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INEQUALITY, COLLECTIVE ACTION, AND TAXING AND SPENDING PATTERNS OF STATE AND LOCAL GOVERNMENTS

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Inequality, Collective Action, and Taxing and Spending Patterns of State and Local Governments

ERIC M. ZOLT*

I. INTRODUCTION

Observers of colonial America noted the remarkable diversity in the new world.[1] One important way in which regions differed was the relative inequality that existed among and within the colonies before independence[2] and among and within the states after independence.[3] In this Article, I examine how state and local differences in inequality may have contributed to different choices as to the type and scope of collective action by state and local governments.

Scholars have examined how inequality influenced the development of such fundamental institutions as voting rights, education, and land ownership.[4] These scholars have focused primarily on economic inequality (either income inequality or wealth inequality) to explore how high initial inequality may have contributed to the evolution of poli-

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[1] See generally J. H. Elliott, Empires of the Atlantic World: Britain and Spain in America 1492–1830 (2006); John J. McCusker & Russell R. Menard, The Economy of British America, 1607–1789 (1991).

[2] See McCusker & Menard, note 1, at 270–76; David W. Galenson, The Settlement and Growth of the Colonies: Population, Labor, and Economic Development, in 1 The Cambridge Economic History of the United States 135, 202–07 (Stanley L. Engerman & Robert E. Gallman eds., 1996); Alice Hanson Jones, Wealth Estimates for the New England Colonies About 1770, 32 J. Econ. Hist. 98 (1972).

[3] This Article follows the lead of Rodney Ramcharan in his working paper, Inequality and Redistribution: Evidence from U.S. Counties and States, 1890–1930, 92 Rev. Econ. & Stat. (forthcoming 2010), and contains no quotations from Alexis de Tocqueville's Democracy in America; see also Lee Soltow, Men and Wealth in the United States, 1850–1870 (1975); Jeffrey G. Williamson & Peter H. Lindert, American Inequality: A Macroeconomic History (1980); Peter H. Lindert, Three Centuries of Inequality in Britain and America, in 1 Handbook of Income Distribution 167 (Anthony B. Atkinson & François Bourguignon eds., 2000).

[4] See, e.g., Daron Acemoglu & James A. Robinson, Why Did the West Extend the Franchise? Democracy, Inequality, and Growth in Historical Perspective, 115 Q.J. Econ. 1167 (2000); Stanley L. Engerman & Kenneth L. Sokoloff, Factor Endowments, Inequality, and Paths of Development Among New World Economies, 3 Economia 41 (2002); Douglass C. North, Institutions, Economic Growth and Freedom: An Historical Introduction, in Freedom, Democracy, and Economic Welfare: Proceeding of an International Symposium (Michael Walker ed., 1988).

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cies affecting suffrage, schooling, and land. The key insight is that inequality may not be just an outcome of government policies but a contributing factor in the design and implementation of such policies. In a recent article, economic historian Kenneth Sokoloff and I examined how differences in initial inequality may have contributed to different taxing patterns between North America and Latin America.[5] Here, I focus on state and local governments in the United States to see how inequality may have influenced the choices made by these governments as to the level of tax burden and the relative use of different tax instruments, as well as the level and type of public spending programs.

So, what would one expect a priori about the relationship between economic inequality and tax and spending patterns of government? On one hand, those societies with greater inequality will likely have greater needs and greater potential benefits for the government to devote resources for social programs, redistribution, and other purposes.[6] On the other hand, more equal societies will likely find it both easier to agree on the type and costs of goods and services to acquire collectively (including a preference for more or less redistribution) and to have a better matching between the costs and benefits to individuals from collective action.

This Article has four objectives. First, it highlights the variations in taxing and spending patterns of state and local governments that began early in our country's history. Second, it explores whether economic inequality is a useful factor in explaining these variations in taxing and spending patterns. While other economic scholars have focused on the relationship of inequality and redistributive government policies,[7] my focus is more on local control and fiscal autonomy in choosing to acquire goods collectively, rather than through individual action. Third, this Article uses the relative level of local property taxes as a metric to compare choices made by residents of local communities on the public provision of public and private goods. Finally, the Article attempts to identify several tax and nontax factors that

[5] Kenneth L. Sokoloff & Eric M. Zolt, Inequality and Taxation: Evidence from the Americas on How Inequality May Influence Tax Institutions, 59 Tax L. Rev. 167 (2006) [hereinafter Inequality and Taxation]. A version of this article for economists is Kenneth L. Sokoloff & Eric M. Zolt, Inequality and the Evolution of Institutions of Taxation in the Americas, in Growth, Institutions and Crises, Latin America from a Historic Perspective 83 (Sebastian Edwards, Gerardo Esquivel & Graciela Marquez eds., 2007).

[6] See generally Peter H. Lindert, Growing Public: Social Spending and Economic Growth Since the Eighteenth Century (2004); Alberto Alesina & Dani Rodrik, Distributive Politics and Economic Growth, 109 Q.J. Econ. 465 (1994).

[7] See, e.g., Roland Bénabou, Unequal Societies: Income Distribution and the Social Contract, 90 Am. Econ. Rev. 96 (2000).

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may influence the relationship among inequality, collective action, and taxing and spending patterns over time.

At least before the Great Depression, the evidence suggests that those areas with greater economic equality, measured by the distribution of either income or wealth, had larger state and local governments that provided a higher level of government services, particularly expenditures for education, insane asylums,[8] transportation, water/sewer projects, and other types of public investments that benefited a broad spectrum of the population. These expenditures were not explicitly redistributive in that government-provided cash transfers or other forms of relief for the poor were remarkably small before the 1930's.[9] But they did result in many state and local governments providing services to a substantial portion of the population in excess of the amounts they paid in taxes. It is also likely that areas with greater equality were more willing to impose taxes on income and wealth, taxes that were likely more progressive, than those areas marked by greater inequality.

Beginning in colonial times and at least until the 1970's, local governments had substantial autonomy in choosing how much to tax their residents (mostly through property taxes) and how to spend their money. Given the economic and political heterogeneity in the United States, it is not surprising that different regions chose different levels of goods and services and different ways to pay for them. Local governments would be expected to promote the interests of those within their jurisdictions.[10] The different demands of the local residents would result in different levels of "local collective goods."

Although economic inequality may have been a major factor in explaining variations in taxing and spending patterns of state and local governments, it is, however, not easy to determine causation. Did inequality cause these patterns, or did these patterns cause inequality, or was there a more complex relationship whereby other factors played larger roles in influencing taxing and spending patterns? It is difficult to separate out how the taxing and spending patterns of state and lo-

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[8] Insane asylums had a much broader role in the 19th century, providing care not only for the mentally ill, but also for a group of individuals who, for a variety of reasons, were unable to live independently. During the 19th century, expenditures for insane asylums were often the second largest state expenditure (after expenditures on education) and often the largest expenditures from the states' general funds. R. Rudy Higgens-Evenson, The Price of Progress: Public Services, Taxation, and the American Corporate State, 1877 to 1929, at 25, 32 (2003).

[9] See Lindert, note 6, at 39–65, for a comparison of poor relief programs in Europe and the United States before the 1930's. Nor were these expenditures for "pure" public goods, that is goods that are nonrivial and nonexcludable in consumption.

[10] Wallace E. Oates, Towards A Second–Generation Theory of Fiscal Federalism, 12 Int'l Tax & Pub. Fin. 349, 351 (2005).

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cal governments influenced, or were influenced by, relative levels of per capita income or the relative degree of urbanization in a region. It is also not possible to ignore race issues in examining taxing and spending policies of state and local governments.[11] Nevertheless, particularly before the 1930's, it is striking how areas with greater equality were generally more willing to "tax and spend" in a manner that likely provided greater benefits and opportunities, as well as greater costs, for residents of the region.

Since revolutionary times, there have been many changes in the allocation of taxing and spending authority among local, state, and the federal governments.[12] For example, at the beginning of the 20th century, local governments had the largest share of total revenues (about 51% of revenues of all levels of government), but now have the smallest share (although intergovernmental transfers result in a share of expenditures being roughly equal to state expenditures).[13] In contrast, the federal share of all government revenues was approximately one-third at the beginning of the 20th century (about 3% of GDP of a total of 10% of GDP for all levels of government) increasing to about two-thirds by the end of the century (about 20% of GDP of a total of about 30% of GDP for all levels of government).[14] In addition, the way governments raise money strongly influences the relative roles of the different levels of local, state, and federal governments.[15] With the shift away from taxing and spending at lower levels of governments, the relative homogeneity of groups within larger geographic areas has declined and the linkages between those who pay taxes and those who receive benefits of government services have weakened.

In many ways this Article is about the rise and relative decline of local property taxes. These property taxes generally resulted from local action to fund local programs. Where data is available, I include estimates of the relationship of economic inequality and relative level of property taxes and relative size of local governments. I first examine the relationship of economic inequality and the relative level of per capita property tax, as well as the property tax as a percentage of total state and local tax revenues. I then examine the relationship of economic inequality and the relative tax receipts of local, state, and federal governments. Finally, for years after 1970, I examine the rela-

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[11] See generally Robin L. Einhorn, American Taxation, American Slavery (2006).

[12] See generally John Joseph Wallis, American Government Finance in the Long Run: 1790 to 1990, J. Econ. Persp., Winter 2000, at 61.

[13] Id. at 65 tbl.1

[14] Richard Sylla, John J. Wallis & John B. Legler, Historical Economics: U.S. State and Local Government, NBER Rep., Spring 1995, at 14.

[15] Control over public expenditures generally follows the power to tax. Sokoloff & Zolt, Inequality and Taxation, note 5, at 168; see also Wallis, note 12, at 80.

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tionship of inequality and the total property tax revenues as a percentage of property tax capacity, using information compiled by the Advisory Commission for Intergovernmental Relations and other scholars.[16]

I proceed as follows. Part II begins with a brief review of selected economic and political aspects of collective action. It then examines the taxing and spending polices of local and state governments until the beginning of the Civil War. Part III examines the policies of state and local governments from the 1860's through World War II. Part IV reviews the time period from World War II until the end of the 20th century. Part V presents some conclusions and observations.

II. Colonial Period to the Civil War

Before examining taxing and spending programs in colonial America, it may be useful to examine briefly the economic and political aspects of collective action. A relatively large literature has evolved examining the collective action problem, which predicts that cooperation among individuals will be rare, because defecting on cooperative agreements is often individually rational, even if it is socially suboptimal.[17]

My primary focus is on the actions of residents of local communities choosing to tax themselves to acquire collectively goods and services. Beginning in colonial times, residents at the village, town, district, or county levels had fiscal authority to collect taxes and provide common services. For example, the number of fiscally independent local school districts in the United States exceeded 127,000 in 1932, and the number of districts was likely higher in the 19th century.[18]

There are (at least) three related, but different, approaches to examining how residents of local communities make choices as to the taxing and spending patterns of government. First, a rich literature exists on predicting voter preferences for tax and spending regimes in democratic societies based on relative income distributions. One model focuses on the median voter and predicts that where the median voter has less income than the mean, the median voter will favor income tax regimes under which her share of taxes will be less than

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16 See text accompanying notes 203–10.

17 See generally Mancur Olson, The Logic of Collective Action: Public Goods and the Theory of Groups (1971).

18 Claudia Goldin & Lawrence F. Katz, The "Virtues" of the Past: Education in the First Hundred Years of the New Republic 4 (NBER, Working Paper No. 9958, 2003), available at www.economics.harvard.edu/faculty/katz/files/virtue_nber.pdf (reporting that the U.S. Office of Education did not collect information on the number of school districts until 1932, and contending that the number of school districts was likely higher in 1900).

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her share of government benefits supported by the tax revenues.[19] Several reasons exist why median voter predictions may not be that useful in the context of state and local governments.[20] Also, in highly-skewed societies, if the poor are less likely to vote (for political or other reasons), the median voter is often someone in the top portion of the income ranks.[21]

A different model of voter preferences may apply where individuals can choose between publicly and privately provided goods and services. Where private alternatives for publicly provided goods exist, low-income and high-income voters may join forces against middle-income voters in preferring lower expenditures for public expenditures and lower taxes.[22] This "ends against the middle" result could occur where the rich prefer privately provided services (such as private schools and hospitals) and the poor have a preference for lower expenditures (and lower taxes) for such services than the middle class voters who place greater value on the services and who are willing to pay higher taxes to obtain them.

Second, economists and political scientists have examined the relationship of the ethnic composition of the population and the size of the government sector. For example, several studies have examined the relationship between the homogeneity of the population and the level of government spending. These studies range from empirical work examining the relationship between the diversity of the population to the level of government services[23] to attempts at explaining why the United States differs from other developed countries in lacking a substantial social welfare system.[24]

Stanley Winer, George Tridimas, and Walter Hettich have examined collective action from the perspective of participants taking both the good and the bad of collective decisions.[25] Thus, to accept

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[19] See, e.g., Alan H. Meltzer & Scott F. Richard, A Rational Theory of the Size of Government, 89 J. Pol. Econ. 914 (1981).

[20] For example, it is not obvious how the median voter theory would work when income taxes are replaced by property taxes and where the benefits may not be redistributive in nature.

[21] Lindert, note 3, at 210. The model will be less useful where voters do not act in their rational self-interest. See generally Bryan Caplan, The Myth of the Rational Voter: Why Democracies Choose Bad Policies (2007).

[22] Dennis Epple & Richard E. Romano, Ends Against the Middle: Determining Public Service Provision Where There Are Private Alternatives, 62 J. Pub. Econ. 297 (1996).

[23] Alberto Alesina, Reza Baqir & William Easterly, Public Goods and Ethnic Divisions, 114 Q.J. Econ. 1243 (1999).

[24] Alberto Alesina, Edward Glaeser & Bruce Sacerdote, Why Doesn't the United States Have a European-Style Welfare State, Brookings Papers on Economic Activity, No. 2, 2001, at 187.

[25] Stanley L. Winer, George Tridimas & Walter Hettich, Social Welfare and Collective Goods Coercion in Public Economics (Carleton Univ. Econ. Paper, 2007), available at http://papers.ssrn.com/sol3/papers.cfm? abstract_id=970979.

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the gains from collective action, one must accept as part of the bundle of government activity certain goods and services that, if offered à la carte, would not be chosen by an individual. According to Winer, Tridimas, and Hettich, there is an optimal level of social coercion in a society that would increase overall welfare.[26]

Important in this concept are various ways to minimize coercion. First, one can minimize the amount of coercion by reducing the size of government. Although this reduces the benefits of collective action, a smaller government also will reduce the potential for members being forced to pay for and receive a higher level of unwanted goods and services. A second alternative is to move the decisions as to collective action to lower levels of government where the matching of preferences as to tax and expenditures may be more likely than for larger regions. A third alternative would be to remove certain goods and services from collective action. Thus, for example, if disagreement exists as to the quality and quantity of public swimming pools and golf courses, then the level of social coercion could be reduced by having only the private sector provide these amenities. A final alternative, followed in many communities in the United States, would be for separate government units to provide a single type of government service, such as primary and secondary education. This approach allows residents to determine the level of expenditures for education independent of decisions as to other government services.

Finally, scholars have focused on the concepts of social capital or social cohesion in comparing the role of governments in different societies. Robert Putnam in two influential books, Making Democracy Work[27] and, a cross-over hit, Bowling Alone,[28] examines the idea of social capital in trying to explain how different countries, or even different regions in the same countries, have different levels of social cooperation and different quantities and qualities of public goods and services. Putnam defines social capital as social networks and norms of reciprocity and trustworthiness that are embedded within them.[29] In Making Democracy Work, Putnam, Leonardi, and Nanetti use the differences in social capital between northern and southern Italy to explain the quality of performance by governments in the two regions.[30] Putnam applies a similar approach in Bowling Alone in comparing the correlation between social capital and several measures of

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[26] Id.

[27] Robert D. Putnam, Robert Leonardi & Raffaella Y. Nanetti, Making Democracy Work: Civic Tradition in Modern Italy (1993).

[28] Robert D. Putnam, Bowling Alone: The Collapse and Revival of American Community (2000).

[29] Id. at 19–24.

[30] Putnam et al., note 27.

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political, economic, and social well-being across the United States and highlighting how a decline in the level of social capital over the last some thirty years has resulted in substantial political and economic costs.[31]

Carles Boix and Daniel Posner provide a crucial theoretical link between inequality and social capital.[32] They note that the degree of social and political inequality among potential cooperating partners will affect social cooperation, and may explain variations in levels of social capital across regions or countries. Boix and Posner contend that cooperation among unequals is problematic because the poor, who will be dissatisfied with the existing distribution of assets, will have an incentive to defect from cooperative arrangements that perpetuate the status quo. Similarly, the rich, seeking to maintain their political and economic privileges, will attempt to undermine any collective action that improves the lot of the poor (unless there is also a substantial benefit for the rich).[33] They then reinterpret Making Democracy Work,[34] finding that the difference in levels of social capital between northern and southern Italy is attributable to the absence of the social institution of feudalism in the north, which led to a more equal distribution of property and wealth that made cooperation easier to sustain as compared to the distribution of assets in the south.[35]

William Easterly, Josef Ritzan, and Michael Woolcock have a different take on social capital, focusing on what they call "social cohesion."[36] One way of determining the level of social cohesion in a society is to focus on potential lines of division—whether based on religion, race, income levels, or language—and the ability of a society to address differences among the various groups. Thus, those societies that are more homogeneous will have a higher level of social cohesion and a greater willingness to make investments with longer-term returns. Similarly, those societies that have developed successful mechanisms for addressing the potential conflicts among different groups will have greater success in reaching consensus on the level of goods and services provided by governments and the taxes necessary to fund them.[37]

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[31] Putnam, note 28.

