space and time, as scholars have noted, can be problematic, by most estimates, the United States by the 1870s had a large and rapidly growing economy. At that time, American per capita real-income levels were already among the highest in the world. The United States, for example, far outpaced countries like Russia, where average real income was about one-half the American level, and even leading European colonial powers such as France and Germany had per capita real GDP figures that were roughly three-fourths of U.S. levels.

Nonetheless, the United States was not the world’s dominant economy during the late nineteenth century. It not only lagged behind the United Kingdom—which had real per capita income levels in the 1870s that were about...
30% greater than the United States—and other relatively small European dynamos like the Netherlands; the United States also trailed the colonial economies of Australia and New Zealand, which, with their small populations, copious natural resources, and large infusions of European capital, had greater real per capita income throughout the last decades of the nineteenth century. By 1870, the United States was still far ahead of the leading economies of Asia (Indonesia) and Latin America (Argentina), but it was gaining on global leaders in terms of economic performance.

Chart 1. Real GDP per Capita, 1870–1930

It did not take long, however, for the United States to surpass the United Kingdom and all other nations in terms of economic growth. The annual growth rate of American real per capita income during the turn of the century outpaced nearly all other nations, with the notable exception of Argentina, which witnessed unprecedented growth rates due mainly to the productivity of fertile land, the export of agricultural goods, and the subsequent investment of European capital. Whereas average real income in the United Kingdom grew at an annual rate of roughly 1% between 1870 and 1930, the United States experienced a 2.6% annual growth rate over the same period. Moreover, as the use of per capita–series rather than aggregate-output data shows, the last third

37. In 1870, U.S. real GDP per capita was roughly $2457 (in 1990 Geary–Khamis dollars), far below estimates for the United Kingdom ($3263) and Australia ($3801). MADDISON, supra note 35, at 194–96.
38. See infra Chart 1.
41. See infra Table A.
of the nineteenth century was a particularly pronounced era of American
economic development compared to other nations and past periods. Technological innovations as well as increased productivity of input factors, particularly capital, led to a modern period of industrialization that was at the center of American per capita–output growth. Those who benefited most from these economic gains, namely investors, manufacturers, merchants, and business managers, would soon become the leading sources of income-tax revenue.

Table A
Average Annual Real GDP Growth per Capita, 1870–1930

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<th>1870–1900</th>
<th>1900–1930</th>
<th>1870–1930</th>
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<tbody>
<tr>
<td>United States</td>
<td>2.2%</td>
<td>1.7%</td>
<td>2.6%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1.4%</td>
<td>0.4%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1.1%</td>
<td>1.8%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Australia</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Argentina</td>
<td>3.7%</td>
<td>1.6%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.4%</td>
<td>2.0%</td>
<td>1.4%</td>
</tr>
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Because of the rapid surge in economic growth at the turn of the century, the United States emerged as the world’s leading economy by the 1920s. Well before then, contemporaries could foresee the coming dominance of American economic might. As one British journalist noted in 1901, “The most serious aspect of the American industrial invasion lies in the fact that these newcomers have acquired control of almost every new industry created during the past fifteen years.” After rattling off a long list of modern devices, including “the telephone, the portable camera, the phonograph, the electric street car, the automobile,” and “the typewriter,” the English writer concluded that “in every one of these . . . the American maker is supreme; in several he is a monopolist.” Comparative historical data corroborates these remarks. By the end of World War I, average real income in the United States was nearly 20%

42. Using real, per capita, gross national product figures, Robert Gallman has estimated that the American economy grew by an annual rate of 2.4% between 1869 and 1909, far greater than in any other prior long-term period. Gallman, supra note 32, at 22.
44. MADDISON, supra note 35, at 194–206.
45. FREDERICK ARTHUR MCKENZIE, THE AMERICAN INVADERS 31 (1901).
greater than in the United Kingdom, and almost 10% greater than in Australia.\footnote{See supra Chart 1. By 1920, U.S. real GDP per capita was approximately $5600 (in 1990 dollars), while U.K. levels were at about $4650, and Australia’s was just above $5000. Maddison, supra note 35, at 194–96.}

American labor and capital productivity at the turn of the century transformed the country into the world’s largest producer of goods and services. In fact, even before the start of the Great War, “aggregate annual output was greater in the United States than in the three main World War I belligerents—the United Kingdom, Germany, and France—combined.”\footnote{Gallman, supra note 32, at 6.} With an increasing proportion of output moving through the market, the potential income-tax base grew significantly. In addition, as the industrial economy shifted from a structure of entrepreneurial capitalism to corporate capitalism, characterized by larger organizational units of production and distribution, government tax authorities were able to collect taxes more easily.

Economic output was not the only way in which the United States created the critical mass that facilitated the base for modern income taxation. By many other measures of modern development, the United States also made great strides at the turn of the century. Average life expectancy increased, infant mortality declined,\footnote{Life expectancy among whites increased from 45 years in 1870 to nearly 61 years by 1930. The infant-mortality rate, defined as the number of infant deaths per 1,000 live births per annum, declined from 175 among whites to 60 by 1870. Sumner J. La Croix, Government and the People: Labor, Education, and Health, in Government & the American Economy 323, 326–27 (2007).} and education levels rose sharply.\footnote{Historical Statistics of the United States (Susan B. Carter et al. eds., 2006) 2-468 to 468 tbl.Bc737–792. For more on the growing demand for high-school education during this period, see generally Claudia Goldin, The Human-Capital Century and American Leadership: Virtues of the Past, 61 J. Econ. Hist. 263 (2001).} These changes led to a healthier and more educated workforce that would soon come to occupy pivotal positions in the development of the modern income tax. Skilled employees were fast becoming the salaried managers of the burgeoning new industrial corporations. An increasing number of service professionals, such as doctors and lawyers, were also earning greater market incomes that could be tapped by the new tax regime.\footnote{Robert W. Gordon, The American Legal Profession, 1870–2000, in 3 The Cambridge History of Law in America, at 73, 93 (Michael Grossberg & Christopher Tomlins eds., 2008).} And there was a growing number of capital owners and investors who were profiting from American industrialization.\footnote{Lawrence E. Mitchell, The Speculation Economy 103 (2007); see also Julia C. Ott, “The Free and Open People’s Market”: Political Ideology and Retail Brokerage at the New York Stock Exchange, 1913–1933, 96 J. Am. Hist. 44 (2009).} In time, each of these groups would be among the country’s leading taxpayers.

The other side of the tax system also benefited from a prosperous and highly educated labor force. The increased administrative capacity necessary to assess and collect income taxes rested heavily on an educated and trained government
bureaucracy—the human capital of the public sector. The growth of the public sector in the early twentieth century, particularly within the U.S. Treasury Department, would become, as we shall see, vital to the development of an effective income tax.52 The expansion of national administrative capacity was, in turn, a function of complex historical forces. In this sense, American economic progress certainly provided new tax “handles” and greater administrative capacity for state authorities, but how such growth and government capacity would be put to use was frequently a socially and politically contested issue.53

Ultimately, though, economic growth and development, by itself, was not enough to provide the proper handles and capacity for the new income-tax regime. Economic growth premised only on increased agricultural productivity or an increasing number of small-scale merchants and artisans engaged in numerous small, perhaps even barter, transactions would not have provided the organizational or institutional framework for the development of an effective income tax. What was even more critical than the increasing amount of national income and output flowing through a national, regulated market was the structural transformation in the American economy that accompanied modern economic growth, namely the pronounced shift from agriculture to large-scale manufacturing that was at the heart of modern American industrialization. Moreover, by helping supplant household production and barter transactions with a more liquid cash economy, modern industrialization facilitated the measurement and collection of income taxes. The cash nexus provided a medium of exchange and standardized equivalence that tax authorities could accurately rely on to measure and assess income.54 Massive industrialization at the turn of the twentieth century was also accompanied by seminal changes in the size and scale of the organizational units of economic production and distribution, and the attendant standardization of managerial and accounting methods. These two institutional changes had a profound impact in shaping the expansion of the modern income tax.

