Public Debt, Ownership and Power
The Political Economy of Distribution and Redistribution

Sandy Brian Hager

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Abstract

This dissertation offers the first comprehensive historical examination of the political economy of US public debt ownership. Specifically, the study addresses the following questions: Who owns the US public debt? Is the distribution of federal government bonds concentrated in the hands of a specific group or is it widely held? And what if the identities of those who receive interest payments on government bonds are distinct from those who pay the taxes that finance the interest payments on the public debt? Does this mean that the public debt redistributes income from taxpayers to public creditors? Who ultimately bears the burden of financing the public debt?

Despite centuries of debate, political economists have failed to come to any consensus on even the most basic facts concerning ownership of the US public debt and its potential redistributive effects. Some claim that the public debt is heavily concentrated and that interest payments on government bonds redistribute income regressively from poor to rich. Others insist that the public debt has become very widely held and instead redistributes income progressively. The lack of consensus, I argue, boils down to both the empirical and theoretical problems that plague existing studies.

Empirically, only a handful of studies have attempted to map the ownership pattern of US federal government bonds, and even fewer have made efforts to measure the redistributive effects associated with a given ownership pattern. And to make matters worse, those few studies that do attempt to map the pattern of US public debt ownership

make little effort to *theorize* in any systematic way the distributive and redistributive dimensions of the public debt.

Anchored within a 'capital as power' theoretical framework, my purpose in this is to shed some much-needed light on the dynamics of distribution and redistribution that lie at the heart of the public debt. I show for the household and corporate sectors how over the past three decades, and especially in the context of the current crisis, the ownership of federal bonds and federal interest has become rapidly concentrated in the hands of dominant owners, the top 1% of households and the 2,500 largest corporations. Over the same period the federal income tax system has done little to progressively redistribute the federal interest income received by dominant owners. In this way, this dissertation argues that, since the early 1980s, the public debt has come to reinforce and augment the power of those at the very top of the hierarchy of social power.

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1 Introduction

> The public finances are one of the best starting points for an investigation of society, especially though not exclusively of its political life
>
> —Joseph Schumpeter[1]

The Questions

Who owns the US public debt? Is the distribution of federal government bonds concentrated in the hands of a specific group or is it widely held? If ownership of government bonds is concentrated, the flow of interest payments on those government bonds is also concentrated. And what if the identities of those who receive interest payments on government bonds are distinct from those who pay the taxes that finance the interest payments on the public debt? Does this mean that the public debt redistributes income from taxpayers to public creditors? Who ultimately bears the burden of financing the public debt?

As simple as these questions might sound, I argue in this study that political economists, despite centuries of debate, have given them unsatisfactory answers. Only a handful of studies have attempted to empirically map the ownership pattern of US federal government bonds, and even fewer have tried to measure the redistributive effects associated with a given ownership pattern.[2] To make matters worse, the handful of

[1] Schumpeter, J.A. 1918 [1991]. 'The Crisis of the Tax State' in R. Swedberg (ed), *The Economics and Sociology of Capitalism*, Princeton, NJ: Princeton University Press, p. 101.

[2] As we will see later this study, the poor empirical track record of existing studies may have to do in part with the paucity of disaggregate data on the ownership of the public debt.

empirical studies that do exist make little effort to *theorize* what I refer to throughout this study as the distributive and redistributive dynamics of the public indebtedness.

To clarify, I use the terms distribution and redistribution to refer to the public debt and tax system, respectively. Distribution in this study refers to the pattern of ownership of government bonds and the interest payments that flow from those ownership claims. Redistribution has to do specifically with the role of the tax system in modifying the pattern of public debt ownership. This is a narrow definition of redistribution, which is distinguished from the broader definition of redistribution as a *change* in distribution (if the top 1% of the population receives 20 percent of income in year t and that 30 percent in year $t+1$, it is common to say there has been a 10 percent upward redistribution of income from years t to $t+1$).

The empirical and theoretical shortcomings in the existing literature have led to ambiguities, such that political economists, whether 'mainstream' or 'critical', cannot agree on even the most basic facts, let alone their interpretation. Some claim that the public debt is heavily concentrated and that interest payments on government bonds redistribute income regressively from poor taxpayers to rich public creditors. Others insist that the public debt has become very widely held and instead redistributes income progressively. But given that existing studies lack any solid theoretical-empirical foundation, how are we to adjudicate between these competing claims?

My purpose in this study is to shed some much-needed light on the dynamics of distribution and redistribution that lie at the heart of the public debt. I suggest that the empirical and theoretical shortcomings in the existing literature can be traced to an

insufficient conceptualization of power. Few would deny that issues of distribution and redistribution – in asking 'who gets what?' and also 'who gets what at whose expense?' – are rooted in concerns over power. Yet these power dimensions are conspicuously absent in existing studies of US public debt ownership. And it is not at all certain that conventional approaches to political economy, which tend to sidestep the power relations of debt and credit in capitalist societies by treating them as a distortion or as a fiction, offer much theoretical guidance (Nitzan and Bichler 2009).