[32] Carles Boix & Daniel N. Posner, Social Capital: Explaining its Origin and Effects on Government Performance, 28 Brit. J. Pol. Sci. 686 (1998).

[33] Id. at 688.

[34] Putnam et al., note 27.

[35] Id. at 688–89.

[36] William Easterly, Jozef Ritzan & Michael Woolcock, Social Cohesion, Institutions, and Growth (Ctr. for Global Dev. Working Paper No. 94, 2006), available at http://ssrn.com/abstract=983117.

[37] Id.

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A. Relative Size of State and Local Governments

The Spanish and British colonies in the new world differed greatly in the government structure and the approach to financing the costs of the colonies. The Spanish were much more successful in extracting wealth from their colonies, mostly in the form of taxes on mineral extraction as well as taxes on the native population.[38] To collect and administer the taxes, a highly centralized government was established throughout the colonial empire, with offices sold to Spanish settlers.[39]

In contrast, the British governors of the colonies in North America lacked effective taxing power to support operations.[40] They were required either to seek financial support from the homeland or to try to raise local taxes to fund government services. Adam Smith famously noted in The Wealth of Nations that the American colonies were not worth the cost of keeping.[41]

Unlike the Spanish rulers, the British gave the American colonies considerable discretion in managing local operations. Wealthy individuals, joint stock companies, and religious groups organizing ventures in the British colonies required a charter or grant from the monarch.[42] These charters or grants provided both economic rights and extensive political and judicial authority. The communities that evolved from these ventures were able to provide collective goods and services as long as they were able to raise the revenue to fund these projects. As early as the 1620's through the 1660's, many local governments in the colonies were imposing property and faculty taxes to provide for common goods and services.[43]

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[38] Peter Bakewell, A History of Latin America: c. 1450 to the Present 182–89, 231–35 (R.I. Moore ed., 2d ed. 2004).

[39] Id. at 132–36, 227–30.

[40] Elliott, note 1, at 139.

[41] Einhorn, note 11, at 17. Smith saw benefits to both Britain and the American colonies from separation and noted that a free trade agreement between England and the American colonies would likely yield substantial economic and political benefits to England and relieve the British of the defense costs of the colonies. See Adam Smith, An Inquiry into the Nature and Causes of the Wealth of Nations 619 (Harriman House 2007) (1776).

[42] Sidney Ratner, James H. Soltow & Richard Sylla, The Evolution of the American Economy: Growth, Welfare, and Decision Making 28 (2d ed. Macmillan Pub. Co. 1993)(1979). Tax incentives often played a major role in encouraging new settlements. Alvin Rabushka, Taxation in Colonial America app. at 64 (2008).

[43] Economist Alvin Rabushka provides an exhaustive and comprehensive review of both the British taxes on the colonies and the local taxes imposed by colonial governments. Rabushka provides examples of poll taxes in Virginia in the 1620's and faculty and trade taxes in New England in the 1630's. Rabushka, note 42, at 169–73, 243. Ratner notes that the New Plymouth colony adopted a tax on estates and faculties in 1643, and the Massachusetts Bay colony adopted a tax law in 1646 that covered personal and real estate and returns and gains to tradesmen, artificers, and handicraftsmen. See Sidney Ratner, Taxation and Democracy in America 52 (1967)

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The overall levels of taxation in the colonies were quite low, much less than the per capita tax burdens in England.[44] The defense costs of the American colonies were largely borne by English taxpayers, and the costs of the provincial governments were relatively small. Edwin Perkins estimates that in the late colonial period per capita provincial taxes ranged from two to four shillings (an average of three shillings or $13.50) and represented no more than 1.5% of estimated per capita earnings, as compared to twelve to eighteen shillings ($54 to $81) in England, or about 4% to 7% per capita income.[45]

The choice of taxes largely reflected the economies in the respective colonies.[46] The Southern colonies were more successful in producing goods for export. Maryland and Virginia exported substantial amounts of tobacco to Great Britain.[47] In the 18th century, agricultural production diversified with the growth of exports in grain and grain products to southern Europe and the West Indies.[48] The lower South, consisting of the coastal regions of Georgia, North Carolina, and South Carolina, exported rice and indigo (primarily to Great Britain, but also to southern Europe and the West Indies).[49] The major taxes in these regions were export taxes imposed on these commodities.

In contrast, with the exception of fish, livestock, and wood products, the New England colonies were less successful in producing goods for export.[50] Relatively few of the exported goods went to England; most of the goods were sold to southern Europe and the West Indies.[51] Given the lack of a dominant export good, the major sources of taxation in these colonies were land taxes and faculty taxes.

The colonies differed not only in the choice of tax instruments, but in the design and administration of particular tax instruments.[52] Property taxes were common, but they took different forms. For example, during the period 1763 through 1775, Edwin Perkins reports that Massachusetts, Rhode Island, Connecticut, Pennsylvania, and New Jersey

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44 Edwin J. Perkins, The Economy of Colonial America 187 (2d ed. 1988); Rabushka, note 42, at 195.

45 Perkins, note 44, at 190.

46 McClusker and Menard note that colonial America was not a single economy, but rather several distinct regional economies more closely tied to Great Britain than to each other. McCusker & Menard, note 1, at 12.

47 Ratner et al., note 42, at 45–48.

48 Id. at 43–44; McCusker & Menard, note 1, at 128–31.

49 McCusker & Menard, note 1, at 174 tbl.8.2.

50 Id. at 107–11.

51 Id. at 108.

52 In 1796, Secretary of the Treasury Oliver Wolcott, Jr. prepared a report on the different state tax systems as background for proposed changes in the federal tax system. While some common patterns existed, he concluded that the tax systems shared little in common. See Einhorn, note 11, at 79.

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taxed land based on assessed values while Virginia, Maryland, South Carolina, and Georgia taxed land on a per acre basis.[53]

Poll taxes likewise came in different flavors. Most states imposed taxes on all males over sixteen years of age. In some colonies, such as Maryland, Virginia, and North Carolina, the poll tax was a flat assessment. To improve the progressivity of the poll tax, Connecticut and Rhode Island tied the poll tax to the value of other taxable property. Colonies in the upper South imposed additional head taxes on slaves and servants, and slaveholders had to pay tax on all slaves over twelve years of age. In contrast, Georgia and South Carolina imposed poll taxes only on free blacks.[54]

In part because of the differences in the economies, the capacity for tax administration differed greatly among the colonies. Greater capability for valuation and assessment of property taxes existed in the New England colonies than in the Southern colonies. It was more common to have elected local tax officials in the North and appointed local tax officials in the South.[55]

The colonies, and the local areas in the colonies, differed in the extent to which they imposed local taxes to fund local operations. The New England colonies were likely the largest providers of collective local services, the Southern colonies were the smallest, and the Middle Atlantic colonies were somewhere in between. Similarly, the New England colonies appeared to have the most progressive tax regimes, followed by the Middle Atlantic colonies.[56] The Southern colonies, with the exception of South Carolina, appeared to have the least progressive tax regimes.[57]

As is the case throughout U.S. fiscal history, raising the financing to fund military operations brought major changes in the level and type of taxes imposed.[58] Given the prewar rhetoric, it is ironic that the Revolutionary War dramatically increased tax burdens. Representation came at a substantial tax cost. From 1792 to 1811, U.S. per capita

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[53] Perkins, note 44, at 191 tbl. 8.1.; see Glenn W. Fisher, The Worst Tax? A History of the Property Tax in America 12–18 (1996); Rabushka, note 42, at 867–69.

[54] Perkins, note 44, at 191 tbl.8.1, 192.

[55] Id. at 27. Einhorn emphasizes the role that the development of democratic institutions had in formation of the tax systems and the existence of competent, experienced, and annually elected tax officials in the Northern colonies as compared to the Southern colonies where tax officials were appointed. Einhorn, note 11, at 81–83.

[56] See Perkins, note 44, at 192.

[57] South Carolina is an interesting exception to the general patterns of taxation in the South. The elites distributed the tax burden among themselves, choosing to fund common expenditures that benefited the elites. See Einhorn, note 11, at 99.

[58] Steven A. Bank, Kirk J. Stark & Joseph J. Thorndike, War and Taxes (2008).

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tax rates were over ten times higher than the imperial taxes levied by the British from 1765 to 1775.[59]

Paying off the debts of the Revolutionary War also shaped the fiscal landscape. Alexander Hamilton's plan to have the federal government assume the debts of the states (and pay off at par) both relieved the state governments of substantial obligations but also created the need for the federal government to have a source of revenue to fund these obligations. One of the first acts of the new Congress was to provide for tariffs—and to give exclusive control of taxing trade to the federal government.[60] This did two things. First, it provided a substantial source of revenue that would be the major source of federal funds into the 20th century. Second, it deprived the Southern states of a substantial portion of their tax base.[61]

Congress adopted a federal property tax in 1798 to provide funds for acquiring warships for the federal navy. Following constitutional requirements,[62] this direct tax was apportioned among the states on the basis of population.[63]

The War of 1812 similarly resulted in the need to raise substantial revenues. To fund war expenditures, Congress imposed a series of direct tax assessments on the states, according to population, to be funded by state property taxes allocated to counties based on the distribution of taxable property.[64] This was in addition to a host of excise taxes imposed on alcohol, tobacco, and several other luxury items.[65] A proposal to adopt a federal income tax was rejected.[66]

The colonial distrust of central governments was reflected in the relative split of services provided by local, state, and federal governments. Throughout the period before the Civil War, the federal government's role was limited to military activities, debt service, administration (including the post office and the federal judiciary), and limited public works.[67]

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[59] Perkins, note 44, at 208.

[60] W. Elliot Brownlee, Federal Taxation in America: A Short History 21–22 (2d. ed. 2004). Revenues from the tariffs accounted for 90% of the total tax revenue between 1789 and 1915. Id. at 6.

[61] During the period 1780 through 1789, the Southern states used state tariffs primarily to raise revenue while the middle and New England states used tariffs for protection and retaliation. Ernest L. Bogart & Donald L. Kemmerer, Economic History of the American People 222 (1942).

[62] U.S. Const. art. 1, § 2, cl.3.

[63] Bank et al., note 58, at 8.

[64] Brownlee, note 60, at 28–29. This accounts for the spike in property taxes from Southern states meeting their obligations for financing the War of 1812.

[65] Bank et al., note 58, at 20.

[66] Id.

[67] Lance E. Davis & John Legler, The Government in the American Economy, 1815–1902: A Quantitative Study, 26 J. Econ. Hist. 514, 516 (1966).

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It is interesting to examine the relative taxing and spending patterns of the local, state, and federal governments. John Wallis contends that the United States has experienced three distinct systems of government finance from 1790 to 1990.[68] Wallis notes that each system has its own dominant source of revenue and that in each system one level of government takes a relatively greater role than the other levels in promoting economic development. In his three-part framework, state governments had the dominant role from 1790 through 1842, local governments had the dominant position from the 1840's through the Great Depression and the New Deal, and the federal government took the lead in the post-Great Depression period.[69]

Several scholars have examined the entrepreneurial activities of state governments from the 1790's to the 1840's.[70] State governments invested first in banks, and then in canals and railroads, often through the use of private and mixed public/private corporations.[71] Several states regularly funded between 35% to 60% of their expenditures from the early 1800's through the period before the Civil War by investing in banks and taxing them.[72] While Hamilton's state debt assumption program relieved debtor states of their financial obligations, creditor states received interest-bearing federal securities that also provided substantial income during this period.[73] States also received revenues from land sales and taxes on business. During this period these revenues were sufficiently large to enable many states to reduce or eliminate state property taxes.

Wallis supports his claim as to the dominance of different levels of government by examining the relative amounts of government debt issued by level of government.[74] In 1841, the states' share of government debt was over 86%, the local governments' share was 11.4%, and the federal share was 2.3%.[75] During this time frame, the states

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[68] Wallis, note 12, at 61–63.

[69] Id. at 66–73; see also John B. Legler, Richard Sylla & John J. Wallace, U.S. City Finances and the Growth of Government, 1850–1902, 48 J. Econ. Hist. 347 (1988). These scholars contend that the dominant role of local governments resulted primarily from the growth of large city governments towards the end of the 19th century.

[70] See, e.g., Richard Sylla, John B. Legler & John Wallis, Banks and State Public Finance in the New Republic: The United States, 1790–1860, 47 J. Econ. Hist. 391 (1987).

[71] Wallis, note 12, at 67.

[72] Sylla et al., note 70, at 401 tbl.1. Massachusetts, Connecticut, Rhode Island, Pennsylvania, Delaware, North Carolina, and South Carolina were particularly successful in raising revenue from taxing and investing in banks. Id.

[73] Ratner et al., note 42, at 178.

[74] Wallis, note 12, at 66 tbl.3.

[75] Wallis notes that Maryland, New York, Rhode Island, Massachusetts, Pennsylvania, South Carolina, Georgia, and Alabama were all able to eliminate state property taxes by 1835. Wallis, note 12, at 67.

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had better access to debt capital than either the federal or local governments.[76]

Table 1 presents the receipts of the different levels of government on a per capita basis and as a percentage of total government receipts.[77] Total government receipts per capita doubled between 1820 and 1855 (from $4.33 to $8.68 per capita, further increasing to $16.98 per capita by 1875).[78] The share of total receipts attributable to local government increased by 164% while state expenditures increased by 145% and the share of federal receipts rose by 33%. Looking at the relative size of the different levels of government (based on total receipts), the relative size of the federal government declined from about 45% in 1820 to about 30% in 1855, while the relative size of local governments increased from about 41% in 1820 to about 54% in 1855.

TABLE 1
Government Receipts, 1820–1855[79]

	Per Capita USD				*Percentage of total*		
	Total	*Federal*	*State*	*Local*	*Federal*	*State*	*Local*
1820	$4.33	$1.96	$0.55	$1.78	45.3	12.7	41.2
1825	4.81	2.05	0.72	2.03	42.7	15.1	42.2
1830	4.89	2.07	0.70	2.12	42.4	14.3	43.3
1835	6.04	2.40	0.91	2.74	39.7	15.1	45.4
1840	5.56	1.45	1.01	3.11	26.1	18.1	55.9
1845	6.08	1.68	1.11	3.29	27.6	18.2	54.1
1850	6.94	2.13	1.13	3.73	30.7	16.3	53.7
1855	8.68	2.62	1.35	4.70	30.2	15.6	54.2

[76] Id. By 1913, the picture had changed dramatically. In that year, the local governments owed 72% of the debt, the state governments' share was down to 6.8% and the federal government share was 21.3%. By 1952, the federal government's share was almost 88%, the local governments' share was 9.5%, and the state governments' share was 2.8%. Id.

[77] The data for Table 1 and many others from this period is from Davis & Legler, note 67, at 529–61, tbls.1, 3 & 7; Campbell Gibson & Kay Jung, Historical Census Statistics on Population Totals by Race, 1790 to 1990, and by Hispanic origin, 1970–1990, for the United States, Regions, Divisions, and States (Working Paper Series No. 56, Population Div., U.S. Census Bureau, 2002). David and Legler acknowledge that the quality of the data on local government is much weaker than the data provided for state and federal governments. Davis & Legler, note 67, at 523. For 1852–1902, the local government data is drawn from census information. For years before 1852, the amount of local receipts and expenditures is estimated using regression predictions from state tax receipt data in the state years for which local tax revenues were included in the census data. Id. at 528, 552. Throughout this Article, historical population data not available in the census was generated using linear interpolation from the years available.

[78] If the 1855 total government receipts of $8.68 were restated in 1820 real dollars, the 1855 total receipts would be $11.77. Morgan Freeman, The Inflation Calculator, available at http://www.westegg.com, last visited Sept. 23, 2009.

[79] Davis & Legler, note 67, at 529–61 tbls.2, 3 & 7; Gibson & Jung, note 77.

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During this time period, there was substantial regional variation in patterns of taxing and spending. Table 2 sets forth the regional per capita receipts by level of government. The regions differ greatly as to both the total per capita receipts and the relative size of the different levels of government.