IV

MODERN AMERICAN INDUSTRIALIZATION AND THE ADVENT OF MANAGERIAL CORPORATE CAPITALISM

During the antebellum period, particularly the 1840s and 1850s, the United States reaped the benefits of early technological innovation and

52. See infra text accompanying notes 125–32.
53. For more on the political and social construction of bureaucratic public power during this period, see generally DANIEL P. CARPENTER, THE FORGING OF BUREAUCRATIC AUTONOMY: REPUTATIONS, NETWORKS, AND POLICY INNOVATION IN EXECUTIVE AGENCIES, 1862–1928 (2001).
54. Gabriel Ardant, *Financial Policy and Economic Infrastructure of Modern States and Nations*, in THE FORMATION OF NATIONAL STATES IN WESTERN EUROPE 164, 218 (Charles Tilly ed., 1975). Although a cash economy had come to replace barter transactions in the United States much earlier than the late nineteenth century, the pervasiveness of market transactions took on a new meaning with the mass production and distribution of American industrialization.
industrialization. But it was in the six decades or so that followed the Civil War that technological advancements related to the second industrial revolution profoundly transformed the size and structure of the U.S. economy. Impressive technological improvements in transportation and communications linked a continental nation and helped create a mass market for production and distribution. Leading industrialists, like James Buchanan Duke, harnessed new technologies to make the production process more efficient and to help increase the national demand for consumer products. During the 1880s, Duke led his company into the cigarette-manufacturing business by employing new cigarette-rolling machines that significantly decreased the time and labor necessary to roll cigarettes. He also used the nascent advertising industry and a new system of merchandising to increase the consumer demand for his product. By 1890, Duke dominated the cigarette market, consolidating the four leading cigarette producing companies into the American Tobacco Company.

As the railroads and telegraph system spread, large-scale integrated industrial corporations, like the American Tobacco Company, emerged to take advantage of the economies of scale provided by the new, high-volume technologies. By combining the techniques of mass production and distribution within single business entities, the colossal new industrial corporations ushered in a new era of American capitalism. Accordingly, the industrial sector of the economy quickly eclipsed the agricultural segment, and new forms of economic organization and management paved the way for a more effective use of direct and progressive taxes on personal and corporate incomes.

There was perhaps no greater evidence of the seismic shift in the economy occasioned by industrialization than the changing sectoral composition of economic output and employment. As late as 1879, agriculture accounted for about half of the total value added in the economy’s commodity output; at that same time, manufacturing was responsible for roughly a one-third share. Within two decades, the two sectors had completely reversed positions. Manufacturing became the dominant segment of the economy by 1899, with a 53% share of output, while the agricultural proportion dropped to roughly one-third. And by 1929, the estimated divergence between the two leading commodity-producing sectors had become even more pronounced.

55. For a succinct summary of the numerous forces driving nineteenth-century American industrialization, see generally Stanley L. Engerman & Kenneth L. Sokoloff, Technology and Industrialization, 1790–1914, in 3 THE CAMBRIDGE ECONOMIC HISTORY, supra note 29, at 367.
57. Robert E. Gallman, Commodity Output, 1839–1899, in 24 THE CONFERENCE ON RESEARCH IN INCOME AND WEALTH, TRENDS IN THE AMERICAN ECONOMY IN THE NINETEENTH CENTURY (STUDIES IN INCOME AND WEALTH) 26 (1960) (All figures are in constant 1879 dollars.).
58. See Robert E. Gallman & Edward S. Howle, Trends in the Structure of the American Economy Since 1840, in THE REINTERPRETATION OF AMERICAN ECONOMIC HISTORY 25, 26 (Robert W. Fogel & Stanley L. Engerman eds., 1971); infra Table B.
The rise of late-nineteenth-century American industrial might was even more evident when viewed from a comparative perspective. Focusing specifically on industrial output, economic historians have shown how the last decades of the nineteenth century were particularly critical for American development. Whereas in 1880 the United States was fourth in terms of per capita levels of industrial output (well behind the United Kingdom, Germany, and Sweden), soon after 1900 the United States had surpassed the United Kingdom to become the world leader. The growing U.S. share of world industrial output similarly illustrates the rise of American manufacturing leadership. Between 1880 and 1900, the United States supplanted the United Kingdom as the world leader in terms of relative share of international industrial output. Incidentally, those nation-states that industrialized earlier were also the first to adopt direct taxes. The United Kingdom and Germany, for instance, enacted income taxes well before the United States, suggesting that some minimum level of economic growth and industrial concentration is necessary for the viability of individual- and corporate-income taxes.

### Table B
Sector Shares of Value Added in Commodity Production, 1879–1929

<table>
<thead>
<tr>
<th></th>
<th>1879</th>
<th>1889</th>
<th>1899</th>
<th>1909</th>
<th>1919</th>
<th>1929</th>
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<tr>
<td>Agriculture</td>
<td>49</td>
<td>37</td>
<td>33</td>
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<td>17</td>
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<tr>
<td>Industry</td>
<td>74</td>
<td>78</td>
<td>83</td>
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<td></td>
<td></td>
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<tr>
<td>Mining</td>
<td>3</td>
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<td>5</td>
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<td>Manufacturing</td>
<td>37</td>
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<td>53</td>
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<tr>
<td>Construction</td>
<td>11</td>
<td>11</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

60. Bairoch, supra note 43, at 294, 302; Wright, supra note 32, at 652.
62. MUSGRAVE, supra note 9, at 371–73.
Historical changes in the distribution of U.S. employment mirrored the sectoral shift in output and the comparative data on American industrial power. Whereas more than half of all U.S. workers were farmers or farm laborers in 1870, that figure dropped to roughly one-fifth by 1930. Although the increase in the share of manufacturing employment was not as pronounced, mainly because of the changing census definition of manufacturing workers and because of the productivity increases in output per worker, the gains were still significant. In 1870, only about 19% of the labor force was dedicated to manufacturing; by 1920 that figure had jumped to nearly 27%. The shift from agricultural employment to manufacturing increased the number of wage-earning workers with more-regular and precise incomes. Furthermore, because farmers, especially subsistence farmers, were frequently difficult to tax, the sectoral shift in employment from agriculture to manufacturing also aided the effectiveness of tax collection.

As more and more Americans became tied to the market for wage labor, their salaries became susceptible to income taxes. To be sure, the vast majority of ordinary workers were immune from the early-twentieth-century income tax. In fact, political leaders and tax reformers consciously framed the modern income tax as a levy mainly on the rich and affluent. As Congressman Cordell Hull, one of the chief architects of the 1913 income tax explained, the central goal of the progressive income tax was to ensure that “the wealth of the country should bear its just share of the burden of taxation and that it should not be

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66. Lebergott, supra note 64, at 119.
68. Brownlee, supra note 29, at 1023.
Still, industrialization not only drove workers from rural farms to urban industries, it also created vast, though uneven, amounts of wealth and facilitated the rise of a new managerial class of business executives. These salaried executives and the new, highly integrated, industrial enterprises they managed would soon become the leading sources of the early, class-based income taxes.