TABLE 2
Per Capita Receipts by Level of Government, 1820–1855, USD[80]

1820	*Federal*	*State*	*Local*	*Total*
New England	3.2	0.4	2.0	5.5
Middle Atlantic	3.1	0.8	2.8	6.7
East North Central	0.7	0.4	2.8	3.9
West North Central	2.1	n/a	n/a	2.1
South Atlantic	1.0	0.5	0.9	2.4
East South Central	1.0	0.4	0.3	1.8
West South Central	3.1	1.1	5.1	9.3
1825				
New England	2.6	0.4	2.1	5.2
Middle Atlantic	4.5	1.0	3.2	8.7
East North Central	0.6	0.4	2.8	3.8
West North Central	1.1	0.2	4.1	5.4
South Atlantic	0.6	0.5	1.3	2.4
East South Central	0.4	1.2	0.2	1.8
West South Central	3.7	1.0	4.8	9.6
1830				
New England	2.3	0.5	2.6	5.3
Middle Atlantic	4.3	1.3	3.3	8.9
East North Central	1.0	0.5	2.8	4.3
West North Central	2.0	0.2	3.6	5.9
South Atlantic	0.7	0.4	0.9	2.0
East South Central	0.4	0.3	0.8	1.5
West South Central	7.3	0.2	4.4	13.9
1835				
New England	1.9	0.6	2.8	5.3
Middle Atlantic	3.6	1.7	4.3	9.6
East North Central	3.6	0.7	3.6	7.8
West North Central	2.9	0.4	7.2	10.4
South Atlantic	0.6	0.7	1.1	2.4
East South Central	2.7	0.4	0.0	3.1
West South Central	2.4	1.4	10.7	14.5
1840				
New England	2.1	0.5	3.3	5.9
Middle Atlantic	2.5	1.7	4.8	9.1
East North Central	0.6	0.9	4.0	5.5
West North Central	4.8	0.6	3.6	9.0
South Atlantic	0.7	0.9	1.4	2.9
East South Central	0.2	0.5	1.2	2.0
West South Central	3.9	0.9	5.5	11.2

[80] Davis & Legler, note 67, at 529–61.

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1845	*Federal*	*State*	*Local*	*Total*
New England	2.4	0.8	3.7	6.9
Middle Atlantic	4.1	2.1	5.1	11.2
East North Central	0.5	0.7	4.0	5.3
West North Central	0.9	0.6	5.5	7.0
South Atlantic	0.5	1.0	1.6	3.1
East South Central	0.2	0.6	0.9	1.7
West South Central	2.1	1.3	4.3	7.7
1850				
New England	3.1	0.7	5.2	9.0
Middle Atlantic	5.3	1.8	5.6	12.7
East North Central	0.5	1.0	4.4	5.9
West North Central	0.9	0.4	5.7	7.1
South Atlantic	0.6	1.1	2.1	3.8
East South Central	0.4	0.8	1.1	2.2
West South Central	2.7	1.6	2.2	6.4
1855				
New England	3.5	1.0	5.9	10.4
Middle Atlantic	5.9	1.8	7.1	14.7
East North Central	1.0	1.3	5.0	7.3
West North Central	5.2	0.5	4.6	10.4
South Atlantic	0.6	1.3	2.8	4.7
East South Central	0.3	0.9	1.5	2.7
West South Central	2.1	1.6	3.7	7.3
Mountain Pacific	3.1	4.9	9.6	17.5

It is interesting to compare the relative levels of federal, state, and local receipts in the regions. In 1820, the regions with the largest per capita total government receipts were West South Central, East North Central, Middle Atlantic, and New England, while the smallest per capita total receipts were East South Central, and South Atlantic. The relative rankings for only local receipts followed a similar pattern. By 1855, the regions with the largest per capita total government receipts were Mountain Pacific, Middle Atlantic, West North Central, and New England. Focusing only on local government receipts, the differences are quite striking. The level of local per capita receipts is much higher in the Mountain Pacific ($9.60), Middle Atlantic ($7.10), and New England ($5.90) as compared to East South Central ($1.50) and South Atlantic ($2.80).[81]

A substantial portion of the differences in level of local receipts may be explained by differences in the need for revenue to support spending on education. Differences existed among the regions in the

[81] See Table 2. Similar patterns exist as to the relative levels of government receipts on a percentage basis. In 1820, the South Atlantic region provided 7% of the total federal government receipts, while New England provided 23%. By 1855, the South Atlantic region provided only 2% of total federal receipts, while New England provided 32%. Local receipts, on the other hand, follow the reverse pattern. In 1820, New England accounted for 16% of total receipts received by local governments, while the South Atlantic received 7%. By 1855, these numbers had changed to 19% and 9%.

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number of school-age children attending school and the length of time they spent in school.[82] Regional differences existed on incentives to fund public education, and these incentives changed over time.[83] These differences reflect the economic costs (cost of providing education and the opportunity costs of attending school rather than working) and benefits (potential for increased economic mobility and the demand for educated workers), as well as the availability and desirability of private schooling. Most notably, the elites in the South benefited from the continuation of a low-cost, poorly-educated workforce, and had little incentive to fund public education for poor whites and slaves (before the Civil War, in many Southern states it was illegal to provide education to slaves).[84]

From early colonial times, particularly in the New England colonies, there was a strong desire to provide basic education to children. It was common for schools to be organized and funded at the village or town level.[85] The census in 1850 showed that only 10% of the white population was illiterate and over half of the school-aged white population attended school.[86] This was approximately the same level of literacy and school enrollments as existed in Germany and Denmark, and was much higher than the levels of England and France.[87]

Sun Go and Peter Lindert provide a convincing answer to the question of how a country with an aversion to taxes and "big" government became the leader in publicly provided primary education.[88] They note that the combination of low levels of initial poverty, local autonomy, and political voice resulted in many relatively small jurisdictions choosing to impose and collect taxes (primarily property taxes) to fund common schools. Go and Lindert provide information as to regional variations on public school enrollment rates. Consistent with other evidence presented in this Article, they find those regions with greater economic and political equality had higher levels of publicly provided education.[89]

It is not that those regions with low public school enrollment rates did not value education. Using information from the 1850 census, Go and Lindert compare the total funds per pupil (public and private ex-

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[82] Lee Soltow & Edward Stevens, Economic Aspects of School Participation in Mid-Nineteenth-Century United States, 8 J. Interdisc. Hist. 221 (1977).

[83] Id. at 230–39, 241–43.

[84] Higgens-Evenson, note 8, at 29.

[85] Ellwood P. Cubberley, The History of Education 362, 365, 366, 369–71 (1920).

[86] Ratner et al., note 42, at 202.

[87] Id.

[88] Sun Go & Peter H. Lindert, The Curious Dawn of American Public Schools (NBER Working Paper No. 13335, 2007), available at http://www.wcfia.harvard.edu/sites/default/files/golindert2007.pdf.

[89] Id. at 32–36.

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penditures) and the level of private tuition per pupil for fifteen Northern states and fifteen Southern states. They find that the total expenditure per student was much higher in the South than the North ($4.67 versus $2.45) and the level of private spending per pupil was ten times higher in the South than the North ($2.52 versus $.24).[90] Thus, different regions made different choices as to the availability of publicly provided education, the level of spending, and the level of taxation to support the spending.

While the decisions to tax and spend on education were initially made at the local level, by the middle of the 18th century, several states provided mandates (some funded and some unfunded) for local governments to provide primary education (and later, free education), and at the end of the 19th century for the local governments to provide secondary education. By the 1850's several Northern states had passed laws requiring local communities to provide free education to children funded out of general tax revenue. Southern states adopted similar requirements after the Civil War.[91] The states also adopted various mandatory education requirements for school-age children at different times, with Northern and Western states adopting requirements significantly before Southern states.[92]

It is likely that those areas with greater economic equality also had greater political equality. Using data from 1850, Go and Lindert compared counties where voting participation by men was relatively high (80%) as compared to counties with lower voting participation (60%). They find in those counties in Northern states where 80% of the men voted that the number of children attending common schools was significantly greater than those counties with lower levels of political participation and that the level of education spending per child (in the form of local property taxes) was significantly higher.[93]

The mere passage of laws requiring universal schooling did not necessarily change the taxing and spending patterns of local governments—especially in those states where the laws were not enforced.[94]

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[90] Id. at 32 tbl.2.

[91] Cubberley, note 85 at 684–86. Sun Go provides a thorough analysis of the transition from partial public funding of common schools to free schools funded in part by state property taxes. This centralization of school finance reduced intra-state inequality in school funding by effectively redistributing funds from rich to poor local communities. Sun Go, Free Schools in America, 1850–1870: Who Voted for Them, Who Got Them, and Who Paid (Jan. 28, 2008), available at http://www.econ.ucdavis.edu/graduate/sgo/research/go.freeschools.jan09.pdf.

[92] Claudia Goldin & Lawrence F. Katz, The Race Between Education and Technology 142–46 (2008).

[93] Go & Lindert, note 88, at 17–19.

[94] Go and Lindert contend that focusing on the actual dates when states passed mandatory education requirements can be misleading because in some states the provision of substantial schooling predates the passage of laws, while in other states the passage of

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But where the requirements were taken seriously, state laws requiring universal schooling generally had three effects. First, the state requirements reduced the autonomy of local governments as to level of education expenditures. Second, the universal schooling laws reduced the differences within states and among states on the level of education expenditures. Finally, with passage of state laws requiring free primary education often came financial support from the state to local governments to provide funding for education.[95]

B. Evidence of Economic Inequality Among and Within Regions

It is difficult to find data for the colonial period to the Civil War that allows for comparisons of the relative levels of economic inequality among regions. Ideally, for purposes of this Article, one would want inequality data collected at the local level to match the local decisionmaking regions (whether town, county, or independent school district) and to reflect the economic composition of the entire local population, not just the income or wealth of the top 1% or 10%. The U.S. Census did not begin reporting data on local distributions of income until 1949.[96] While some local studies of economic inequality before the Civil War have been completed, they do not provide enough information to allow for comparisons across states—much less towns, counties, or districts. Some studies also provide for summary estimates (such as Gini coefficients) of the relative income or wealth distribution or provide estimates of the income or wealth of the elite, but there is not sufficient data to estimate the relative size of the middle class of local communities over time or among regions.

Economic historians have examined the level of wealth in colonial America and the rate of economic growth in the period before the revolution. Related efforts have focused on the level of inequality in income and wealth both within and across regions in colonial America. Determining levels of inequality is challenging because of limitations on the availability and quality of data on income and wealth. It was not until the census of 1850 that information as to income and wealth became available on a national scale and not until the introduction of the income tax in the 20th century that scholars have been able to mine the significant data from income tax returns.[97]

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laws did not result in a substantial increase in the commitment to provide universal schooling. Id. at 4–5.

[95] Goldin & Katz, note 92, at 142.

[96] Paul W. Rhode & Koleman S. Strumpf, Assessing the Importance of Tiebout Sorting: Local Heterogeneity from 1850 to 1990, 93 Am. Econ. Rev. 1648, 1660 (2003).

[97] Some data are available from the first U.S. direct taxes leveled in 1798 and from Civil War income tax records.

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The primary sources of data for pre-revolution estimates of wealth and inequality are from local income tax records, property tax records, and probate records. In addition to limited data availability, several theoretical problems exist in trying to extrapolate from selected local and regional data to determine inequality on a national basis.[98]

Working primarily with probate records, Alice Hanson Jones has developed estimates of the wealth and the level of inequality in colonial America.[99]

TABLE 3
Distribution of Total Wealth Among Free Adults by Region, 1774[100]

	All Colonies	*New England*	*Middle Atlantic*	*South*
Mean (£)	252.0	161.2	189.2	394.7
Median (£)	108.7	74.4	152.5	144.5
Gini Coefficient	0.66	0.64	0.54	0.67
Percentage of total wealth held by richest				
1%	12.9	11.6	12.0	10.4
2%	19.6	18.8	16.0	16.9
10%	50.7	46.8	35.1	46.9
20%	67.9	65.9	52.7	69.6
50%	93.3	92.4	88.8	94.2

Before the revolution, levels of wealth were highest in the Southern colonies and lowest in New England.[101] As set forth in Table 3, the mean total wealth of a free American was estimated at £252 in 1774, with the per capita estimates of £161.2 for the New England colonies, £189.2 for the Middle Atlantic colonies and £394.7 for the Southern colonies.[102] The value of the mean wealth per free adult in New England and the South was more than twice as high as the respective medians, as compared with a mean that was only 25% greater than the

[98] Peter H. Lindert, untitled work, 32 Econ. Hist. Rev. 452 (1979).

[99] Alice Hanson Jones, American Colonial Wealth: Documents and Methods (1977). Jones reviewed 939 probate inventories from ten colonies, generally relying on data from 1774. From the records of the dead, she attempted to estimate the aggregate wealth holdings of the living in the different regions of prerevolutionary America. A review of Jones' methodology is set forth in Lindert, note 98. Lindert concludes that Jones is able to address the major biases present in probate records: (1) incomplete asset and debt coverage, (2) exclusion of poor decedents, (3) bias towards higher age groups, and (4) sporadic regional coverage. Id. at 452.

[100] Galenson, note 2, at 204 tbl.4.13 (1996); Alice Hanson Jones, Wealth of a Nation to Be: The American Colonies on the Eve of the Revolution 164–65 tbl.6.2 (1980).

[101] The exodus of the loyalists to Canada and the forfeiture of property at the time of the revolution served to reduce inequality in both New England and the Middle Atlantic.

[102] Jones, note 100, at 164–65 tbl.6.2.

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median for the Middle Atlantic colonies.[103] The Southern colonies were richer even if the value of slaves is excluded from wealth holdings of individuals in the South.

The regions also varied in both the composition of wealth and the importance of different occupations in the economy. Land represented a much higher proportion of total wealth in the New England colonies as compared to the Middle Atlantic and Southern colonies while the Middle Atlantic colonies had the highest proportion of financial assets to total wealth as compared to the New England colonies and the Southern colonies.[104] Relatively rocky farmland meant that small farmers dominated the New England colonies while large-scale farming (rice, tobacco, and then cotton) contributed to the growth of plantation owners in the South. The relative numbers of merchants and entrepreneurs were higher in the Middle Atlantic colonies and New England than in the Southern colonies.[105]

Slavery presents several challenges in determining the distribution of income and wealth and the level of inequality. One approach is to exclude slaves from the income and wealth estimates and to determine estimates by including only the free population (and attributing to slave owners the value of the slave labor they controlled). The second approach is to treat slaves as effectively owning no measurable wealth. Under this approach, the proportion of assets owned by the top 10% of the Southern population increases from about 50% to about 70% and the Gini coefficient increases from 0.67 to 0.83.[106]

Some disagreement exists about how much inequality was present in colonial America. Economic historian Peter Lindert reviews the debate on the relative level of inequality in colonial America and the years following the revolution.[107] He examines two different views: one, the notion of relative equality throughout the colonies (with the exception of parts of the South) and, two, that inequality in colonial America roughly approximated the high levels of inequality in England.

As set forth in Table 3, general estimates place the wealth of the top 20% as owning two-thirds of the physical wealth and the bottom 20%

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[103] Galenson, note 2, at 204.

[104] Ratner et al., note 42, at 62 tbl.3–2.

[105] Id. at 49–53.

[106] Allan Kulikoff, Whither the Progress of Inequality?, 57 Wm. & Mary Q. 825 (2000) (reviewing Inequality in Early America (Carla Gardina Pestana & Sharon V. Salinger eds., 1999)); Allan Kulikoff, Growth and Welfare in Early America, 29 Wm. & Mary Q. 359, 261 (1982) (reviewing Jones, note 100, and Jones, note 99).

[107] Lindert, note 3, at 186–92. Lindert is one of the leading proponents of the "romantic" view of colonial America, finding that the high levels of inequality reflected in the 1850, 1860, and 1870 census data resulted from changes in relative levels of income and wealth in the four decades prior to the Civil War. Id.

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as holding less than 1%.[108] This compares favorably with the level of inequality in England.[109] It is also likely that the relative size of the middle class was greater in colonial America than in England, or for that matter, the rest of Europe.

Economic historian Lee Soltow, one of the primary proponents of the view that economic inequality was always high in colonial America and the period immediately following the revolution, examined census data from the 1850's and 1860's and extrapolated back to examine the level of economic inequality for the years 1790 to 1860.[110] Soltow examined the distribution of slaveholding patterns among Southern slaveholders in 1790, 1830, 1850, and 1860 and adjusted for the age of the slaveholder. He found that the level of inequality in the South was relatively constant from 1790 to 1860.[111]

In addition to the challenges in comparing inequality data over time or between regions, the differences in the composition of the population make comparisons difficult. For example, regions with many young people and a few old people may be more unequal than a region with a few young people and many old people because of life-cycle levels of wealth—that is, wealth is positively correlated with age.[112] Similarly, it is difficult to compare regions with different levels of urbanization and immigration (either from other countries or other regions).[113]

Despite disagreement on the level of inequality in colonial America and the changes in relative inequality in the pre–Civil War period, general consensus does exist in several areas. First, as noted above, there was less economic inequality in the American colonies than existed in England. Second, the Northern colonies were more equal than the Southern colonies, in large part because of the growth in the number of slaves in the Southern colonies in the pre-revolutionary period. The percentage of slaves in the population in the South increased from zero in 1630 to 40% in 1770.[114] Third, higher levels of economic inequality existed in urban as compared to rural areas, par-

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[108] See Ratner et al., note 42, at 74.

[109] Lindert, note 3, at 186.

[110] Lee Soltow, Economic Inequality in the United States in the Period from 1790 to 1860, 31 J. Econ. Hist. 822 (1971).

[111] Id. at 839.

[112] Jeremy Atack & Fred Bateman, Egalitarianism, Inequality, and Age: The Rural North in 1860, 41 J. Econ. Hist. 85 (1981).

[113] Several studies have examined changes in inequality in a particular city or region. See, e.g., Richard H. Steckel & Carolyn M. Moehling, Rising Inequality: Trends in the Distribution of Wealth in Industrializing New England, 61 J. Econ. Hist. 160 (2001); Jeremy Atack & Fred Bateman, The "Egalitarian Ideal" and the Distribution of Wealth in the Northern Agricultural Community: A Backward Look, 63 Rev. Econ. & Stat. 124 (1981).

[114] Lindert, note 3, at 187.

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ticularly the Northern rural areas where the dispersion in the size of farms was less than in the Southern rural areas.[115] Throughout the 19th century (and continuing through the 20th century), the urban areas continued to attract young, low-income newcomers while at the same time building up a relatively small affluent local class. Finally, the existence of a new frontier throughout the period before the Civil War may have served to increase equality. The newly settled areas presented both an avenue of escape for those who were economically disadvantaged and greater opportunities for new wealth and income as the frontier regions developed.[116]

C. Observations on State and Local Governments Before the Civil War

In looking at state and local governments for the period before the Civil War, I offer the following observations. First, the demand for public goods and commonly-provided private goods appears to have been driven by local communities. Even before independence, local communities could elect to have local governments provide goods and services as long as they could find a way to pay for them. During the period before the Civil War, the United States was still very much a rural country and local communities had the ability to make taxing and spending decisions.[117] The role of the federal government in providing infrastructure improvements and social services was quite small.

Second, the choices made varied greatly by region. The aggregate levels of per capita government receipts and expenditures was five to six times higher in some regions than others. By 1855, the East South Central ($2.70) and the South Atlantic ($4.70) regions had much lower per capita aggregate government receipts as compared to the Mountain Pacific ($17.50), Middle Atlantic ($14.70), New England

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[115] Atack & Bateman, note 113, at 124, 129. Atack and Bateman provide estimates of Gini coefficients for rural Northern households in sixteen states in 1860. Using the per capita property tax revenues for 1860 provided in the statistical abstracts, it is possible to estimate the relationship between the level of inequality and the level of property taxes. The correlation coefficient is –.13. The outlier in this data set is Maryland, where the Gini coefficient is .85, substantially higher than any other state in the sample. Excluding Maryland from the sample increases the correlation coefficient to –.213. The sample size is too small to draw any strong inferences from this data, and the presence of outliers can influence the result, but it does provide some support for the inverse relationship between inequality and levels of local taxation. Id. at 125 tbl.1.

[116] See generally Joseph P. Ferrie, Migration to the Frontier in Mid-Nineteenth Century America: A Re-Examination of Turner's "Safety Value," (Northwestern Univ. Econ. Paper, July 1997), available at http://faculty.wcas.northwestern.edu/~fe2r/papers/munich.pdf.

[117] Sylla et al., note 14, at 348. In 1850, only 15% of the U.S. population lived in urban areas. By 1900, the percentage of the population living in urban areas was 40%. Id.

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($10.40), and West North Central ($10.40) regions. Similar patterns exist if one looks at per capita government receipts at the local government level.[118]

Third, throughout this time period, real property taxes were the primary vehicle for raising funds for local government. The dominant role of real property taxes before the Civil War highlights three important factors. First, during this period, real property was the major component of wealth, so that a good argument can be made that taxes were assessed on some notion of capacity or ability to pay. Second, the proceeds from taxing property were often sufficient to fund the basic level of local government services, although relatively low property tax bases in certain areas limited the ability of local governments to provide comparable services to those provided in wealthier areas.[119] Third, because local taxes were collected and expenditures made in the same area, a very strong overlap likely existed among those who decided the level of government activity, those who paid for it, and those who benefited.[120]

Finally, although one can offer some general observations about the level of inequality in the United States before the Civil War, the quality of data does not allow for strong conclusions about the relationship of inequality and size of state and local governments. At a general level, it does appear that the New England, Middle Atlantic, and East North Central states had lower levels of economic inequality and larger state and local governments than the South Atlantic, East South Central, and West South Central states.

III. Civil War to World War II

Several events and factors influenced taxing and spending patterns during the period from the Civil War to World War II. The Civil War devastated the economy of the South and left the country with significant deficits resulting from military operations as well as pension obligations to Union soldiers and their survivors.[121] The economic base in

[118] In 1855, the per capita levels of local government receipts were lowest in the East South Central ($1.50) and South Atlantic ($2.80) regions and highest in the Mountain Pacific ($9.60), Middle Atlantic ($7.10) and New England ($5.90) regions. See Table 2.

[119] In those areas with low property tax capacity, the parents of students in common schools were required to help fund the cost of schooling through tuition fees known as rate bills. See Go, note 91, at 24–27.

[120] It is important to consider the incidence of the property tax in examining the relative mix of tax instruments used by the different levels of governments. See generally George R. Zodrow, The Property Tax Incidence Debate and the Mix of State and Local Finance of Local Public Expenditures, 53 CESifo Econ. Stud. 495 (2007).

[121] See generally Claudia D. Goldin & Frank D. Lewis, The Economic Cost of the American Civil War: Estimates and Implications, 35 J. Econ. Hist. 299 (1975).

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Southern states to support local and state government was much smaller than the pre-Civil War economic base.[122]

The increase in urbanization and the growth of U.S. cities during the last part of the 19th century increased both the aggregate size of government and the relative role of local governments.[123] While only 15% of the U.S. population in 1850 lived in urban areas (places with 2,500 or more people), by 1900 the number had increased to 40%.[124] As per capita tax revenues and expenditures tend to vary directly with the size of the city, the growth of U.S. cities increased the level of fiscal activity per person.[125]

During this period there were substantial waves of immigration into the United States, as well as migrations between regions. Between 1861 and 1890, about 11.3 million immigrants arrived, primarily from the United Kingdom, Germany, and the Scandinavian countries, and from 1890 to 1920 another 18.2 million immigrants came to the United States, primarily from southern and eastern Europe.[126] With substantial reductions in the costs of moving people and goods, there was greater mobility of individuals and families between regions and greater integration of the regional economies. Following World War I, employers in the North sought to increase their labor supply by attracting African-Americans from the South. About 1.5 million African-Americans moved north during the period from 1916 through the 1920's.[127] In the 1940's and 1950's, the decline in the demand for low-skilled agricultural workers in the South contributed to another wave of migration of African-Americans from the rural South to the urban North.[128]

Finally, the Great Depression and the New Deal policies adopted to deal with its consequences also changed taxing and spending patterns. The aggregate size of government increased substantially following

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122 Id. at 307–09 tbl. 12. Goldin and Lewis provide a rough estimate of the decrease in the value of physical capital of about $1.487 billion.

123 Legler et al., note 69, at 348, 350–52.

124 Id. at 348.

125 Id. at 350–51. The authors also find substantial regional differences in the relative size of cities and the proportion of the urban population living in different regions. The Northeast had the highest level of fiscal activity with 65% of the U.S. urban population in 1850 living in the Northeast (46% in 1902). While the South had a larger urban population than the Midwest in 1850, by 1900, 34% of the U.S. urban population lived in the Midwest and 14% lived in the South. There were also regional differences in the per capita city revenues and expenditures. Id. at 352–54.

126 Ratner et al., note 42, at 304–05.

127 Id. at 418–19.

128 Id. at 475–76. Total government expenditures increased from less than 12% of GDP in 1927 to about 20% of GDP in 1934. John Joseph Wallis & Wallace E. Oates, The Impact of the New Deal on American Federalism, in The Defining Moment: The Great Depression and the American Economy in the Twentieth Century 157 (Michael D. Bordo, Claudia Goldin & Eugene N. White eds., 1998) [hereinafter Defining Moment].

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the New Deal. The New Deal resulted in a major increase in the role of the federal government in directly providing increased government services and in providing grants to state and local government (mostly to state governments).[129] While the federal government had long provided some transfers to state and local governments,[130] the amount of government transfers increased substantially following the Great Depression.[131]

A. Relative Size of State and Local Governments

Throughout the Civil War and the years following, the size of the local, state, and federal governments increased substantially. Wartime taxes funded only about 20% of the cost of the Civil War, so increased government revenues were required to service the debt accrued during the war.[132] As set forth in Tables 1 and 4, per capita government receipts almost doubled from 1855 to 1875 ($8.68 to $16.98). At the federal level, per capita government receipts increased from $2.62 to $7.10 from 1855 to 1875, while the increase at the state level was $1.35 to $2.70 and the increase at the local level was $4.70 to $7.18.

TABLE 4
Government Receipts, 1875–1895[133]

	Per Capita USD				*Percentage of total*		
	Total	*Federal*	*State*	*Local*	*Federal*	*State*	*Local*
1875	$16.98	$7.10	$2.70	$7.18	41.8	15.9	42.3
1880	16.54	7.34	1.84	7.36	44.4	11.1	44.5
1885	16.51	6.49	1.91	8.11	39.3	11.6	49.1
1890	17.85	7.39	2.32	8.15	41.4	13.0	45.6
1895	18.35	6.77	2.59	8.98	36.9	14.1	49.0

[129] Id. at 155. Jacob Metzer, How New Was the New Era? The Public Sector in the 1920s, 45 J. Econ. Hist. 119 (1985); Hugh Rockoff, By Way of Analogy: The Expansion of the Federal Government in the 1930s, in The Defining Moment, note 128, at 125.

[130] Early examples of federal aid to state and local governments include textbooks for the blind (1879), agricultural experiment stations (1887), and state soldiers' homes (1888). In the 1920's, the largest federal grant program to the states was for highway construction grants. Wallis & Oates, note 128, at 163.

[131] Federal grants as a share of state and local revenues increased from 1.5% in 1927 to 13.7% by 1934. Id. at 157 tbl.5.1. The relative amount of federal grants to total state and local expenditures has varied greatly following the spike in 1934, with a range of about 5–10% during the 1940's–1950's and about 12–25% in the 1960's–1990's. Id. Compared to many other developed countries, the United States has a relatively small system of intra-governmental grants. See Kirk J. Stark, Rich States, Poor States: American Federation and the Politics of Fiscal Equalization, 63 Tax L. Rev. (forthcoming 2010).

[132] Richard Sylla, Experimental Federalism: The Economics of American Government, 1789–1914, in 2 The Cambridge Economic History of the United States 483 (Stanley L. Engerman & Robert E. Gallman eds., 2000) [hereinafter Cambridge Economic History].

[133] Davis & Legler, note 67. If the 1895 total government receipts of $18.35 were restated in 1875 real dollars, the 1895 total receipts would be $23.99.

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The relative size of federal, state, and local governments also continued to change. Whereas in 1855, federal government receipts were about 30% of total receipts, and state and local governments were about 16% and 54%, respectively, by 1875 the percentages had changed to 42% for the federal government, and 16% and 42% for the state and local governments, respectively.[134]

Many of the same earlier regional patterns for relative size of state and local governments continued in the post–Civil War period. As set forth in Table 5, in 1875 the per capita receipts by local governments varied from a low of $2.20 and $2.70 in the East South Central and South Atlantic regions to a high of $12.20 and $17.50 in the Pacific and Mountain regions. By 1895, similar differences existed among the regions, with per capita receipts by local governments in the East South Central and South Atlantic (as well as West South Central) averaging $3.10 and $4.10, and the Mountain and Pacific regions averaging $13.10 and $15 per capita (and New England averaging $18.70 per capita).

State level receipts (and expenditures) also varied by region. In 1875, the largest state governments on a per capita basis were in the New England, Middle Atlantic, Mountain, and Pacific regions, and the smallest were in the West North Central, South Atlantic, and East North Central regions. Except in those regions where the local governments were relatively small, the receipts of the state governments were often less than one-half of the receipts of the local governments.

By 1895, relatively little had changed in the regional patterns of state and local governments. New England and the Pacific regions had much larger state governments on a per capita basis than other regions ($10.60 and $5.10, respectively) and East South Central, West North Central, and South Atlantic regions had the smallest state governments ($1.30, $1.60, and $1.70, respectively).

TABLE 5

Per Capita Receipts by Level of Government, 1875–1895, USD[135]

1875	*Federal*	*State*	*Local*	*Total*
New England	7.0	5.8	10.6	23.3
Middle Atlantic	16.2	3.1	10.0	29.4
East North Central	5.6	1.7	7.7	15.0
West North Central	2.5	1.5	7.8	11.8
South Atlantic	3.8	1.6	2.7	8.1
East South Central	2.8	2.0	2.2	7.0
West South Central	2.0	3.3	5.0	10.3
Mountain	1.5	12.9	17.5	31.8
Pacific	14.5	6.2	12.2	33.0

[134] See Tables 1 and 4.

[135] Davis & Legler, note 67, at 529–61 tbls.2, 3 & 7.

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1880	*Federal*	*State*	*Local*	*Total*
New England	8.2	4.2	13.4	25.9
Middle Atlantic	18.2	1.7	9.7	29.5
East North Central	6.4	1.7	8.0	16.0
West North Central	2.7	1.3	8.0	11.9
South Atlantic	2.9	1.7	2.8	7.4
East South Central	2.7	1.2	1.9	5.7
West South Central	1.9	1.1	4.8	7.8
Mountain	2.2	2.0	11.9	16.1
Pacific	9.5	4.0	13.4	26.9
1885				
New England	7.5	4.9	14.0	26.3
Middle Atlantic	15.9	1.9	11.3	29.2
East North Central	5.4	1.5	8.8	15.6
West North Central	2.9	1.6	8.8	13.3
South Atlantic	2.3	1.5	3.3	7.1
East South Central	3.5	1.2	2.8	7.4
West South Central	1.5	2.0	4.0	7.4
Mountain	1.9	2.3	11.5	15.7
Pacific	8.0	3.4	13.1	24.6
1890				
New England	7.1	6.8	17.0	30.9
Middle Atlantic	18.5	2.2	9.9	30.5
East North Central	6.1	1.7	9.4	17.1
West North Central	3.1	1.7	8.7	13.5
South Atlantic	4.2	1.5	2.8	8.5
East South Central	3.4	1.5	3.0	7.8
West South Central	1.7	2.4	3.7	7.8
Mountain	2.8	3.2	11.5	17.5
Pacific	8.5	5.9	14.1	28.5
1895				
New England	7.7	10.6	18.7	37.0
Middle Atlantic	14.9	2.1	11.2	28.2
East North Central	6.7	1.9	9.7	18.3
West North Central	3.4	1.6	9.0	13.9
South Atlantic	3.6	1.7	4.1	9.4
East South Central	3.9	1.3	3.1	8.3
West South Central	1.4	1.9	4.1	7.4
Mountain	3.5	2.7	13.1	19.3
Pacific	6.7	5.1	15.0	26.9

During this time period, there were significant changes in the relative use of different tax instruments by state and local governments. The major change was the reduced use of property taxes by state governments and the general assignment of the right to tax real property to local governments. This change resulted from dissatisfaction with a general property tax.[136] Edwin R. A. Seligman, one of the leading public finance scholars of the late 19th and early 20th century, provided an influential critique highlighting the failures of the general property tax as the main source of revenue to fund government opera-

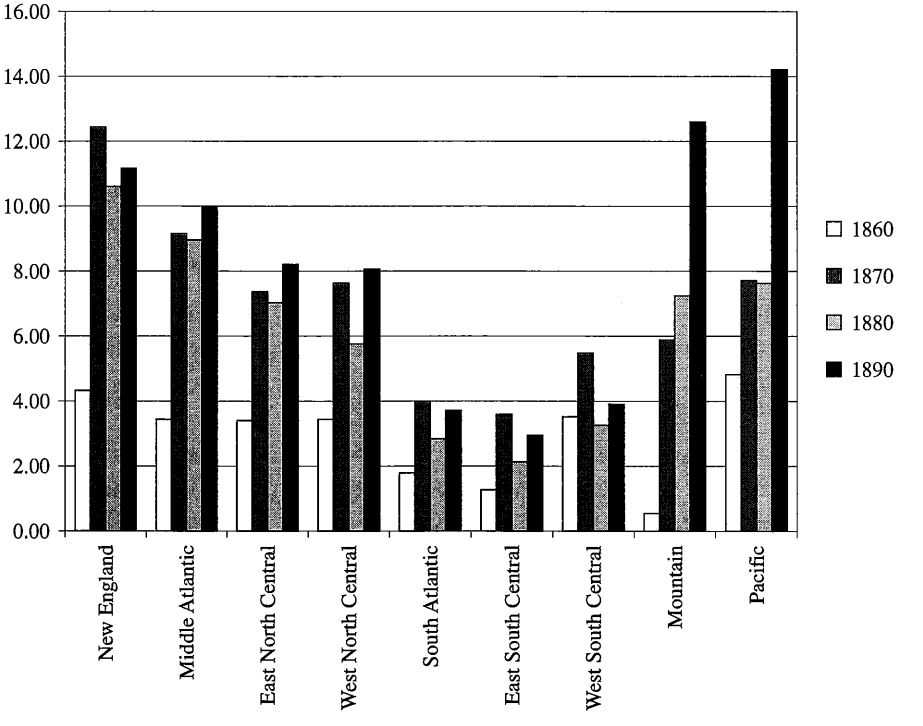
[136] Higgens-Evenson, note 8, at 17–18.