Indeed, the modern industrial business corporation, administered by a hierarchy of salaried professionals, was the hallmark of managerial corporate capitalism. In earlier times, nearly all business firms were single-unit enterprises owned and operated by a sole individual or small group of individuals who responded to market prices and provided a solitary economic function—be it a retail shop, factory, or bank—out of a lone location. Before the railroad and telegraphic system became fully operational in the 1880s, these small firms rarely competed with each other in a national market, nor did they have the communication capabilities to manage and coordinate several scattered operating units. Without a need for managerial supervision, these traditional, often family-owned, companies combined the responsibilities of ownership and control. Simply put, in these preindustrial businesses, “owners managed and managers owned.”

In stark contrast, the modern business enterprise, which was usually organized as a corporation, was a large-scale firm with integrated multiple units that performed a variety of economic activities across a vast area of operations. The complex and numerous production and distribution activities of these new firms were monitored and coordinated by a hierarchy of salaried managers who generally had little equity stake in the businesses they operated. Unlike the swashbuckling captains of industry from an earlier generation, the administrators of the modern business corporation were organizational men—and they were nearly all men—dedicated to the long-run viability of their business organizations. They were, in short, business bureaucrats.

Modern business managers guided the expansion of their enterprises both internally and through mergers and acquisitions. Indeed, between 1895 and 1904, in what is known as the “great merger movement,” manufacturing firms consolidated at a remarkable, breakneck pace due to a confluence of historical

70. CHANDLER, supra note 12, at 1–12.
71. Id. at 9.
72. Though there were notable exceptions such as the Ford Motor Company which remained a sole proprietorship well into the twentieth century, the vast majority of industrial enterprises were organized as legal corporations. RICHARD S. TEDLOW, THE RISE OF THE AMERICAN BUSINESS CORPORATION 5 (1991).
73. CHANDLER, supra note 12, at 7–10. The growing separation of ownership and control was, of course, a great concern for corporate-law scholars and policymakers. See generally ADOLF A. BERLE, JR. & GARDINER C. MEANS, THE MODERN CORPORATION AND PRIVATE PROPERTY (1932).
74. HEILBRONER & SINGER, supra note 56, at 77–85.
During that time, nearly two thousand companies combined with former rivals to create some of the country’s largest industrial corporations. Duke’s American Tobacco Company, for instance, embarked in the early 1890s on a series of mergers and internal expansions that led it to control nearly 80% of the entire tobacco industry. As a result, American Tobacco’s market capitalization skyrocketed from $25 million in 1890 to approximately $500 million by 1904. Though the “visible hand of management” helped determine the success of many mergers, the growth of financial intermediaries with increasing access to international capital markets was equally important. Whereas earlier transportation companies relied mainly on the issuance of public and private debt, the great merger movement accelerated the institutional convergence of American industrial manufacturing and finance capital. Banks and other financial institutions prospered, and the ownership of large corporate organizations became increasingly dispersed as the American spirit of financial speculation and the ideology of a “shareholder democracy” began to take hold.

The emergence of large, integrated corporations is frequently depicted as a functional response to the technological changes of modern industrialization, or as an inevitable concomitant of economic growth. Their evolution, however, was hardly natural or inexorable. Like all institutions, these new economic organizations were populated by human agents who used resources and power to further their beliefs and interests during historically specific moments. 

The individuals, for example, who came to occupy the rungs of middle and upper management at the leading American industrial corporations were, by and large, members of an upper class imbued with economic and political authority. Highly educated and frequently well connected, these business bureaucrats had every incentive to perpetuate the power and prestige of a management structure that was fast producing the next generation of business leaders.

76. DURDEN, supra note 56, at 62.
78. WILLIAM G. ROY, SOCIALIZING CAPITAL 7 (1997).
79. Id. at 49–50.
80. See ROY, supra note 78, at 4. On the rise of financial speculation and the ideology of a so-called “shareholder democracy,” see generally MITCHELL, supra note 51; Ott, supra note 51.
81. For a critique of the structural functionalism that underpins the Chandlerian account, see generally ROY, supra note 78; Robert W. Gordon, Critical Legal Histories, 36 STAN. L. REV. 57 (1984). On more recent challenges to the economic description of the seemingly natural rise of the modern corporation, see generally CONSTRUCTING CORPORATE AMERICA: HISTORY, POLITICS, CULTURE (Kenneth Lipartito & David B. Sicilia eds., 2004).
83. HEILBRONER & SINGER, supra note 56, at 80–81.
Likewise, the growth of the corporate form as a legal entity had its own social and cultural history, one that exacerbated the defects of the existing nineteenth-century U.S. tax system. On the one hand, the pervasiveness of large corporations throughout American society helped establish the social legitimacy of an economic organization in a political culture that was regularly suspicious of concentrated power. Indeed, well before the economic-productivity gains of American industrialism took hold, corporations were completing the cultural spade work that would ensure the existence of large-scale businesses and hence the subsequent development of the income tax. In the process, Big Business corporations were also playing an important role through tax withholding and other reporting measures in educating and socializing their dividend-receiving owners and their salaried managers about the process of tax compliance.

On the other hand, the rise of corporate capitalism and the concomitant increase in intangible wealth in the form of corporate securities placed greater pressure on prevailing tax systems and provided social and political reformers with an opportunity to advance income taxes as a substitute for the federal tariff and subnational property taxes. The national tariff, which was no longer simply protecting infant industries but seemed to be shielding domestic monopolies from foreign competition, was blamed for fostering the creation of large business combinations known as trusts. At the state and local level, the inability of general property taxes to capture the wealth of large shareholders animated agrarian populists and legal reformers who sought to use the income tax as a viable alternative to property taxes. The drawbacks of the existing framework of the American tax system combined with the economic changes wrought by industrialism fueled the social and political calls for income taxation. Thus, although industrialization and the rise of managerial corporate capitalism were important influences on the creation and elaboration of the modern income tax, the adoption of income taxes did not inescapably flow from economic forces, but rather was conditioned by social and political power and complex historical processes. Social and political variables, in other words, were endogenously related to the economic factors shaping the modern income tax.

There were other modern forces related to industrialization that affected the arrival of managerial capitalism—and subsequently the development of the income tax—in various ways. Rapid urbanization, for instance, supported the creation of mass production and distribution, and in turn indirectly expanded the possibilities for new types of taxes. Between 1880 and 1910, the proportion of Americans living in urban areas (defined as locations with more than 2,500

persons) more than doubled, and the share of those living in large cities (defined as locations with more than 100,000 persons) nearly quadrupled.\textsuperscript{87}

The lure of factory jobs in mass-production processes certainly pulled Americans into urban areas. The exodus from small rural communities to large urban areas also led to the creation of a vast market of consumers who were willing to purchase standard, mass-produced goods that were generally less costly than the aesthetically specialized and individualized designs of craftsmen. Ironically, the growth of the mass-consumption market provided opportunities for the enactment of sales taxes. As large department stores and chain stores began to eclipse the small-scale general country store,\textsuperscript{88} government tax authorities could more easily assess consumption taxes, like a retail-sales tax. Some state governments exploited this revenue stream during the early twentieth century, beginning with levies on specific consumption items such as cigarettes and gasoline.\textsuperscript{89}