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tions.[137] While Seligman noted that the property tax likely worked relatively well in a mainly agricultural community, the property tax had serious deficiencies in a society with substantial commercial and industrial interests.[138] As wealth from sources other than real estate grew, the failure of the property tax to tax those other assets effectively meant that the tax burden fell primarily, and unfairly, on holders of real estate.

The regional patterns on the relative use of property taxes are quite telling. Figure 1 shows the per capita ad valorem taxes (primarily property taxes) by region from 1860 through 1890.

FIGURE 1
Per Capita Property Taxes by Region, 1860–1890[139]



[137] Edwin R. A. Seligman, Essays in Taxation 19–65 (10th ed. 1931), reprinted in Edwin R. A. Seligman, Essays in Taxation 19–65 (Augustus M. Kelley ed., 1969).

[138] Id. at 59–61.

[139] Statistical Abstract of the United States 630 tbl.437 (1922), available at http://www2.census.gov/prod2/statcomp/documents/1922–01.pdf; Statistical Abstract of the United States 198 tbl.197(1933), available at http://www2.census.gov/prod2/statcomp/documents/1933–01.pdf; Statistical Abstract of the United States 246 tbl.238 (1941), available at http://www2.census.gov/prod2/statcomp/documents/1941–01.pdf; Statistical Abstract of the United States 9 tbl.8, 311 tbl.313 (1944), available at http://www2.census.gov/prod2/statcomp/documents/1944–01.pdf; see notes on tables in the Statistical Abstracts for explanations of certain figures.

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As revenues from property taxes generally were used to fund local activities, those areas that had higher per capita taxes received higher levels of local goods and services. At the beginning of this period, per capita property taxes by state and local governments ranged from $7.27 and $4.33 for the Pacific and New England regions to $1.26 and $1.79 for East South Central and South Atlantic regions. By 1890, per capita property taxes were over $8.00 for all regions except for South Atlantic, East South Central, and West South Central regions—where per capita property taxes were less that $4.00.[140]

With the assignment of taxes on real property primarily to local governments,[141] state governments began to rely on other sources of revenue. Particularly after 1900, states received substantial revenues from sales and excise taxes, motor vehicle registration and license fees, and, towards the end of the period, individual and corporate income taxes.[142] Finally, the sources of federal tax revenue changed substantially during the period from the Civil War to World War II. The principal source of revenue shifted from tariffs and excise taxes at the beginning of the period to individual and corporate income taxes at the end of the period.[143]

Spending Patterns of Different States and Regions

The states and local governments' spending patterns also varied greatly during this time period. The variations likely reflect some combination of differences in political process and control, revenue capacity of the different regions, and preferences as to level and type of government services. The Civil War destroyed a large part of the economy in the South. In 1840 the average income in the South was slightly below the non-South, but by 1880 average income in Southern states was about 50% of the rest of the country.[144] The decline in income and wealth made it difficult to raise funds to support local and state governments.

For many regions, a large part of local expenditures was mandated by state law requiring both the provision of free common school education (and later secondary school) and mandatory attendance of students. Throughout this time period, the role of the federal government in providing continuing support for education was rela-

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[140] See Figure 1 and Appendix, Table A2 (providing per capita property tax by region for 1960–2000).

[141] Higgens-Evenson, note 8, at 77–91.

[142] Id.

[143] Brownlee, note 60, at 96–97.

[144] Robert J. Barro & Xavier Sala-I-Martin, Convergence Across States and Regions, Brookings Papers on Economic Activity, issue 1, 1991, at 107, 123.

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tively small.[145] Massachusetts was the first state to adopt a law requiring compulsory education in 1852.[146] By 1890, twenty-seven states and territories adopted legislation compelling students to attend school.[147] In contrast, only after 1900 did Southern states adopt legislation for compulsory education.[148]

Rudy Higgens-Evenson provides a comprehensive review of taxing and spending for several states in this time period. He finds substantial variation in the level of common school spending and the portion funded by local taxes.[149] The differences in education spending between the Southern states in his review (Tennessee, Alabama, and Mississippi) and the rest of the country are quite substantial.[150] The same story is reflected in a study of relative spending per student as a percentage of the U.S. average in 11 Southern states for the period 1890 through 1940.[151]

C. Evidence of Economic Inequality Among and Within Regions

There is no simple story or uniform data set that captures trends in economic inequality during the period 1865 through 1945. It is easier to find events (such as wars) and discrete economic changes (such as panics and depressions) that significantly changed relative levels of inequality than it is to identify any clear factor or factors that explain longer trends. Clayne Pope provides an excellent review and analysis of inequality in the 19th century by examining Alexis de Tocqueville's claims of relative equality in the United States in the 1830's, Frederick

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145 The federal government, however, was instrumental in using a portion of land sales to finance education. The Land Ordinance of 1785, and the later Northwest Ordinance of 1787, reserved a portion of land sales to fund education. Federal aid to education continued into the 19th century with the use of land grants to fund state colleges. Goldin & Katz, note 18, at 14.

146 Goldin & Katz, note 92, at 143.

147 Edgar W. Knight, The Evolving and Expanding Common School, Annals Am. Acad. Pol. & Soc. Sci., Sept. 1949, at 92, 97.

148 Id. Such legislation was adopted in the following years: Tennessee (1905), North Carolina (1907), Louisiana (1910), South Carolina, Texas, Florida, and Alabama (1915), Georgia (1916), and Mississippi (1918). Id.

149 Higgens-Evenson, note 8, at 28–30.

150 Higgens-Evenson finds similar regional differences in state spending on insane asylums. Per capita spending on mental heath facilities was above average in Massachusetts, New York, California, Nevada and Oregon, about average in Wisconsin and Michigan, and below average in Alabama, Mississippi, and Tennessee. Id. app. at fig.3. At the end of the 19th century, several states increased funding for general hospitals, as well as mental hospitals. Id. app. at fig.7. In 1929, per capita annual hospital expenditures averaged about $1.25 in Massachusetts, New Jersey, and New York, about $.75 in California, Oregon, and Nevada, about $.50 in Illinois, Michigan, and Wisconsin, and about $.25 per capita in Alabama, Mississippi, and Tennessee. Id.

151 Gavin Wright, Old South, New South: Revolutions in the Southern Economy Since the Civil War 80 tbl.3.10 (1986).

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Jackson Turner's proposition that the frontier created greater opportunities and more egalitarian communities, and Simon Kuznet's hypothesis that economic development would first cause inequality to rise and then to fall as the economy matures.[152] Pope finds substantial support for upward occupational mobility, substantial wealth mobility over time, an increase in opportunity from the opening up of the frontier, and significant intergenerational mobility.[153] He also finds substantial wealth inequality throughout the United States (higher in the South) with the poorest half owning virtually no real assets, and support for substantial income inequality.[154]

The best sources of information about economic inequality during the first part of this period are the wealth estimates in the 1860 and 1870 census. Between 1860 and 1870 there appeared to be a reduction in wealth inequality as the percentage of wealth held by the richest 1% declined from 29% (for free adult males) in 1860 to 24% (for white adult males) in 1870, and the percentage of wealth held by the top 10% declined from 73% to 68%.[155]

As the regional economies became more integrated during this period, it is likely that there was substantial convergence across the states and regions. Robert Barro and Xavier Sala-I-Martin highlight two types of convergence: one, focusing on the relative rates of growth between poor and rich economies, and two, focusing on the decline over time in the cross-sectional dispersion of per capita income or product.[156] They find that Southern states tended to have low per capita income in 1880 and high growth rates thereafter, whereas Western states had relatively high per capita income in 1880 and below-average growth rates thereafter.[157] With respect to dispersion of per capita income, Barro and Sala-I-Martin found a substantial decline in the state-level dispersion of per capita income (a decline from 0.54 in 1880 to 0.33 in 1920, and then rising to 0.40 in 1930).[158] Interestingly, the rate of convergence of per capita income between and within regions was quite similar. Thus, the differences between poor and rich states within a region declined at roughly the same rate as poor states caught up with rich states across the country.[159]

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[152] Clayne Pope, Inequality in the Nineteenth Century, in 2 Cambridge Economic History, note 130, at 109.

[153] Id. at 138.

[154] Id. at 136.

[155] Id. at 132. The comparable percentages for 1774 would have the richest 1% holding 12.9% of the wealth and the richest 10% holding 50.7%.

[156] Barro & Sala-I-Martin, note 144, at 112–13.

[157] Id. at 115.

[158] Id. at 121.

[159] Id. at 124.

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To examine the relationship between inequality, taxing, and spending patterns, I rely primarily on two different approaches for estimating of state-level inequality. One approach examines distributions of wealth—in this case, rural landholdings. To map economic inequality, Rodney Ramcharan examines the distribution of farm sizes on a county-by-county basis using the U.S. census data for the decennial census for years 1890 through 1930. The census separates farm sizes in nine different categories and Ramcharan uses this data to construct Gini coefficients of land inequality by region. The following table uses Ramcharan's data to estimate the Gini coefficients on a regional basis:

TABLE 6
Gini Coefficient by Region, 1890–1930[160]
Population-weighted Gini Coefficient, Distribution of Rural Landholdings

	1890	*1900*	*1910*	*1920*	*1930*
New England	.48	.50	.52	.52	.53
Middle Atlantic	.45	.43	.44	.43	.43
East North Central	.42	.41	.40	.38	.39
West North Central	.29	.41	.40	.39	.40
South Atlantic	.50	.53	.53	.50	.50
East South Central	.50	.51	.51	.50	.49
West South Central	.48	.48	.51	.51	.52
Mountain	.23	.41	.50	.49	.54
Pacific	.40	.58	.63	.66	.71

It is interesting that for this data set New England and the South Atlantic region are very similar in terms of inequality. It is also striking that based on relative levels of rural landholdings, the Pacific region becomes the most unequal over time (almost doubling its Gini coefficient). Because of the focus on rural landholdings, this data set may be more useful in examining inequality in the United States in the earlier periods (1890 and 1900) as compared to the later periods, when the shift of the population from rural to urban areas is much more substantial.

A different approach at measuring economic inequality among the states and regions examines the income share of the wealthiest individuals. Mark Schmitz and Price Fishback compiled state-level estimates of the percentage of income held by the top 1% and 5% of the

[160] This table is based on state-level Gini coefficients generously provided to the author by Rodney Ramcharan.

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population for years 1929, 1933, and 1939. Table 7 sets forth this information aggregated by region.[161]

TABLE 7
Income Share of Top 1%, 1929–1939

	1929	*1933*	*1939*
United States	16.80	10.95	10.24
New England	19.37	11.33	10.47
Middle Atlantic	22.94	13.21	10.86
East North Central	15.72	9.97	10.06
West North Central	11.81	9.81	8.77
South Atlantic	14.33	10.89	11.06
East South Central	13.41	11.85	11.13
West South Central	13.35	10.74	16.64
Mountain	10.66	8.37	8.19
Pacific	13.23	8.66	8.57

Again, while income share of the top 1% and 5% is useful in estimating the economic and political influence of the elites, it is less useful in estimating the size and importance of the middle class in a particular region.[162] Also, the state-level data will not capture variations within a state, where local communities will make different local taxing and spending decisions.

D. Relationship of Level of Economic Inequality and Taxing and Spending Patterns of State and Local Governments

This Section first reviews three studies that examine how inequality may influence taxing and spending patterns at the state and local level (most notably, education spending). It then examines the relationship of inequality and property taxes as a percentage of total state and local revenues and then the relationship of inequality and the relative share of local, state, and federal taxation as a portion of total taxation.

The three studies reviewed below take different approaches to try to explain why state and local governments made different choices as to the level of collective government services and the taxes to pay for

[161] Mark Schmitz & Price V. Fishback, The Distribution of Income in the Great Depression: Preliminary State Estimates, 43 J. Econ. Hist. 217 (1983).

[162] Additional information for the levels of income inequality can be mined from income tax data, especially for those years where the scope of the income tax was increased to cover larger portions of the population. Thomas Piketty and Emmanuel Saez compiled a data series on the top shares of pretax income in the United States, covering 1913 through 1998, and for wages for the period 1927 through 1998. Thomas Piketty & Emmanuel Saez, Income Inequality in the United States, 1913–1998, 118 Q.J. Econ. 1 (2003). This data fails to capture the relative size of the middle class. Before 1944, income tax return information was limited to the top 10% of the population because the exemption levels were sufficiently high that only a small portion of the population was required to file tax returns.

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them.[163] Each study examines tax and spending data from roughly the same time frame, 1890–1930. Taken together they provide support for the proposition that economic inequality was a substantial factor in explaining differences in taxing and spending patterns during this time period.

The first study, by Claudia Goldin and Lawrence Katz, examined differences among U.S. state and local governments in their commitment to provide secondary education.[164] Local governments in the late 19th century and early 20th century substantially increased their investments in the expansion of secondary schools. This was not cheap. The cost of secondary education was about twice as much as primary education. Yet, during this time period, the United States was much more successful in providing both mass secondary and higher education than its European counterparts.[165] The percentage of young Americans graduating high school increased from less than 10% in 1910 to over 50% in the 1940's.[166]

Two parts of the Goldin and Katz study (and their subsequent work) are particularly relevant to this Article. First, to estimate the size of the middle and upper-middle class, they use state-level automobile registration data as a variable to capture the level and distribution of wealth in a state. Goldin and Katz contend that high automobile registrations per capita likely indicate a more equal distribution of wealth and that automobile ownership is a good proxy for the share of voters likely to favor financing a public good as expensive as secondary education. Goldin and Katz find that those states with the highest per capita automobile registrations (California, Nevada, Kansas, Nebraska, and Iowa) were also the leaders in providing state and local financing for secondary education.[167]

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[163] Claudia Goldin and Lawrence F. Katz in a series of articles examine differences among the states in the provision of secondary schooling. Claudia Goldin & Lawrence F. Katz, Human Capital and Social Capital: The Rise of Secondary Schooling in America, 1910–1940, 29 J. Interdisc. Hist. 683 (1999) [hereinafter Schooling in America]; Goldin & Katz, note 18.

[164] Claudia Goldin & Lawrence F. Katz, Why the United States Led in Education: Lessons from Secondary School Expansion, 1910 to 1940 (NBER Working Paper No. 6144, 1997), available at http://ssrn.com/abstract=225907. Other factors include an older population group, a lower percentage of Catholics, and a smaller proportion of the labor force in manufacturing.

[165] Goldin & Katz, Schooling in America, note 163.

[166] Claudia Goldin, America's Graduation from High School: The Evolution and Spread of Secondary Schooling in the Twentieth Century, 58 J. Econ. Hist. 345, 348 (1998). Goldin and Katz provide several explanations for the faster growth of secondary education in the United States as compared to Europe. They find that European countries had less geographic mobility, greater centralized decision-making for education, lower wealth levels, and a higher percentage of industrial employment of the workforce than the United States. Goldin & Katz, note 164, at 23–26.

[167] Goldin & Katz, Schooling in America, note 163, at 701.

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Second, Goldin and Katz examine the demographic and ethnic composition of communities to try to explain differences in the level of support for funding secondary schools. States that had a large number of school districts relative to population (Nebraska, Kansas, South Dakota, and Iowa) were more likely to have small, relatively homogeneous communities that could reach a consensus to impose taxes to fund education. These areas tended to have higher and more equally distributed wealth and income, and greater ethnic and religious homogeneity.[168]

The second study, by Oded Galor, Omer Moav, and Dietrich Vollrath, takes a different approach. Rather than focus on groups of voters getting together to acquire collectively goods and services, Galor, Moav, and Vollrath examine how elites used their economic and political influence to provide low levels of spending on public education and block education reforms.[169] To estimate the power of the elites, they use census data on the number and size of farms to construct state-level indices of land inequality. They then compare how differences in land inequality correlate to different expenditure decisions. Controlling for income per capita, level of urbanization, and racial composition of population, Galor, Moav, and Vollrath find strong support that higher land inequality resulted in lower spending on public education.[170]

The major contribution of the third study is the use of county level data to match better the unit of decisionmaking with estimates of economic inequality, local taxes, and local expenditures.[171] Rodney Ramcharan constructs a data set of county-level inequality for rural areas by using census data on relative farm sizes for the period 1890–1930. Ramcharan then examines county level per capita education expenditures and per capita tax revenue to determine whether a relationship exists between level of inequality and taxing and spending patterns for this time period.[172]

He finds that greater economic inequality is significantly associated with lower per capita education expenditures.[173] The use of county-level data allows for comparison of inequality and education spending in the context of common state policies. For example, Ramcharan

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168 Id. at 702.

169 Oded Galor, Omer Moav & Dietrich Vollrath, Inequality in Land Ownership, the Emergence of Human Capital Promoting Institutions, and the Great Divergence, 76 Rev. Econ. Stud. 143, 165–71 (2009).

170 Id. at 173.

171 Ramcharan, note 3.

172 Id.

173 Id. at 13, 41. Higher inequality is also associated with lower tax revenue. Ramcharan estimates that for 1900 a one standard deviation increase in inequality is associated with a 65% decline in per capita ad valorem taxes. Id. at 42.

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notes that 235 counties in Texas provide an excellent vehicle to examine the correlation of inequality and education spending; He finds a strong correlation in Texas counties between levels of land inequality and per capita education expenditures.[174] Interestingly, he finds that the location of the county (whether in the North or in the South or Border State) does not influence the impact of inequality on educational expenditures.[175] Ramcharan continues by testing the relationship between inequality and education spending by looking at state-level data. Again he finds a negative and robust relationship between inequality and per capita education expenditures during this time period.[176]

Figures 2, 3, and 4, below, provide additional information as to the relationship between economic inequality and taxing and spending patterns during this time period. If levels of inequality did influence choices made by local communities as to the level of common expenditures and the taxes to pay for them (generally, property taxes), then one would expect to see higher per capita property taxes in those areas with greater equality. Similarly, in those communities with greater equality, one might also expect the property tax to play a greater role as compared to other local and state taxes and that local governments in communities with greater equality would be larger relative to state and federal governments than areas with areas with greater inequality, where state and federal governments would be relatively larger. The three figures compare the relative level of inequality and the relative level of property taxes from slightly different perspectives: Figure 2 examines the relationship between inequality and the per capita level of property taxes; Figure 3 examines the relationship between inequality and the relative role of property taxes as compared to total state and local taxes; and Figure 4 examines the relationship between inequality and the relative size of local, state and federal governments.

Figure 2 illustrates the relationship between per capita property taxes and inequality for 1890. The inequality estimates are from Ramcharan's data for state-level Gini coefficients for rural landholdings (Table 6). The correlation is strongly negative (–.54). Thus, where per capita property taxes were high, the Gini coefficients (and hence inequality) tended to be low. The plot below illustrates the negative relationship.

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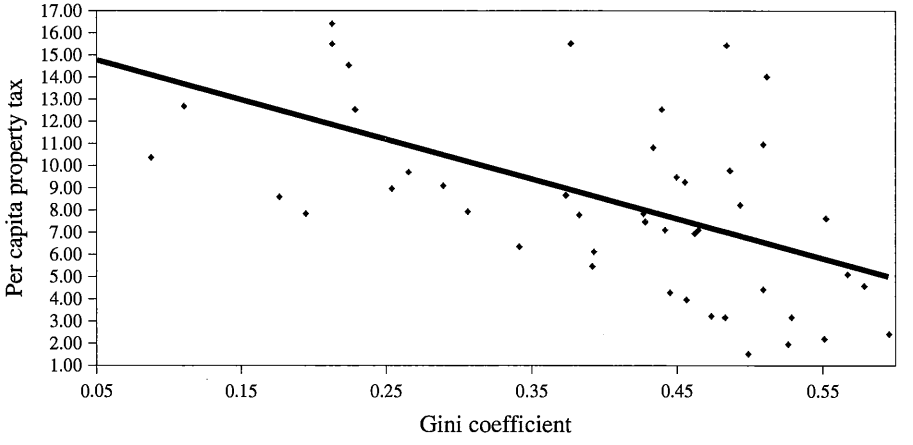
174 Id. at 11.

175 Id.

176 Id. at 12.

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FIGURE 2
Relationship of Per Capita Property Taxes and Inequality (Land Inequality in Rural Areas 1890)



While the relationship between property taxes and inequality is quite strong in 1890, the results for later years show a much weaker correlation. For the years 1900, 1910, and 1920, the correlation coefficients are –.13, –.12, and –.18, respectively.[177]

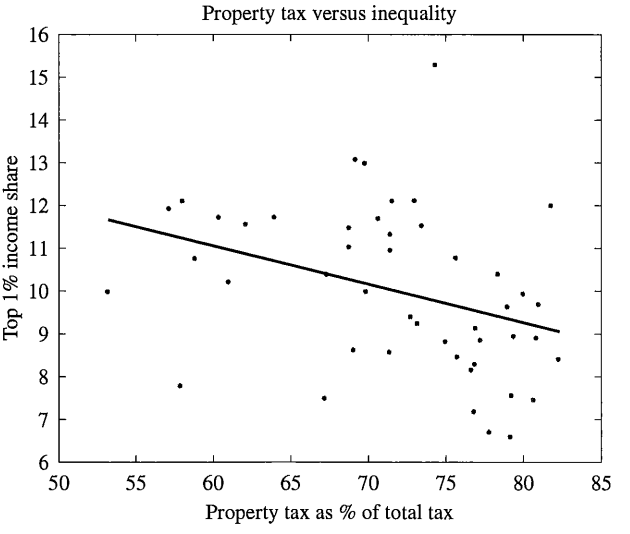
It is also interesting to compare the relationship between the property tax as a percentage of total state and local taxes and the level of inequality by state. Schmitz and Fishback estimated the top 1% share of income distribution for each state for 1933 and 1939 (Table 7).[178] Property tax data is available for 1932 and 1942.

[177] As set forth later, using a different source of inequality data, the correlation coefficients between per capita property taxes and inequality is –.54 in 1933 and –.44 in 1939. See discussion accompanying notes 179–80.

[178] Schmitz & Fishback, note 162. They also provide inequality data for 1929, but a comparison with property tax data for 1929 is not useful because of the effects of the Great Depression on property tax receipts.

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FIGURE 3
Property Tax as a Percent of Total State and Local Tax (1932) and Inequality (Top 1% income share, 1933)[179]



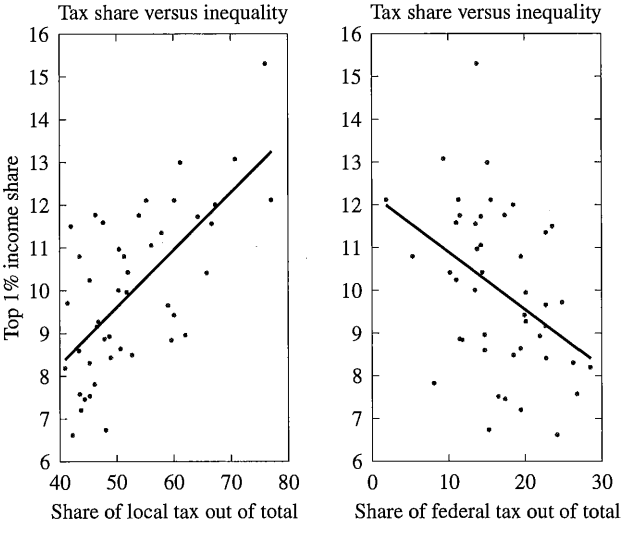
Correlation = –.36

Figure 4 below compares the state level of inequality with tax share by level of government. For 1932, the correlation of inequality with tax share is –0.58 for local government, –.07 for state government, and 0.57 for the federal government. For 1942, the correlation of inequality with tax share is –.53 for local government, –.04 for state government, and .60 for the federal government. Thus, for those years, those states with higher inequality tend to have smaller local and state governments as a share of total government relative to states with lower inequality and tend to have a larger share attributable to the federal government.

[179] A regression of the property tax data on inequality from 1932 yields a coefficient of –.20, a R^2 value of .66, and a t-statistic of –5.890. The regression is significant at the 5% level. Statistical Abstract of the United States 200 tbl.203, 202 tbl.204 (1934), available at http://www.census.gov/prod2/statcomp/documents/1934-01.pdf; Schmitz & Fishback, note 161, at 223 tbl.1.

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FIGURE 4
Relative Local and Federal Share of Total Tax Receipts and Inequality (Top 1% income share, 1933)[180]



E. Observations on State and Local Governments from Civil War to World War II

Several major changes took place in the roughly 80-year period between the Civil War and World War II. The size of government grew substantially and the relative roles of local, state, and federal government changed dramatically. At the beginning of this period, aggregate government revenues as a percent of GNP were about 5.4% (immediately before the Civil War) increasing to about 29.5% immediately after World War II.[181] The growth was uneven, with most of the increase taking place after 1920. In 1860, government revenue was divided about 46% to the federal government and about 24% to state governments, and 30% to local governments; by 1946, the relative percentages had changed to 75% to the federal government and about 12.5% each to state and local governments.[182]

Related to the changing roles of the different levels of government, the relative importance of tax instruments and their use by different

[180] A regression of the local tax receipt data on inequality from 1932 yields a coefficient of –.131, a R^2 value of .58, and a t-statistic of –4.771. The federal taxation data yields a coefficient of .117, a R^2 value of .57, and a t-statistic 4.66. Both regressions are significant at the 5% level. Statistical Abstract, note 179, at 200 tbl.203, 171 tbl.171; Schmitz & Fishback, note 161, at 223 tbl 1.

[181] Wallis, note 12, at 65 tbl.1.

[182] Id.

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levels of government changed. The federal government moved from relying on tariffs and excise taxes to using the individual and corporate income tax to raise the bulk of revenues. The state governments substantially reduced their use of property taxes, and moved to relying on sales and excise taxes and, later on, income taxes, for most of their revenues. Local governments continued to rely on local property taxes for an overwhelming portion of their revenues.[183]

Regional taxing and spending patterns were similar to those of the pre-Civil War period, but with some convergence toward the end of this period. For 1875, the per capita state and local government receipts were significantly lower in the South Atlantic ($4.30), the East South Central ($4.20), and the West South Central ($8.30) regions than in the New England ($16.40), Middle Atlantic ($13.10), Mountain ($30.40), and Pacific ($18.40) regions.[184] Again, similar patterns exist if one looks only at local receipts.

Although substantial variations in regional taxing and spending patterns continued throughout this period, the differences have narrowed. For 1942, per capita state and local government receipts were still significantly lower for the South Atlantic ($44), the East South Central ($36), and the West South Central ($46) regions than the New England ($89), Middle Atlantic ($100), Mountain ($67), and Pacific ($95) regions. The regional variation in level of local receipts was still substantial in 1942, with the South Atlantic, East South Central, and West South Central per capita local receipts being only about half of the local receipts of the New England, Middle Atlantic, Mountain, and Pacific regions.[185]

A strong inverse correlation still existed during this period between economic inequality and per capita property taxes. Similarly, in those regions with greater economic equality, property taxes were a larger proportion of total local and state tax receipts than regions with greater inequality. Finally, the percentage share of local tax receipts out of total government receipts tended to be higher, and the percentage share of federal tax receipts out of total government receipts tended to be lower, in those regions with greater economic equality as compared to those regions with greater inequality.

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[183] Alan D. Sokolow, The Changing Property Tax and State-Local Relations, Publius, Winter 1998, at 167; John Joseph Wallis, A History of the Property Tax in America, 18 State Tax Notes 1883, 1892 (May 29, 2000).

[184] See Table 5.

[185] See Table 9 and Appendix, Table A1.

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IV. Post World-War II

The taxing and spending trends that began in the 1930's continued in the post-World War II period. The federal government retained its dominant position with about 70% of total government receipts (though down from its peak in the early 1950's). The relative total receipts of state governments fell slightly in the 1950's but returned to prior levels by the last part of the 20th century. Local government receipts increased slightly in relative terms by the beginning of the 1970's, but have declined since then, and by the end of the 20th century accounted for 11% of total receipts (down from 50-60% of total receipts in the first part of the 20th century).[186] Beginning in the 1970's, various legal and political constraints on local governments' control over property taxes[187] make it unlikely that local governments' ability to raise own-source revenue will improve in the foreseeable future.

The long-run economic convergence between and among regions and states continued through the post-World War II period, albeit with some divergence beginning in the 1980's. With the further decline in mobility costs, Americans continued to move to new locations, and a greater proportion now live in states other than the state where they were born.[188] Economic inequality continued to fall in the post-World War II period until the late 1960's and 1970's, when inequality began to increase substantially, a trend that continues.[189] Although the levels of inequality have increased, the dispersion among regions (as well as states) continues to fall.[190] Though regional and state levels of inequality have become more similar, the economic heterogeneity within parts of individual states and, perhaps more importantly, within cities and counties has likely increased.

A. Relative Size of State and Local Governments

World War II had a dramatic effect on the relative relationship among local, state, and federal governments in the United States. As many have noted, the federal income tax moved from being a "class"

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186 See Table 8.

187 See generally Sokolow, note 183.

188 U.S. Census Bureau, Current Population Survey, Annual Geographic Mobility Rates, by Type of Movement: 1947–2008 tbl.A-1 (2009), available at http://www.census.gov/population/socdemo/migration/tab-a-1.pdf.

189 Goldin & Katz, note 92, at 46–49.

190 See Table 10. In 1949, the Gini coefficients for the different regions ranged from .36 to .47. By 1990, the range of Gini coefficients had narrowed to .38 to .42 and then increased to .40 to .47 by 2000.

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tax to a "mass" tax.[191] For the first time, the federal government was larger than the combined size of state and local governments.[192]

Table 8 examines the relative size of local, state, and federal governments by looking at tax receipts for the period 1932 through 2000. The aggregate size of government has increased greatly during this period.[193] But what may be more surprising is the shift in the relative sizes of the different levels of government. The receipts of the federal government were only about 20% of total government receipts in 1932, but by 2000 grew to over 70%. State receipts as a percentage of total receipts remained relatively constant through the 1930's and early 1940's, fell relative to other levels of government in the 1950's, and then regained their prior levels over the last 30 years. Local receipts fell dramatically relative to other levels of government from the 1930's through the early 1950's, increased slightly during the 1960's and 1970's, and then declined relative to other levels of government over the last 30 years.

TABLE 8
Government Receipts 1932–2000
Per Capita, USD and Percentages by Level of Government

	Per Capita USD				*Percentage of total*		
	Total	*Federal*	*State*	*Local*	*Federal*	*State*	*Local*
1932	$63	$12	$13	$38	20	21	59
1942	167	96	37	34	58	22	20
1953	571	439	67	65	77	12	11
1959	637	453	90	94	71	14	15
1970	1121	694	236	191	62	21	17
1980	2823	1836	605	382	65	21	14
2000	10555	7451	1922	1182	71	18	11

The variation among the regions as to the relative size of the different levels of government has narrowed substantially, partly because of smaller regional differences as to the relative size of local governments.[194] In 1932, large disparities existed among the regions on the

[191] See, e.g., Brownlee, note 60, at 115–16.

[192] Id. at 116.

[193] The tax–to–GNP ratio roughly doubled during this period. Wallis, note 12, at 63.

[194] Statistical Abstract of the United States 158 tbl.161, 199 tbl.201 (1934), available at http://www2.census.gov/prod2/statcomp/documents/1934-01.pdf; Statistical Abstract of the United States 260 tbl.277, 310 tbl.312 (1944), available at http://www2.census.gov/prod2/statcomp/documents/1944-01.pdf; Statistical Abstract of the United States 348 tbl.406, 397 tbl.455 (1955), available at http://www2.census.gov/prod2/statcomp/documents/1955-01.pdf; Statistical Abstract of the United States 366 tbl.485, 404 tbl.531 (1959), available at http://www2.census.gov/prod2/statcomp/documents/1959-01.pdf; Statistical Abstract of the United States 385 tbl.609, 417 tbl.660, 418 tbl.661 (1972), available at http://www2.census.gov/prod2/statcomp/documents/1972-01.pdf; Statistical Abstract of the United States 246 tbl.414, 283 tbl.476 (1982), available at http://www2.census.gov/prod2/statcomp/documents/

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relative receipts by level of government. For example, local governments accounted for 68% of receipts in the West North Central region as compared to only 36% in the South Atlantic region. The dramatic increase in the relative size of the federal government had the effect of reducing on a percentage basis the dispersion among the regions. The receipts of local governments in the South Atlantic region, however, were still less than half of the relative receipts of the West North Central, Middle Atlantic, and Mountain regions.[195]

By the end of the 20th century, the relative increase in state level receipts further reduced the dispersion among the regions in local government receipts. In 2000, with the exception of the relatively high level of local receipts in the Middle Atlantic region, the rest of the regions were remarkably similar on a relative percentage basis, with local governments accounting for between 10-12% of total government receipts.[196] Similar patterns exist if one examines regional per capita tax receipts on a dollar basis.[197] By 2000 the regions had substantially converged on per capita local tax receipts, with the exception of the East South Central region and the Middle Atlantic region, where local government tax receipts in the former are only about one-third of the latter.