Over time, sales taxes became the prerogative of state governments. As states and commonwealths came to rely on sales taxes as an increasingly important source of revenue, they resisted federal encroachments on this tax base. In the process, they staked out important ground in the ongoing intergovernmental tension that was characteristic of the history of American fiscal federalism. Indeed, the politics of fiscal federalism may explain in part why subsequent attempts at adopting a federal sales tax were thwarted.\textsuperscript{90} Yet in the early twentieth century the rise of a mass-consumption market suggests that the development of the income tax was not preordained, that it was profoundly shaped by social and political factors. Economic growth and urban industrialization provided policymakers with multiple “tax handles”; but it was mainly social crisis and political leadership particularly during the 1940s that prevented the development of a national retail-sales tax and reinforced the federal reliance on progressive income taxes.\textsuperscript{91}

One reason why the federal sales tax did not gain sufficient currency among lawmakers and policy analysts was because consumption levies had long been assumed to be the most regressive of taxes, extracting revenue from those least able to pay. Since the late nineteenth century, regressive taxes were associated with a period of rising income and wealth inequality. The growing disparity of wealth during the Gilded Age was also linked to the rise of corporate


capitalism. As a result, large, wealthy corporations became targets of populist protests, and lawmakers began using tax policy as a cudgel to try to control the growth of Big Business.\textsuperscript{92} Given the limited amount of statistical data on nineteenth-century wealth and income, modern economic historians tend to disagree about the extent of economic inequality in the late 1800s,\textsuperscript{93} but most seem to concur that between the Civil War and the Great Depression a high degree of income inequality reached an “uneven plateau,” whereby the share of national income received by top income earners was consistent and peaked during particular moments, including the eve of U.S. entry into World War I.\textsuperscript{94} The Great War itself had a tremendous leveling effect on income inequality, due in no small part to the “soak the rich” tax laws of the period, but higher levels of income disparity reappeared during the 1920s, reaching similar peaks on the eve of the 1929 stock-market crash.\textsuperscript{95}

Contemporary commentators were not oblivious to the growing disparity of wealth. Writing in 1893, the federal statistician George K. Holmes used census data to estimate that the richest 9% of American families owned about 70% of national assets.\textsuperscript{96} The social consequences of such inequality seemed obvious. “There is always the danger,” wrote Holmes, that the rich “will get too large a hold upon the wealth, the resources, and the labor of the country,” in which case “the most effective and practical remedies are progressive taxes on incomes, gifts, and inheritances.” Holmes contended that it was only through such political and legal measures that society could ensure “a distribution . . . most conducive to social welfare.”\textsuperscript{97}

Holmes’s remarks were emblematic of the era. Social commentators echoed alarmist warnings about swollen fortunes, and these sociopolitical concerns helped galvanize public support for the corporate tax and the Sixteenth Amendment.\textsuperscript{98} The growing social anxiety and the calls for political and legal reforms illustrate how economic factors were intertwined with other forces in helping shape the adoption and expansion of the modern income tax. Industrialization and the advent of managerial corporate capitalism provided

\textsuperscript{92} Avi-Yonah, supra note 6, at 1212–30; Kornhauser supra note 6, at 53–54.
\textsuperscript{94} Jeffrey G. Williamson & Peter H. Lindert, \textit{American Inequality: A Macroeconomic History} 75–79 (1980). The spread in pay rations between highly paid and low-paid jobs parallels the income inequality seen in the share of income going to the top 1% of income recipients. \textit{Id.} at 80–92.
\textsuperscript{97} Holmes, supra note 96, at 599–600.
\textsuperscript{98} Ratner, supra note 19, at 254.
the broader context, but historically specific social tensions and political actions triggered fundamental changes to the institutional structure of American tax law and policy. In this way, sociopolitical forces were bound up with broader economic transformations.

V

ECONOMIC CHANGE AND THE INSTITUTIONAL FOUNDATIONS OF THE MODERN INCOME TAX

Many of the economic changes wrought by the ascent of industrialization and managerial corporate capitalism gradually had a profound impact on the development of the modern income tax. Unsurprisingly, the concentration of large-scale business enterprises had a direct influence on the elaboration of the corporate-income tax. Not only was Big Business an easy political target for populist reformers and progressive leaders, who could point to wealthy business enterprises as potential sources of badly needed government revenue; these large-scale industrial organizations also provided government tax authorities significant administrative assistance. The consolidation of numerous, scattered, specialized enterprises into fewer integrated, multi-unit big businesses eased the administrative burden on corporate-tax collections.

It was not only the corporate-income tax, however, that benefited from the rise of American Big Business; the individual-, or personal-, income tax also prospered. The top managers and dispersed owners of the new corporate behemoths became leading payers of the personal-income tax. In fact, over time, professional salaries and dividend income became an increasingly significant part of individual-income-tax revenues. In addition to helping create the wealth and earnings that were susceptible to personal-income-tax laws, the large industrial corporations were also pivotal intermediaries in the tax-collection process. In the early years of the corporate tax, they were remittance vehicles for a corporate levy that was arguably aimed at shareholders. In later years, when early and crude forms of income tax withholding were adopted and the deliberate double taxation of corporate income took hold, these business corporations became more-direct and purposeful collection agents for the Bureau of Internal Revenue (BIR).

Yet the expansion of both the corporate- and individual-income tax may not have been possible were it not for the systematic changes in the way modern business enterprises precisely calculated their costs and revenues. Innovations in accounting that emerged from the careful coordination of mass production and distribution facilitated—inadvertently perhaps—the development of the modern income tax by giving government organizations ample opportunities to assess and collect corporate profits and personal incomes. It was this multitude of economic changes ushered in by managerial corporate capitalism that helped shape the institutional foundations of the modern income tax.
A. Big Business and the Development of the Corporate-Income Tax

Even before the 1909 levy, business corporations had been among the favorite tax targets of subnational lawmakers and policy analysts. The nineteenth-century general property tax administered by state and local governments gained much of its revenue from the property of local utilities and street railways, as well as the tracks and property used by national railroads. State and local governments also imposed gross-receipts taxes on businesses, which accounted for a substantial amount of subnational revenue. In fact, in several states such as California, New Jersey, and Pennsylvania, corporate taxes generated the majority of total annual tax receipts in the early twentieth century.99

The increasing demand for public spending on education, hospitals, and internal improvements drove the desire of state lawmakers to turn to business corporations for greater tax revenue.100 An equally important component was the anxiety created by the growing economic power of Big Business. Drawing on a deep-seated antimonopoly tradition, agrarian populists feared that modern business corporations were quickly eliminating the traditional way of life of many yeoman farmers, relegating them to the dustbin of history. Likewise, local merchants feared the concentration of monopoly power in the hands of northeastern industrial elites. The taxation of large-scale modern corporations was thus part of the overall American political preoccupation with using state power to control the rise of corporate capitalism and the growing power of economic elites.101

Indeed, American statecraft has long been distinguished by its antagonism towards Big Business. As political and business historians have demonstrated, the early arrival of American managerial corporate capitalism in the mid to late 1800s preceded, and in some ways compelled, the subsequent development of the modern regulatory and administrative state. Consequently, a unique American divide between private enterprise and public administration began to develop.102 Although antitrust law is generally the policy arena that scholars

100. Id. at 65.
have explored to substantiate this claim,\textsuperscript{103} the tensions between American government and Big Business can also be clearly seen in the evolution of U.S. corporate-tax laws and policies.