TABLE 9
Per Capita Receipts by Level of Local Government, 1932–2000, Percentages

1932	*Federal*	*State*	*Local*
New England	13	21	66
Middle Atlantic	24	17	59
East North Central	15	19	66
West North Central	9	23	68
South Atlantic	44	21	36
East South Central	14	32	54
West South Central	8	34	58
Mountain	6	28	66
Pacific	13	22	65

1982_83-01.pdf; Statistical Abstract of the United States 286 tbl.443, 322 tbl.475 (2003), available at http://www.census.gov/prod/2004pubs/03statab/stlocgov.pdf and http://www.census.gov/prod/2004pubs/03statab/fedgov.pdf; Author's computations.

195 See Table 9.

196 Id. and Table A1 in the Appendix provide per capita receipts by region and level of government, 1932–2000, in U.S. dollars.

197 See Appendix, Table A1.

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1942	*Federal*	*State*	*Local*
New England	55	21	25
Middle Atlantic	60	17	22
East North Central	62	21	17
West North Central	43	27	31
South Atlantic	67	21	12
East South Central	53	29	18
West South Central	48	32	20
Mountain	36	35	29
Pacific	48	30	21
1953			
New England	73	12	15
Middle Atlantic	81	8	12
East North Central	82	9	9
West North Central	70	14	16
South Atlantic	77	15	8
East South Central	72	18	10
West South Central	69	20	12
Mountain	66	19	15
Pacific	70	16	14
1959			
New England	66	14	19
Middle Atlantic	76	9	14
East North Central	76	12	13
West North Central	65	16	19
South Atlantic	70	18	12
East South Central	68	21	11
West South Central	63	22	15
Mountain	62	20	18
Pacific	63	18	19
1980			
New England	64	17	19
Middle Atlantic	65	17	19
East North Central	69	13	18
West North Central	67	13	20
South Atlantic	63	13	24
East South Central	60	11	29
West South Central	67	12	21
Mountain	61	15	24
Pacific	63	11	25
2000			
New England	71	19	10
Middle Atlantic	66	18	16
East North Central	71	18	11
West North Central	72	18	10
South Atlantic	70	18	12
East South Central	68	22	10
West South Central	73	16	12
Mountain	68	20	12
Pacific	69	22	10

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B. Evidence of Economic Inequality Among and Within Regions

As set forth in Table 10 below, economic inequality in the United States declined and then increased following World War II (from a Gini coefficient of 0.40 in 1949, to a low of 0.35 in 1970, and then to 0.45 in 2000). For purposes of this Article, several trends are important. First, those regions that tended to be more equal at the beginning of the period (New England, Middle Atlantic, East North Central, and Pacific) were more equal through 1990, but not necessarily though 2000. Second, those regions that had the highest level of inequality at the beginning of the period (South Atlantic, East South Central, and West South Central) still had high levels of inequality at the end of the period.

TABLE 10
Income Inequality, Gini Coefficient, 1949–2000[198]

	1949	*1959*	*1970*	*1980*	*1990*	*2000*
United States	.40	.36	.35	.38	.40	.45
New England	.36	.33	.33	.36	.38	.44
Middle Atlantic	.38	.30	.35	.38	.40	.47
East North Central	.36	.34	.33	.36	.38	.41
West North Central	.40	.37	.35	.37	.38	.40
South Atlantic	.44	.40	.37	.38	.40	.44
East South Central	.47	.43	.39	.40	.42	.45
West South Central	.45	.41	.38	.40	.42	.46
Mountain	.39	.35	.35	.37	.39	.43
Pacific	.36	.34	.36	.37	.40	.47

But while the relative rankings of the regions were relatively stable during the period, the variation of the Gini coefficients of the regions became much smaller. For example, the spread between the high and low Gini coefficients among the regions in 1949 and 1959 was .11 and .13, respectively; in contrast, the spread between the high and low Gini coefficients for years 1980, 1990, and 2000, was .04, .04, and .07, respectively.

C. Taxing Patterns of Different States and Regions

While property taxes continue to be the primary source of funding for local governments, property taxes' relative share of total taxes has continued to decline over the 20th century. Property taxes as a per-

[198] For 1949 and 1959, see Ahmad Al-Samarrie & Herman P. Miller, State Differentials in Income Concentration, 57 Am. Econ. Rev. 59, 63 tbl.1 (1967). For all other years, see James Galbraith & Travis Hale, State Income Inequality and Presidential Election Turnout and Outcomes (Univ. Texas Inequality Project Working Paper No. 33, 2006), available at http://utip.gov.utexas.edu/papers/utip_33.pdf.

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centage of local taxes have declined from 87.5% in 1952 to 74.1% in 1995, and property taxes as a percentage of own-source local revenue have declined from 71% in 1952 to about 46% in 1995. Finally, property taxes as a percentage of total local revenue (including transfers from other levels of government) have declined from 49.9% in 1952 to 28.6% in 1995.[199]

Similar to the political challenges against the state-level general property taxes at the end of the 19th century, local property taxes were, and are still, subject to increased political pressures during the last quarter of the 20th century. By the end of this period, over forty states have imposed limits on local governments' autonomy to impose property taxes—whether in the form of capping property tax revenue, limiting property tax rates, or limiting allowable increases in assessed property values.[200]

To compensate for the declining share of property taxes, there has been a substantial increase in the relative use of state income and sales taxes and intra-government transfers from state to local governments or increased direct state funding and control of services historically provided by local government.[201]

D. Relationship of Level of Economic Inequality and Taxing and Spending Patterns of State and Local Government

This Section continues by examining the relationship between economic inequality and the relative share of the property tax as a percentage of total state and local taxation. It then examines the relationship between inequality and the relative share of local, state, and federal taxes of total taxes.

Figure 5 continues the review of the relationship between inequality and relative use of property taxes. Again for 1960, states with relatively greater equality rely more on property taxes to fund government operations. Figure 5 also provides information as to the relationship between the level of inequality and the relative shares (measured by tax revenue) of different levels of government. The pattern in 1953 follows the results found in the pre-World War II period. In those areas with relatively greater inequality, the tax share of local government was relatively smaller and the tax share of the federal government was relatively larger (correlation of –.20 for tax receipts of local governments as a percentage of total receipts with inequality and .16 for tax receipts of the federal government as a percentage of

199 Sokolow, note 183, at 165, 168.

200 See generally David Brunori, Local Tax Policy: A Federalist Perspective 59–60 (2d ed. 2007).

201 Wallis, note 183, at 1895 tbl.5; Sokolow, note 183, at 168 tbl.1.

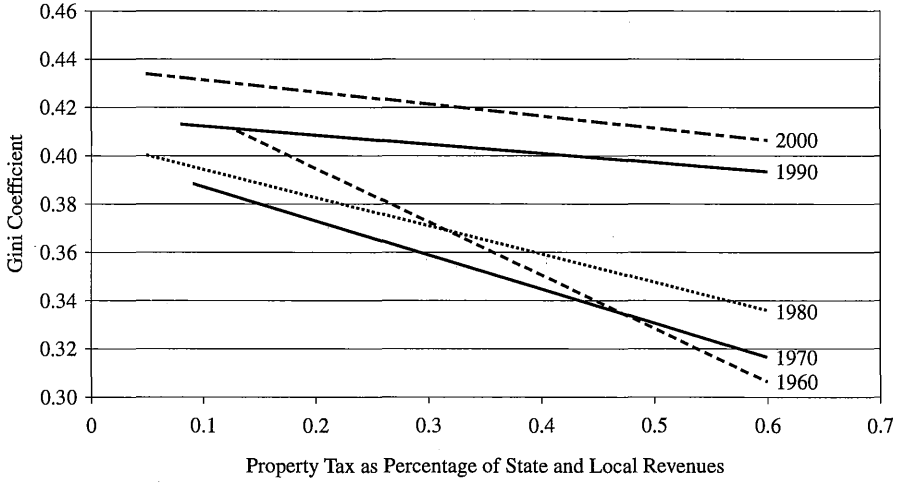
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total receipts with inequality). There was no meaningful correlation between the level of inequality and the relative tax share of state governments (correlation of –.08).

By 1960, the pattern had changed, whereby greater inequality was now associated with relatively larger tax shares for state governments and correspondingly smaller tax shares for local and federal governments (correlation of .54 for tax share of state governments, and –.24 for share for local governments and –.26 for share of the federal government). This pattern continued through the 1970's, 1980's, and early 1990's.

By 2000, the pattern had changed again, and now relatively little correlation exists between the relative levels of inequality and the relative tax shares of local, state, and federal governments (correlation of .07 for tax share of local governments, –.09 for tax share of state governments, and .04 for tax share of the federal government.

FIGURE 5
Gini Coefficient as a Function of Property Tax as a Percent of State and Local Revenues (1960–2000)[202]



[202] Al-Samarrie & Miller, note 198; U.S. Census, Gini Ratios by State: 1969, 1979, 1989, 1999, tbl.S4, available at http://www.census.gov/hhes/www/income/histinc/state/state4.html; Statistical Abstract of the United States 422 tbl.552 (1962), http://www2.census.gov/prod2/statcomp/documents/1962-01.pdf; Statistical Abstract of the United States 418 tbl.661 (1972), 284 tbl.477 (1982), available at http://www2.census.gov/prod2/statcomp/documents/1982_83-01.pdf; Statistical Abstract of the United States 286 tbl.288 tbl.446 (2003), available at http://www.census.gov/prod/2004pubs/03statab/stlocgov.pdf.

The regression results for the relationship between inequality and relative use of property taxes reflected in Figure 5 are set forth in the following table.

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A different approach to examining the taxing and spending choices made by different local and state governments focuses on relative property tax effort. This approach relies heavily on the interstate fiscal disparity data from the now-defunct Advisory Commission for Intergovernmental Relations (ACIR).[203] The ACIR, Robert Tannewald,[204] and then a group of scholars including the Urban Institute,[205] have constructed representative tax systems (as well as representative expenditure systems) to allow for comparisons of the tax systems of state and local governments focusing on the underlying economic and demographic conditions in the states, rather than actual revenue and expenditure levels. The representative tax system estimates a particular state's tax revenues based on a standardized tax system that uses a uniform revenue base and tax rates and charges that are set at the average of the fifty states.

The representative tax system provides estimates for the major taxes assessed by state and local governments, including property taxes. This is a useful source of information as to both the property tax capacity for each of the states and the actual property tax revenue collected. A state's property tax effort is determined by comparing actual property tax revenue to the estimated property tax capacity (so, applying the "average" tax system to the state's economic base). Figure 7 sets forth estimates of the property tax efforts of the different states.

TABLE 11

Regression Results: Gini Coefficient as a Function of Property Tax as a Percent of State and Local Revenues (1960–2000)

	1960	*1970*	*1980*	*1990*	*2000*
Coefficient	–.221	–.141	–.117	–.038	–.049
R^2	.365	.333	.185	.195	.004
t-statistic	–5.145*	–4.82*	–3.263*	–1.349	–.426

*Test is significant at the 5% level

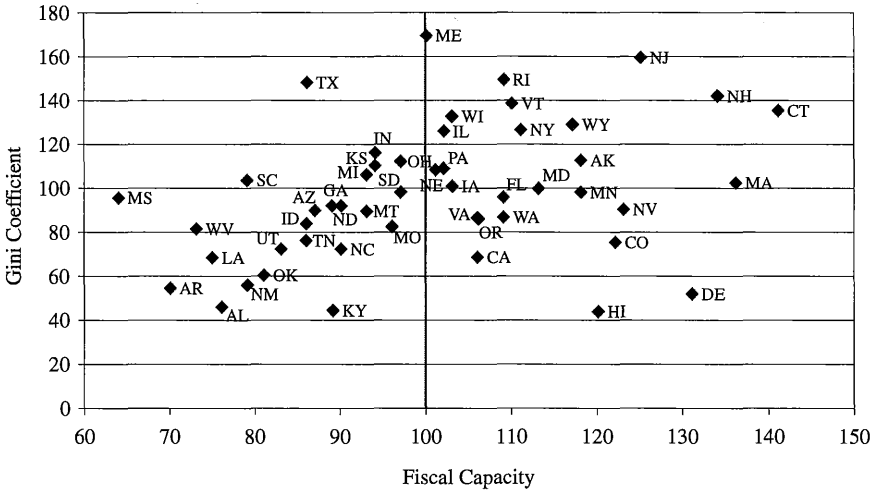
[203] Advisory Comm'n on Intergovernmental Relations, Tax Capacity of the Fifty States: Methodology and Estimates (1982) [hereinafter ACIR].

[204] Robert Tannenwald, Interstate Fiscal Disparity in 1997, New Eng. Econ. Rev., 2002, 3d Q., 17; Robert Tannenwald & Nicholas Turner, Interstate Fiscal Disparity in State Fiscal Year 1999 (Public Policy Discussion Papers No. 04–9, 2006), available at http://www.bos.frb.org/economics/ppdp/2004/ppdp0409.pdf.

[205] Yesim Yilmaz, Sonya Hoo, Matthew Nagowski, Kim Reuben & Robert Tannenwald, Measuring Fiscal Disparities Across the U.S. States: A Representative Revenue System/Representative Expenditure System Approach Fiscal Year 2002 (Urban Inst. Occasional Paper No. 74, 2006), available at http://www.urban.org/uploadedpdf/311384_fiscal_disparities.pdf.

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FIGURE 7
Property Tax Effort vs. Fiscal Capacity 2002[206]

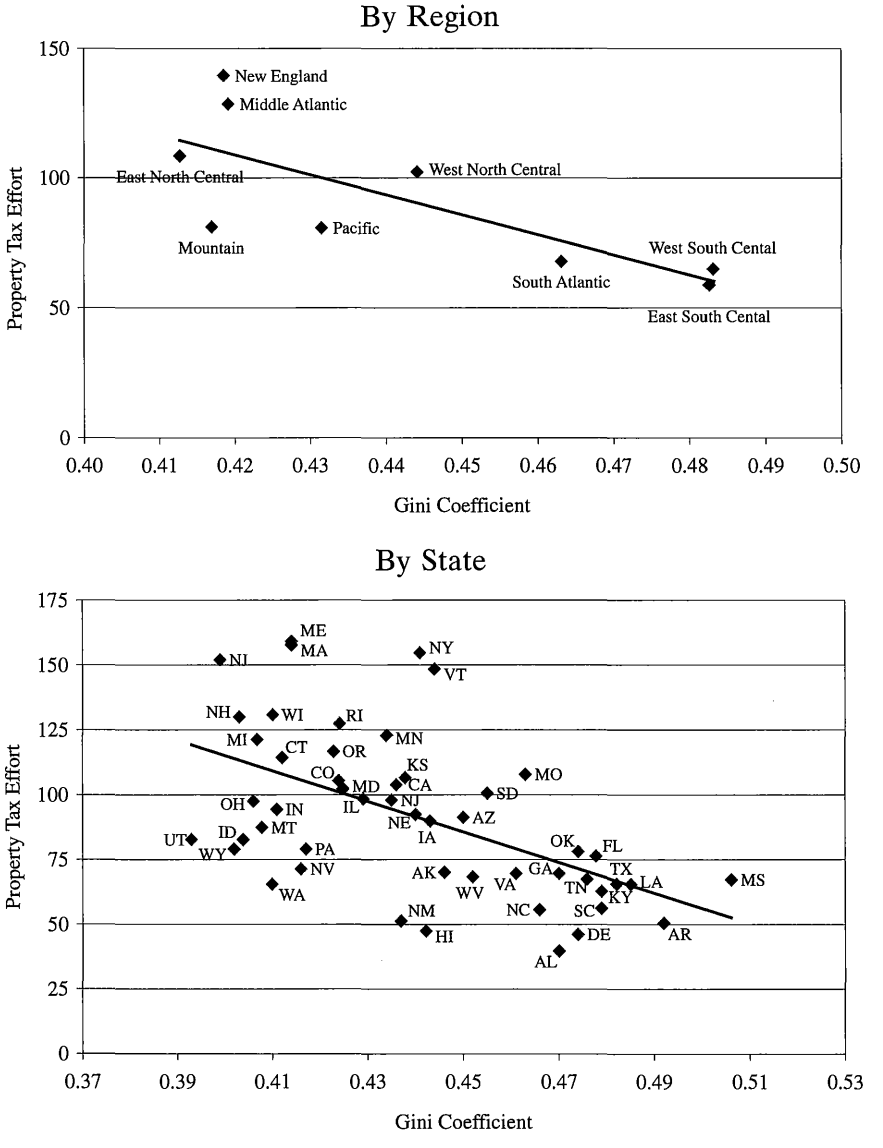


The data from the ACIR and other scholars also allows state-level and regional comparisons of the relationship between inequality and property tax effort over time. This might provide support for the proposition that those states (or regions) with greater equality might have higher property tax efforts than those states (or regions) with greater inequality. It also might highlight the effects of property tax limitations on limiting the autonomy of local government to impose higher levels of property taxes to fund local services.