During the political debates over the modern income tax, the proper taxation of modern business corporations was a central concern. For lawmakers drafting the 1894 income tax, the decision to impose a separate corporate-level tax was a direct result of the social and political desires to punish large, abusive corporations. “[T]he sentiment that in some way or another the Legislature must get at the corporation,” explained one U.S. senator, “accounts for the tax upon the incomes of corporations.” The prevailing “sentiment seems to be that if a corporation does anything wrong, strike at all corporations, tax them.”\textsuperscript{104}

Although most contemporary economic experts agreed that the incidence of corporate taxes was relatively uncertain, the overwhelming perception of corporate tax proponents was that it ultimately hit owners of capital, and not labor or consumers. Similar attitudes drove the debates over the 1909 corporate levy and the 1913 tax. And the objections to the new corporate taxes validated that they were indeed perceived as punitive measures by the owners and managers of large-scale business corporations who were nominally forced to pay these levies.

Though the motivations behind the early corporate taxes may have been to punish economic elites, these laws initially raised only moderate amounts of revenue, at least until the economic, social, and political conditions surrounding World War I dramatically transformed all aspects of American public finance.\textsuperscript{105} The 1909 corporate excise tax, for example, imposed only a flat, 1% levy on net corporate income above $5,000.\textsuperscript{106} The 1913 income tax maintained a flat 1%, but removed any exemption level.\textsuperscript{107} These measures raised some revenue, but it was not until World War I, when new war and excess-profits taxes were added to higher ordinary corporate-income taxes, that business corporations became an integral part of the revenue-raising machinery. From 1916 through 1919, Congress enacted a series of tax laws aimed at extracting revenue from those industries and individuals who were believed to be profiting most from the war effort. In 1918, during the peak of the wartime tax regime, profits and income taxes on corporations generated roughly $3.1 billion out of total tax revenue of about $4.3 billion, thus accounting for nearly three-quarters of total revenue.\textsuperscript{108}


\textsuperscript{105} David M. Kennedy, Over Here: The First World War and American Society 112 (2004).


\textsuperscript{107} Tariff of 1913, Pub. L. No. 63-16, § 2, 38 Stat. 114, 166 (1913). Because the Sixteenth Amendment had obviated the need for framing the levy as an excise tax, the 1913 tax was expressly imposed as a levy on net corporate income.

\textsuperscript{108} U.S. Treasury Department, U.S. Internal Revenue, Statistics of Income, Compiled from the Returns for 1925, at 23 (1927).
What is even more significant than the revenue eventually raised by corporate taxes is the type of business firms that were remitting the early levies. The large-scale industrial corporations that had ushered in a new era of managerial capitalism soon became the largest sources of corporate-income and profits taxes, especially during World War I. Corporations classified by the BIR as part of “manufacturing and mechanical industries” accounted for nearly half of all corporate-income-tax revenue, and about a quarter of overall tax revenue in 1916. By 1918, manufacturing was responsible for nearly half of all total tax revenue, accounting for $2.1 billion of the total $4.2 billion raised by both corporate and personal taxes.

### Table C
Leading Sources of Early Corporate Tax Revenue, by Industry, 1916–1930
(nominal dollars in thousands and as percentage of total tax revenue)

<table>
<thead>
<tr>
<th>Industry</th>
<th>1916</th>
<th>1920</th>
<th>1925</th>
<th>1930</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>$81,260</td>
<td>$944,960</td>
<td>$546,740</td>
<td>$316,991</td>
</tr>
<tr>
<td>Transportation and Public Utilities</td>
<td>$30,160</td>
<td>$98,623</td>
<td>$186,313</td>
<td>$156,573</td>
</tr>
<tr>
<td>Finance, Banking, Insurance, etc.</td>
<td>$10,505</td>
<td>$119,001</td>
<td>$179,948</td>
<td>$109,455</td>
</tr>
<tr>
<td>Trade</td>
<td>$192,612</td>
<td>$145,349</td>
<td>$64,165</td>
<td>$21,474</td>
</tr>
<tr>
<td>Mining</td>
<td>$15,846</td>
<td>$174,595</td>
<td>$55,048</td>
<td>$21,474</td>
</tr>
</tbody>
</table>

A closer analysis of corporate-tax revenues by leading industries during the early years of income taxation suggests that Big Business remained a significant source of tax revenue, even as war and excess-profits levies were repealed in the 1920s. Despite the paucity of systematic data, and the shifting definition of BIR categories over time, the salience of large industrial corporations to overall tax revenue is unmistakable. Manufacturing, transportation and public utilities, financial institutions, and trade were all leading sources of corporate-tax revenue from World War I to the onset of the Great Depression. Notably, while manufacturing firms were the leading source of corporate revenue throughout

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109. U.S. TREASURY DEPARTMENT, U.S. INTERNAL REVENUE, STATISTICS OF INCOME, COMPILED FROM THE RETURNS FOR 1916, at 12 (1918); infra Table C.


this period, the apparent rise of financial intermediation and the relative decline of mining are also apparent from the data. 112

As large-scale industrial corporations became increasingly significant sources of total tax revenue, the highly integrated aspects of these corporate enterprises also seemed to ease the administrative burden on tax authorities. In the process of creating and expanding integrated and highly efficient business organizations, corporate business managers were also providing government tax authorities with a single site for an enormous amount of income-tax information. Measuring and reaching the income of millions of small merchants or scattered artisans was much more administratively challenging than tapping a small number of large, integrated manufacturers. The economies of scale that were driving mass production and distribution were, in short, facilitating income-tax collections.

With an increasing proportion of income and output moving through larger units of production and distribution, tax collection could become more centralized. Instead of trying to get handles on a large number of small and dispersed producers of goods, the BIR could focus its energies, as it did, on the concentrated regions of the country where many of the large-scale industrial corporations were situated. 113 At the same time, the BIR itself seemed to become more business-like in its efficient collection of revenue, especially during the World War I period, when a dramatic increase in administrative capacity and improvements substantially decreased the costs of tax collection. According to BIR statistics, the average cost of collection declined steadily from a high of over two dollars for every hundred dollars collected in 1909 to roughly thirty cents by 1918. 114 Though there were likely several reasons for this steep increase in collection efficiency, including the World War I Treasury Department’s efforts to access a traditional reservoir of patriotism and civic voluntarism, 115 the scale economies of taxing large, integrated corporations with a newly reorganized and well-trained BIR were likely part of the reason.

112. See supra Table C.
113. SEC’TY OF THE TREASURY DEP’T, ANNUAL REPORT OF THE SECRETARY OF THE TREASURY ON THE STATE OF THE FINANCES FOR FISCAL YEAR ENDED JUNE 30, 1910, at 452 (1911). There are, of course, limits to the notion that the concentration of businesses facilitates tax collection. In the extreme case, if there were just one large business, tax collection would suffer from the lack of information collected through business to business transactions.
114. BLAKEY & BLAKEY, supra note 21, at 555.
B. Managerial Corporate Capitalism and the Development of the Personal-Income Tax

It was not only as sources of corporate-income taxes and as concentrated collection sites that large industrial enterprises contributed to the elaboration of the income tax; they also influenced the development of personal-income taxes in similar ways. First, the great wealth created by these large economic organizations was distributed to two main groups that were the leading sources of personal-income-tax revenue: the highly paid top executives who were managing these new large-scale business enterprises and the corporate stockholders who were collecting handsome dividends and investment profits from their ownership of these firms. Second, the new business enterprises were also pivotal intermediaries in the process of collecting individual-income taxes. During the early phases of corporate taxation, when it seemed unclear whether corporate taxes were aimed at business corporations as separate entities or were simply proxies for an income tax on shareholders, large-scale business enterprises played a critical role in helping to collect income taxes. And when early and crude forms of personal-income-tax withholding were adopted, corporations remained vital remittance vehicles for individual income taxes. Although the process of tax withholding changed over time, this aspect of the rise of managerial corporate capitalism may have had the greatest long-term impact on the effective administration of the modern U.S. income tax.

Like the corporate tax, the early personal-income tax began with relatively modest rates and high-exemption levels, but it too was radically altered by the World War I fiscal revolution. The 1913 income tax, for example, exempted incomes under $3000 ($4000 for married couples), and imposed a “normal” rate of 1% on all income up to $20,000, after which graduated “surtax” rates reaching a peak of 6% for income over $5 million were applied. According to modern estimates, only about 2% of American households were affected by the 1913 income tax, and the average tax rate for top earners was only 6%. World War I, of course, forever altered the fiscal landscape. Beginning with the Revenue Act of 1916, Congress lowered exemption levels and dramatically increased rates. At the height of the World War I tax regime, the exemption level dropped to $1000 ($2000 for married couples), normal rates soared to 6% for the first $4,000 of income above exemption levels and 12% for all income beyond $4,000, and surtax rates skyrocketed to a top rate of 65%. Nearly one in five American households paid some income tax, and the effective rate on

116. On the multiple motivations behind the early corporate tax, see generally Avi-Yonah, supra note 6; Bank, supra note 6; Kornhauser, supra note 6.
top income earners (those earning more than $1 million) reached a high of 65%.  

Over time, as managerial corporate capitalism spread and exemption levels declined, the sources of personal income reflected the growing importance of the elite business class. Modern historians have estimated that for the early income tax, this amorphous group of “[b]usinessmen . . . accounted for about eighty-five percent of the income reported, and almost ninety percent of the tax paid.” Contemporary estimates of the average annual salaries of business executives further suggest that top corporate managers fell well within the early web of income taxes. According to a 1925 study of pre–World War I salaries, average yearly executive salaries for the largest firms (those with capital over $1.5 million) was roughly $10,000, well beyond the $4,000 exemption level for married couples. The average annual salaries of top managers at smaller firms also frequently fell within the existing income-tax brackets. To be sure, the total number of top managers paying income taxes was not large enough to sustain the revenue needs of a modern nation-state. Still, a more careful examination of data from income-tax returns over time corroborates that salaries were becoming an increasingly larger source of individual income. Whereas salaries accounted for less than 20% of total personal-income-tax revenue in 1916, by the end of the war, salaries generated nearly 60% of individual-income-tax receipts. Although this figure declined during the post-war fiscal retrenchment, salaries remained the leading source of personal-income-tax revenue throughout the rest of the twentieth century.


122. BUENKER, supra note 4, at 14.


124. Id. The average wage earner, of course, made much less, earning about a total of $1,400 on an annual basis. U.S. DEPARTMENT OF COMMERCE, STATISTICAL ABSTRACT OF THE UNITED STATES 347 (1930).

125. In fact, only about 226,000 American households with income over $10,000 actually filed income taxes in 1920, but this group accounted for more than 75% of total individual income-tax revenue in that year. U.S. TREASURY DEPARTMENT, U.S. INTERNAL REVENUE, STATISTICS OF INCOME, COMPILED FROM THE RETURNS FOR 1920, at 4–5 (1920).

126. See infra Table D.

Table D
Leading Sources of Early Personal-Income Tax, 1916–1930
(nominal dollars in thousands and as percentage of total tax revenue)\textsuperscript{128}

<table>
<thead>
<tr>
<th></th>
<th>1916</th>
<th>1920</th>
<th>1925</th>
<th>1930</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td>$1,478,346</td>
<td>$15,270,373</td>
<td>$9,742,159</td>
<td>$9,921,952</td>
</tr>
<tr>
<td></td>
<td>18%</td>
<td>57%</td>
<td>39%</td>
<td>44%</td>
</tr>
<tr>
<td>Business*</td>
<td>$2,637,474</td>
<td>$5,927,327</td>
<td>$3,688,804</td>
<td>$2,628,056</td>
</tr>
<tr>
<td></td>
<td>32%</td>
<td>22%</td>
<td>15%</td>
<td>12%</td>
</tr>
<tr>
<td>Dividends</td>
<td>$2,136,468</td>
<td>$2,735,845</td>
<td>$3,464,624</td>
<td>$4,197,303</td>
</tr>
<tr>
<td></td>
<td>26%</td>
<td>10%</td>
<td>14%</td>
<td>19%</td>
</tr>
<tr>
<td>Interest and Investments</td>
<td>—</td>
<td>—</td>
<td>$1,814,402</td>
<td>$1,940,437</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>Total Income</td>
<td>$8,349,901</td>
<td>$26,690,269</td>
<td>$25,272,034</td>
<td>$22,412,445</td>
</tr>
</tbody>
</table>

* Personal income from business refers to income from sole proprietorships.

As industrial corporations began to tap capital markets more aggressively in the early twentieth century, dividends and gains from investments also became an important source of personal income. Because the definition of investment profits, or capital gains, varied during the early years of the income tax, there is little consistent data on this income-tax revenue stream. Nonetheless, the early decades of the twentieth century witnessed the increasingly widespread dispersion of corporate-stock ownership.\textsuperscript{129} It was also a time when industrial firms, like Bethlehem Steel and U.S. Steel, began using stock-bonus plans to reward top managers.\textsuperscript{130} As a speculation economy and an ideology of “shareholder democracy” took hold, more and more Americans began to identify themselves as stockholders.\textsuperscript{131} Indeed, the distribution of stock ownership among the middle class seemed to increase dramatically.\textsuperscript{132} Accordingly, dividends made up a growing amount, if not a growing percentage, of total personal income in this period. In the aggregate, dividends, salaries, and

\textsuperscript{128} U.S. Treasury Department, U.S. Internal Revenue, Statistics of Income Compiled from the Returns for 1916 (1918); Treasury Department, U.S. Internal Revenue, Statistics of Income Compiled from the Returns for 1918 (1921); Treasury Department, U.S. Internal Revenue, Statistics of Income from Returns of Net Income for 1920 (1922); Treasury Department, U.S. Internal Revenue, Statistics of Income from Returns of Net Income for 1925 (1927); Treasury Department, U.S. Internal Revenue, Statistics of Income from Returns of Net Income for 1930 (1932).

\textsuperscript{129} H.T. Warshow, The Distribution of Corporate Ownership in the United States, 30 Q. J. Econ. 15, 15–17 (1924).


\textsuperscript{131} Mitchell, supra note 51, at 197–205; David Hochfelder, “Where the Common People Could Speculate”: The Ticker, Bucket Shops, and the Origins of Popular Participation in Financial Markets, 1880–1920, 93 J. Am. Hist. 335, 336 (2006); Ott, supra note 51, at 44. Estimates suggest that although only about 3% of U.S. households owned stock before World War I, by the end of the 1920s that figure had jumped to nearly 25%. Ott, supra note 51, at 45.