206 Tannenwald & Turner, note 204; Yilmaz et al., note 205.

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FIGURE 8
Property Tax Effort vs. Gini Coefficient by Region and State, 1960[207]



For 1960, the correlation between economic inequality and property tax effort is quite strong for both regions and states (coefficients of –.579 for regions and –.312 for states).[208] But by 2002, there is no longer a meaningful correlation between economic inequality and

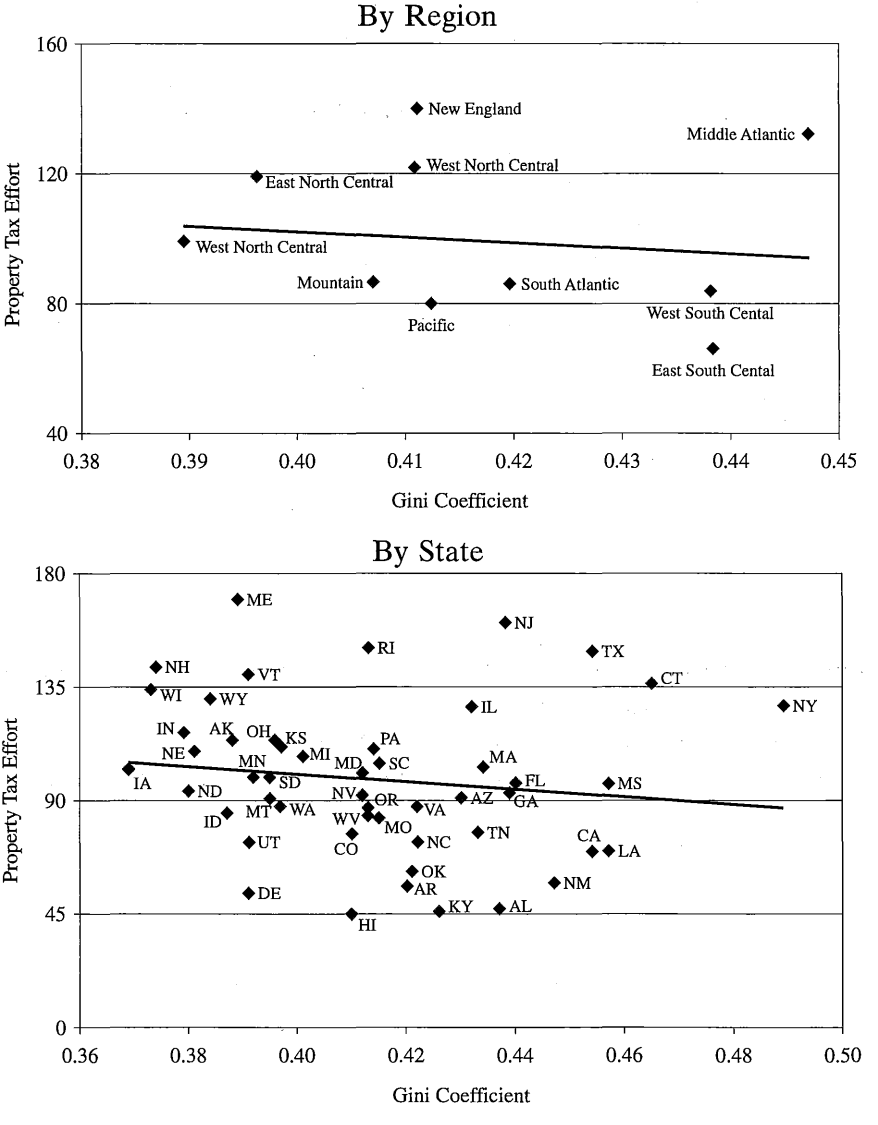
[207] ACIR, note 203; Al-Samarrie & Miller, note 198.

[208] Id.

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property tax efforts at either a region or state level (coefficient of –.016 for regions and –.017 for states).[209]

FIGURE 9
Property Tax Effort vs. Gini Coefficient by Region and State 2002[210]



209 Galbraith & Hale, note 198; Yilmaz et al., note 205.
210 Id.

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E. Observations on State and Local Governments from World War II to 2000

Since World War II, there have been several major changes in the taxing and spending patterns of local, state, and federal governments. The size of the federal government has increased relative to the size of state and local governments.[211]

While state tax revenues have stayed relatively stable during the post-World War II period (at about 20% of total taxes collected), local taxes have continued to decline on a relative percentage basis.[212] This also is reflected in the change in the revenue generated by specific tax instruments—as state income and sales tax revenues have generally increased and local property tax revenues have declined.[213]

The regional differences in taxing and spending have narrowed. By 2000, on a percentage basis, local government tax receipts account for about 10-12% of total receipts for all regions except for the Middle Atlantic region, where they account for about 16% of total receipts.[214] Looking at per capita dollar receipts tells a similar story for convergence, with the exception of the East South Central region ($689.00) having substantial lower local per capita tax receipts than the Middle Atlantic region ($1864).[215]

The property tax has declined in importance in the post-World War II period. Whether measured as a percentage of total local taxes, a percentage of own–source revenue for local governments, or a percentage of total local general revenue, the property tax plays a substantially smaller role in local finances than in prior periods. Over 40 states have adopted some type of limitations on the ability of local government to impose property taxes.[216] It is likely that these changes influence the relative fiscal powers of the different levels of governments and reduce local government autonomy.

Because of the increased use of intragovernmental transfers, local government expenditures are substantially higher than local government taxes, fees, and other receipts. State and federal transfers to local governments likely reduce taxing and spending disparities within states between poorer and richer areas as well as between more equal and less equal areas.

While inequality has increased substantially (especially over the last thirty years), the relative rankings of the different regions were rela-

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211 See text accompanying notes 191–94.

212 See Table 8.

213 See text accompanying notes 199–201.

214 See Table 9.

215 See Appendix, Table A1.

216 Brunori, note 200.

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tively stable. The major change during the post-war period is the substantial decline in the variation in levels of inequality among the regions.[217]

The relationship of economic inequality and different taxing patterns of local government appears to have changed over this time period. Through most of the post-World War II period, the inverse correlation between state-level economic inequality and per capita property taxes has continued.[218] Similarly, in the first part of this period, strong correlations existed between economic inequality and the relative role of property taxes as a portion of total state and local tax revenues, and the relative tax shares of different levels of government. The major change is the relationship of levels of inequality and the relative share of state tax receipts out of total government receipts. Beginning in the late 1950's, the greater the level of inequality, the higher the relative share of state taxes out of total local, state, and federal tax revenue.[219]

Those areas with higher levels of economic inequality also tended to collect a lower portion of their estimated property tax capacity than areas with lower levels of inequality. These estimates of relative property tax efforts, based on data from the Advisory Commission from Intergovernmental Relations,[220] provide support that those areas with greater equality were more willing to impose local taxes to fund local expenditures.

V. Conclusions and Observations

This Article takes a long-term perspective on the taxing and spending patterns of state and local governments. It sought first to highlight the variations in taxing and spending that began early in our country's history. Beginning with the colonial period, local governments had substantial authority in choosing the types and level of services to provide, as long as they could pay for them. And in most cases the tax instrument of choice was the property tax. Before the Civil War (indeed, before the Great Depression), the role of the federal government in providing support for education, health, and other local infrastructure improvements was relatively small. State and local governments chose different taxing and spending policies. Throughout this period, the level of per capita government receipts and expendi-

[217] See Table 10.

[218] See discussion in Section IV.D.

[219] Id.

[220] See text accompanying notes 203–10.

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ture at the local and state levels was five to six times higher in some regions compared to others.[221]

Between the Civil War and World War II, the relative role of federal, state, and local governments began to change. Most notably, the aggregate size of the government grew more than five–fold and the size of the federal government increased substantially relative to state and local governments.[222] With these changes came changes in the relative role of different tax instruments.[223] The income tax replaced the property tax as the primary tax on individuals. The adoption of the federal corporate income tax and the personal income tax, and the move to a mass income tax during World War II contributed to the shifting of taxing and spending powers from local governments to the federal government. The regional differences in taxing and spending patterns continued through this period, with some convergence toward the end of this period.[224] The regional variation in level of local receipts was still substantial in 1942, with the South Atlantic, East South Central, and West South Central per capita local receipts being only about half of the local receipts of the New England, Middle Atlantic, Mountain, and Pacific regions.[225]

After World War II, the federal government continued its dominant role relative to state and local governments.[226] In addition, state governments played a larger role in providing and funding of goods and services historically provided by local governments (most notably, primary and secondary education). The regional differences in taxing and spending have narrowed, and the relative use of tax instruments continued to change during this period.[227] Revenues from income taxes at the federal level, income and sales taxes at the state level increased relative to property taxes at the local level.[228]

This Article then sought to determine whether economic inequality is a useful factor in explaining these variations in taxing and spending patterns. Several factors other than economic inequality influence local taxing and spending decisions. Among the factors are relative levels of per capita income, composition of wealth, the level of urbanization and industrialization, and such demographic factors such as the age, religion, racial composition, and birthplace of the population. Ad-

221 See text accompanying notes 80–95.

222 See text accompanying notes 132–34.

223 See text accompanying notes 135–43.

224 See Table 9 & Appendix, Table A1.

225 See Appendix, Table A1.

226 See text accompanying notes 191–94.

227 See text accompanying notes 194–97.

228 See text accompanying notes 199–201.

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ditional factors are mobility and fiscal competition among local communities and states.

While the quality of the data on economic inequality does not allow for strong conclusions on the relationship of economic inequality and fiscal activities of state and local governments before the Civil War, it does appear that those areas with greater levels of equality had higher levels of common goods and services and, correspondingly, higher levels of state and local taxes.[229]

For the period after the Civil War, there appears to be a strong correlation between inequality and taxing and spending patterns. The studies by Goldin and Katz,[230] by Galor, Moav, and Vollrath, and by Ramcharan lend support to the proposition that economic inequality was a substantial factor in influencing local decisions as to the type and level of goods to acquire collectively and the willingness to impose property taxes to fund these activities.[231] Controlling for such factors as per capita income, level of urbanization, and racial composition of the population, these studies found that greater economic inequality was associated with lower levels of spending (particularly spending on primary and secondary education) at the state and local levels.

Examination of state level inequality and taxing patterns for the period between the Civil War and World War II lends further support to this finding. During this period there was a negative correlation between the level of inequality in a state and amount of per capita property taxes.[232] Similarly, those states that were more equal had higher percentages of local property taxes out of total state and local taxes, as well as relatively larger local governments (measured by relative tax receipts) as compared to state and federal governments.

For some time after World War II, the general patterns on the relative relationship between economic inequality and taxing and spending patterns continued. By the end of the 20th century, however, there no longer appears to be a meaningful correlation between the relationship between economic inequality and taxing and spending patterns of local and state governments.

In closing, I offer some possible explanations for the change in the relationship between economic inequality and taxing and spending patterns. One possible explanation for this change is the reduced fiscal role played by local governments. Local governments face substantial legal and political constraints on both taxes and expenditures.

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229 See text accompanying notes 117–20.

230 Goldin & Katz, note 164.

231 Id.; Galor et al., note 169; Ramcharan, note 3; see text accompanying notes 163–76.

232 See text accompanying notes 177–85.

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Property tax limitations in many states constrain local governments' ability to provide additional local goods and services. Various court decisions and state legislation require equalization (to various degrees) of school funding. In addition, political acceptability of the property tax, the primary fiscal instrument of local governments, has fallen substantially, both because of the visibility of the tax and because rapid changes in home prices often resulted in substantial increases in property tax liability (often, unrelated to any change in the level and quality of public services).

A second possible explanation is that the change in the relationship between economic inequality and taxing and spending patterns results from the convergence among the states and regions in relative levels of inequality through the 1970's and then the subsequent divergence in the 1980's. In particular, increases in the level of economic inequality among states in the New England and Middle Atlantic regions in the last part of the 20th century (states that have traditionally had large local and state governments) may have contributed to the substantial weakening of the correlation between economic inequality and taxing and spending patterns of state and local governments.

A third explanation is that patterns of inequality within states, in particularly with cities and counties, have changed within the last twenty or thirty years. In contrast to the small, relatively homogenous communities that constituted the bulk of local governments in the 18th and 19th centuries, within community heterogeneity has likely increased substantially. This increase in heterogeneity likely contributes to a convergence of taxing and spending patterns across communities.[233]

It may be that each of these explanations contributes to the current weak or nonexistent relationship between economic inequality and taxing and spending patterns of local and state governments. Clearly, the relative fiscal roles of local, state, and federal governments has changed dramatically since colonial times. And with those changes in the fiscal landscape, we have moved substantially from a world where local communities had the primary role in choosing the level and type of government services and the taxes to pay for them.

[233] For a review of evidence supporting this position, see Rhode & Strumpf, note 96, at 1672–74.

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APPENDIX

TABLE A1
Per Capita Receipts by Level of Government, 1932–2000, USD

1932	*Federal*	*State*	*Local*
New England	10	16	50
Middle Atlantic	22	16	53
East North Central	10	12	43
West North Central	5	12	37
South Atlantic	24	12	20
East South Central	4	9	15
West South Central	3	12	20
Mountain	3	15	35
Pacific	10	17	50
1942			
New England	106	40	49
Middle Atlantic	151	44	56
East North Central	123	41	35
West North Central	47	29	34
South Atlantic	89	28	16
East South Central	41	22	14
West South Central	42	28	18
Mountain	38	37	30
Pacific	89	56	39
1953			
New England	395	65	84
Middle Atlantic	645	61	92
East North Central	607	66	68
West North Central	313	61	70
South Atlantic	333	63	36
East South Central	204	51	28
West South Central	239	68	41
Mountain	270	77	62
Pacific	410	96	79
1959			
New England	412	90	121
Middle Atlantic	690	84	128
East North Central	551	85	93
West North Central	339	82	97
South Atlantic	333	87	56
East South Central	243	77	40
West South Central	262	92	62
Mountain	319	106	91
Pacific	427	123	130

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1980	*Federal*	*State*	*Local*
New England	1946	565	529
Middle Atlantic	2290	658	598
East North Central	2164	572	391
West North Central	1863	569	358
South Atlantic	1415	532	295
East South Central	1003	487	186
West South Central	1611	509	291
Mountain	1528	587	372
Pacific	1933	780	350
2000			
New England	9329	2456	1316
Middle Atlantic	7807	2076	1864
East North Central	7734	1947	1173
West North Central	7693	1923	1021
South Atlantic	6659	1710	1106
East South Central	4890	1562	689
West South Central	6540	1420	1039
Mountain	5724	1726	1024
Pacific	7560	2369	1063

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TABLE A2
Per Capita Property Tax by Region (1960–2000)[234]

	1960	*1970*	*1980*	*1990*	*2000*
New England	143.03	291.19	511.38	999.37	1351.56
Middle Atlantic	118.13	247.88	485.12	1017.11	1253.23
East North Central	118.24	218.94	409.74	757.74	992.00
West North Central	116.60	207.52	344.54	630.28	803.08
South Atlantic	32.90	58.98	120.04	260.00	577.47
East South Central	40.50	72.48	148.16	290.77	435.35
West South Central	67.79	120.41	262.24	560.21	757.77
Mountain	102.71	182.17	330.38	575.59	728.21
Pacific	138.60	300.51	348.81	701.82	799.25

Property Tax as a Percent of State and Local Revenue by Region (1960–2000)[235]

	1960	*1970*	*1980*	*1990*	*2000*
New England	.50	.45	.30	.24	.20
Middle Atlantic	.39	.39	.28	.24	.18
East North Central	.44	.30	.21	.15	.12
West North Central	.42	.34	.21	.17	.12
South Atlantic	.14	.10	.07	.07	.09
East South Central	.20	.14	.10	.08	.07
West South Central	.26	.24	.20	.18	.14
Mountain	.31	.35	.23	.17	.13
Pacific	.38	.44	.20	.17	.13

[234] Sources: Statistical Abstract of the United States 422 tbl.552 (1962), available at http://www2.census.gov/prod2/statcomp/documents/1962-01.pdf; Statistical Abstract of the United States 418 tbl.661 (1972), available at http://www2.census.gov/prod2/statcomp/documents/1972-01.pdf; Statistical Abstract of the United States 284 tbl.477 (1982), available at http://www2.census.gov/prod2/statcomp/documents/1982_83-01.pdf; Statistical Abstract of the United States 288 tbl.446, (2003), available at http://www.census.gov/prod/2004pubs/03statab/stlocgov.pdf.

[235] Id.

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