\textsuperscript{132} By 1923, more than half of all dividends paid went to people with incomes below $20,000. Mitchell, supra note 51, at 103 (citing to H.T. Warshow, The Distribution of Corporate Ownership in the United States, 30 Q. J. Econ. 15 (1924)).
noncorporate business income accounted for a tremendous amount of personal-income-tax revenue. As a group these three categories generated more than three-quarters of total individual-income-tax receipts in 1916, nearly 90% in 1920, and roughly two-thirds of income-tax revenue throughout the 1920s.\footnote{133}{See supra Table D.}

One of the reasons why dividends and salaries became such a significant part of early personal-tax revenue was because of the key intermediary position of corporations in the tax-collection process. In the early years of the corporate tax, before the deliberate double taxation of corporate income, large business corporations served as vital collection devices for taxes that were arguably aimed at shareholders. Because the prevailing national tariffs and the dysfunctional subnational property tax did not reach the intangible wealth held by owners of business corporations, namely their investments in corporate securities, the pre–World War I corporate taxes could be seen as proxies for an income tax on shareholders, as some scholars have claimed.\footnote{134}{See generally Bank, supra note 6.} If that was the case, corporations were in a sense deputized as quasi-collection agents for the BIR. Even in subsequent decades, after the double taxation of corporate income became a conscious part of American tax policy, corporations would continue to be important remittance agents in the tax-collection process. Beginning with the 1913 income tax, a crude yet comprehensive form of withholding was used to ease the administrative burden on individual-income-tax collections. Since large, integrated corporations were already using careful bookkeeping techniques to calculate precisely employment costs and dividend payouts, the federal government could easily exploit this information source and require corporations to withhold the tax payments on salaries and dividends.

The U.S. experiment with withholding had begun, haltingly, with the Civil War income taxes. Borrowing the concept from the British, the Union used a “stoppage at the source” method of tax collection that was limited to government salaries, corporate dividends from railroads, and interest from financial institutions.\footnote{135}{Tax Act of 1862, ch. 119, §§ 81, 82, 86, 12 Stat. 432 (1862).} Even at this early stage, lawmakers recognized that large-scale, integrated corporations could be effective remittance vehicles. As one tax commentator succinctly explained, “[I]t was much easier to collect from the corporations than from the individual stockholders and bondholders.”\footnote{136}{Joseph A. Hill, The Civil War Income Tax, 8 Q. J. ECON. 416, 427 (1894).} And as corporations became bigger and more consolidated, this principle became even more evident.

Whereas the Civil War income tax had made limited use of withholding, the 1913 income tax imposed a more comprehensive method of what was referred to as “collection at the source.”\footnote{137}{BLAKEY & BLAKEY, supra note 21, at 79.} The law provided that whenever a corporation...
or individual paid out interest or dividends of any amount, or rent, premiums, wages, or salaries in excess of $3000, they were required not only to provide this information to the BIR, they also had to withhold the normal tax of 1% and pay it to the BIR on behalf of the payee. By 1913, dramatic changes in the size and structure of the American economy made the use of withholding via corporations and other intermediaries even more effective than during the Civil War. The arrival of urban–industrial capitalism not only increased the proportion of workers that were salaried employees, but the early convergence of large-scale manufacturing and finance capital also increased the amount of dividends and interest that were being paid out.

Although, in theory, collection at the source could be highly efficient and even popular with taxpayers, the increasing complexity of tax laws led the Treasury Department to move from a system of “withholding at the source” to a method of collecting “information at the source.” The potential intricacies of the law became especially acute when the World War I tax regime imposed steeply progressive surtax rates. Lawmakers reasoned that a corporation could be a fairly reliable withholding agent when there was a flat normal rate that applied to all salaries and dividends, but that there was much greater uncertainty about the proper rate of taxation when there might be other sources of income besides salaries and dividends. Because of this reasoning and because collection at the source, which applied only to normal (as opposed to surtax) rates, was capturing only a small percentage of total tax revenue, Congress altered the withholding system during the war by replacing “collection at the source” with “information at the source” for nearly all taxpayers. Thereafter, corporations and other intermediaries provided detailed information about dividends, salaries, and other similarly situated fixed payments, but no longer collected the tax on these payments.

The advent of social security in the late 1930s reintroduced Americans to a type of withholding, though it was limited to earmarked payroll taxes. This experience with automatic payroll deductions would prove to be critical for policymakers and taxpayers alike, as the process of income-tax withholding developed over time. The more general procedure of withholding income taxes at the source did not return until the mid-1940s, when the turn to a mass tax compelled the government to reach out to a much greater swath of Americans. Although some libertarian scholars have bemoaned how the

139. Annual Report of the Secretary of the Treasury on the State of the Finances for the Fiscal Year Ended June 30, 1918 (1919), at 942–44.
142. Brownlee, supra note 20, at 94–95.
advent of withholding has insidiously facilitated the growth of big government, the development of withholding at the source may be one of the greatest legacies of the early income-tax laws. Modern lawmakers, for example, have celebrated withholding as “the cornerstone of the administration of our individual income tax.” And tax-law scholars and public-finance economists have come to agree that the process of third-party remittance is an essential feature of modern income-tax compliance. It is no mere coincidence that the earliest forms of withholding began during the early twentieth century, for it was then that lawmakers could more easily turn to the burgeoning industrial corporations for assistance in remitting personal-income-tax revenue.

C. Corporate Accounting and the Modern Income Tax

In many ways, the development of tax withholding and information reporting would not have been possible without an even more fundamental change ushered in by the arrival of managerial corporate capitalism: the consolidation of innovate accounting methods. Modern business corporations, like modern tax collection, thrived on accurate information. To do their jobs, corporate executives needed and craved precise and systematic quantitative information about the everyday operations of their enterprises. In earlier periods, small-scale merchants could likely get by with ad hoc accounts of separate parts of their business transactions. During the rise of industrialism, however, high capital costs, the compelling demands of scientific management, and a new class of investors drove managers of modern industrial corporations to develop more-sophisticated forms of financial, capital, and cost accounting.


147. On the importance of accurate information to the growth of large industrial corporations, see generally MARGARET LEVENSTEIN, ACCOUNTANCY COMES OF AGE (1990).

As with so many other areas of management innovation, the mid-nineteenth-century railroads led the way in centralizing and standardizing financial information and accounts.\(^{149}\) Other industrial concerns, such as steel companies, soon followed suit, and by the early twentieth century, leading manufacturers like Du Pont pioneered some of the most precise and consolidated types of accounting practices.\(^{150}\) Although business managers initially created new accounting methods to exploit the scale economies of mass production and distribution, these innovations facilitated—inadvertently perhaps—the development of the modern income tax by giving government organizations ample opportunities to assess and collect corporate profits and personal incomes.

Among the many management innovations initiated by Du Pont, the consolidation of cost, capital, and financial accounting proved highly beneficial to tax collection. In combining these areas of recordkeeping, Du Pont focused carefully on overhead costs, which included indirect costs such as salaries, and direct material costs like tax liability. These figures, unsurprisingly, were a boon to tax collection. Similarly, the new focus on capital accounting—that is on the rate of return on invested capital—allowed Du Pont officials to evaluate and plan their use of fixed and working capital. Though this information was provided mainly for the use of the company’s executive committee, over time it would also become a useful resource for assessing tax liability.\(^{151}\)

There were, to be sure, precedents for the federal exploitation of corporate accounting. Throughout the nineteenth century, industrial enterprises—like railroads—were, for example, liable for state and local property taxes and, on occasion, even for state taxes on gross receipts.\(^{152}\) Thus, company auditors and financial experts needed to account for an enterprise’s regular state and local tax liabilities. Public utilities also came under the regulatory powers of subnational governments, and, as part of their rate-monitoring functions, street railways and sewer and gas companies were required to share financial information regularly with state and local regulators.\(^{153}\) Though many regulated and taxed businesses often exercised their political power to evade regulatory rules, and to avoid or delay their state and local tax payments, these companies could not claim that they did not have an accurate account of their regular financial performance. In fact, railroads employed small armies of accountants and auditors, probably more than the federal or any state government.\(^{154}\) Over time, government officials at all levels began using the financial information intended for managers, directors, and investors to facilitate the process of tax collection.

149. CHANDLER, supra note 12, at 109.
150. Id. at 445.
151. Id. at 445–47.
152. HIGGENS-EVENSON, supra note 99, at 14, 80.
153. Id.
154. CHANDLER, supra note 12, at 110.
At the federal level, the advanced accounting for salaries and dividends was particularly useful for the development of the individual income tax. Modern business corporations employed hundreds of thousands of professional, salaried managers. Monitoring the payment of salaries to these employees was an important part of calculating the expenses of the growing industrial enterprises. The salary information not only helped companies keep track of labor costs, it also provided government tax authorities with a platform from which to tax these salaries as part of the early personal-income tax. Similarly, as the separation of ownership and control of large corporations became more pronounced, and as financial intermediaries began to play a more prominent role in underwriting business expansion, accurate measures of return on investment and dividend yields became increasingly significant. Here too, government tax authorities found new tax handles to tap dividends and capital gains as personal income from property.

The rise of a fledgling accounting profession during this time period also supported the links between systematic recordkeeping and tax collection. The early income-tax laws, to be sure, increased the demand for accounting services, which required professional accountants to patrol the borders between trained experts and unqualified amateurs. Yet, the true significance of the accounting profession for tax collection in the early years of the income tax came from the profession’s identity that it was operating as independent, objective, and fair arbitrators between taxpayers and the government. Edwin L. Suffern, the 1912 president of the American Association of Public Accountants, reminded his colleagues that professional accountants had a responsibility in providing the accurate financial information that could benefit all interested parties, including the state.

Over time, as the tax burden on businesses and individuals increased, the growing demand for accountants and lawyers and the increasing competition to provide tax services eroded this ethos of objective independence. Consequently, tax accountants increasingly became advocates for their clients rather than neutral arbitrators.

Corporate managers—and their auditors and lawyers—may not have intended their rational and routinized accounting methods to be used by tax authorities, but once the institutional foundations were firmly in place, a virtuous feedback cycle seemed to emerge whereby new tax laws would reinforce accurate business accounting. This type of symbiosis was apparent at the subnational level during the turn of the century, though in the other direction. Government research bureaus, like the New York Bureau of Municipal Research, were not only relying on corporate data, but also adopting “business methods” such as executive budgets and centralized accounting.

156. Id. at 254–55.
the early decades of the twentieth century, the feedback mechanism was also working in the opposite direction, for the activist tax state was shaping the accounting practices of corporations. One way this was occurring was through the stiff reporting requirements that accompanied the early income-tax laws. The 1909 corporate tax, for instance, required all business corporations to file detailed returns listing not only gross income but all permissible deductions, including operating expenses, interest on debt, other taxes paid, and losses not covered by insurance. Returns were due on March 1st, and fines were imposed for late filing, for fraudulent returns, and for not filing at all. And, perhaps most important, returns were initially deemed to be public records and thus open to inspection.\footnote{158} Although business interests complained vehemently about the reporting requirements, especially the potential for full disclosure,\footnote{159} the hierarchically managed modern business corporation seemed to be well suited to take on the new tax reporting requirements. One of the great achievements of managerialism, after all, was its ability to calculate precisely the costs and profits from mass production and distribution.

The U.S. Treasury Department was highly cognizant of how tax laws could foster greater systematic tax information. During the Great War, federal tax officials claimed that the income-tax laws, and especially the newly complex war and excess-profits taxes, were forcing businesses to reform their accounting practices. “Businessmen were deriving one inestimable benefit from the new tax law,” Daniel C. Roper, the wartime Commissioner of Internal Revenue, later recounted. “Complicated and technical as were the minutiae, they were learning how to keep accurate records of profit and loss.”\footnote{160} Roper was surely exaggerating the power and influence of the World War I tax regime, but he accurately identified how the modern income tax was perpetuating its own existence by helping reinforce its institutional foundations.

VI
CONCLUSION

It has been roughly a century since the 1909 corporate tax and the Sixteenth Amendment together helped pave the way for the elaboration of the modern income tax. Yet, even before the corporate levy was enacted or the constitutional amendment was ratified, more-fundamental economic and material changes were already laying the critical groundwork for the subsequent development of direct and progressive taxes. Well before the first permanent national income tax was adopted in 1913, a unique array of technological innovations and resource-based circumstances were fueling American economic growth and helping propel the United States into a world

\footnote{158. Corporation Tax Act, Pub. L. No. 61-5, § 38, 36 Stat. 11, 112–13 (1909). On the rise and fall of the disclosure requirements linked to the 1909 corporate tax, see Kornhauser, supra note 6, at 69.}
\footnote{159. Kornhauser, supra note 6, at 115–16.}
\footnote{160. DANIEL C. ROPER, FIFTY YEARS OF PUBLIC LIFE 181 (1969).}
industrial power. The income tax benefited enormously from these economic transformations. As an increasing amount of economic output and income moved through the formal channels of a regulated national market, government authorities seized new opportunities to assess and collect income taxes.

There was perhaps no greater facilitator of the expansion of markets and the adoption of income taxes than the modern, large-scale industrial corporation. These highly integrated business enterprises helped create the corporate and individual wealth that would soon become a central source of income-tax revenues. The big businesses themselves became significant sources of corporate income, just as salaried, professional managers and dividend-receiving stockholders became important sources of personal-income-tax revenue. As these modern business enterprises became more integrated and concentrated, they also provided vital administrative assistance to the collection of income taxes. The concentration of capital and labor in these new organizational units provided government authorities with convenient “tax handles” to identify and gather both corporate and individual income taxes. Likewise, the systematic record-keeping and accounting that helped to foster the rise of managerial corporate capitalism also provided government agencies with crucial tax information. The U.S. Treasury exploited this access to information with its own innovations, including early, crude types of withholding, which lowered the costs of tax collection. New and more-complex tax laws, in turn, reinforced the rational bookkeeping that was at the heart of industrial capitalism and that helped facilitate income-tax compliance.

The establishment of modern tax institutions that accompanied economic growth and the emergence of the modern business corporation did not occur easily or quickly; these institutions were part of a broader, contested process of change, frequently accelerated by national emergencies such as the two world wars. In some cases, the evolution was episodic. The institution of tax withholding, for example, had limited initial success, and was even replaced during the pivotal World War I era when business interests convinced U.S. Treasury officials that steeply progressive rates were incompatible with income-tax collection at the source. Tax withholding returned, however, during the Second World War, and, by the end of the twentieth century, it became one of the most important aspects of effective tax compliance. In other cases, institutional achievements were more fleeting. Corporate taxes as a source of total tax revenue grew during the first half of the century, peaking in 1943, but since then they have diminished rapidly. In still other situations, the development of tax institutions has been more promising. Corporations as remittance devices—not only in withholding employee salaries but also for information about dividends and other sources of individual income—have remained critical to the effective functioning of a quasi-voluntary system of tax compliance. Although social crisis and political will have been vital to the development of these important tax institutions, many of them may not have been possible without the antecedent material conditions provided by
American economic growth and the advent of modern managerial corporate capitalism.