The Alternative

Theoretically, my approach builds upon a burgeoning body of literature that places power at the heart of the analysis and conceptualizes capitalism not as a mode of production/consumption, but as a mode of power (Nitzan and Bichler 2009; Di Muzio 2013; Hager 2012). According to this alternative 'capital as power' approach, capital is defined as capitalization: the discounting of future earning capacity into present value. This earning capacity, as we will see, is exclusively a matter of institutionalized power. Like any other asset, the value of a government bond is generated through discounting its risk-adjusted future earnings into present value. Following this logic, the public debt is not a 'fiction' as existing theories of capitalism would have us believe, but capital like any other capitalized asset. And like any other capital, the public debt, too, capitalizes power.

The interest payments and principle that flow to owners of government bonds are 'backed by' the government's powers of taxation and this backing means that

government bondholders own a share 'in the organized violence of society' (Nitzan and Bichler 2009: 294). Framed as a guiding hypothesis, the capital as power approach developed in this study proposes that the accumulation of ownership claims on the public debt by a particular group of bondholders represents the growing power of that group over society.

Crucially, the social power conferred by ownership is top-down, relative and dynamic. As a top-down process, the focus here is not on capital in general but on the dominant capitalists: the largest corporations and wealthy individuals at the center of the process of accumulation. As dominant capitalists augment and increase the market value of their ownership claims, they achieve differential accumulation and augment their power relative to other social groups. And as an inherently dynamic process, the way to gauge the trajectory of capitalist power is to map the relative changes in ownership over time.

These alternative theoretical propositions provide a conceptual basis for the development of alternative empirical methods and accounting techniques. A focus on relative or differential accumulation leads to the use of cut-off points that separate dominant capital from the wider population. A focus on the dynamic aspects of power leads, where possible, to the replacement of 'snapshots' of ownership data with long-term historical time-series.

Examining the US household and corporate sectors, my alternative theoretical-empirical analysis offers the first systematic effort to map the long-term and shorter-term historical dynamics of distribution and redistribution that lie at the heart of the public debt. I show for both sectors how over the past three decades, and especially in the

context of the current crisis, the ownership of federal bonds and federal interest has become rapidly concentrated in the hands of dominant owners, the top 1% of households and the 2,500 largest corporations. Over the same period the federal income tax system has done little to progressively redistribute the federal interest income received by dominant owners. In this way, this study argues that, since the early 1980s, the public debt has come to reinforce and augment the power of those at the very top of the social hierarchy.

Anchored within this alternative theory of capital as power, the exploratory research conducted in this study produces some of the key quantitative building blocks for mapping the power relations of US public indebtedness. Yet this anchoring of the research with the theoretical framework remains *partial*. To develop a more complete theory of 'public debt *as* power', more work must be done to outline the qualitative and other quantitative dimensions of power and how these relate to the quantitative map produced in this study. In the concluding chapter of this study I suggest several avenues for future research that will flesh out the theory.

The Synopsis

The analysis in this study builds up gradually chapter-by-chapter; to properly comprehend it the reader is asked to tackle the document in its entirety. In the remainder of this introductory chapter, I provide a synopsis of the argument as it unfolds through the remaining seven chapters.

Chapter Two sets the stage for the analysis by comprehensively surveying the existing literature on the distributive and redistributive dynamics of the US public debt. The chapter takes its point of departure in the work of the late nineteenth-century political economist Henry Carter Adams, who offered the first serious attempt to theorize and empirically map the pattern of US public debt ownership. In his empirical work, Adams (1887: 44) found the 'spectacle of a highly centralized public debt'. The ownership of which was dominated by a powerful 'bondholding class' that, in Adams's estimation, controlled the government much like dominant shareholders control a corporation. For Adams, the public debt reinforced class inequality between the majority of taxpayers who financed the interest payments on the public debt on the one hand, and the bondholding class that received the bulk of those interest payments on the other.

The chapter then goes on to survey the literature as it has evolved since Adams published his pioneering study. As we will see, the twists and turns in the debates about the distributive and redistributive dynamics of the public debt have been bound up with deeper transformations in the US political economy. But one thing remains constant: over the past century political economists have come to no consensus regarding these dynamics. There has been no agreement on the most rudimentary facts. Some insist that the public debt has become widely held in the twentieth century and redistributes income progressively, while others emphasize continuities with Adams's era and claim that ownership of the public debt is still heavily concentrated and redistributes income regressively. In short, political economists have failed to give any convincing portrayal,

let alone an explanation, of what has happened to the bondholding class that Adams theorized and mapped over a century ago.

The purpose of Chapter Three is to explain *why* political economists have failed to come to any consensus on even the most basic facts regarding the ownership of the public debt and its redistributive effects. The lack of consensus, I argue, is due to both empirical and theoretical problems that plague the existing literature. Empirically, the track record of the existing literature in mapping the disaggregate ownership of the public debt is, to put it mildly, patchy. And those few studies that do engage in empirical research offer little in the way of theoretical reflection on the subject matter. One crucial exception in this regard is the aforementioned work of Adams, whose theoretical-empirical framework drew inspiration from Marx and made implicit linkages between the ownership of the public debt and the exercise of power by the 'bondholding class'. Yet Adams makes no effort to systematically theorize these power dimensions and their relationship to concepts such as value, capital and state, which are foundational to political economy.

The linkages between distribution/redistribution and power have obvious intuitive appeal. But it is not at all clear whether conventional theories of political economy, both liberal and Marxist, can help us to integrate power into their frameworks in a way that would allow empirical research on the distributive and redistributive dynamics of the public debt to flourish. The remainder of Chapter Three outlines the difficulties that conventional frameworks have in explaining the power underpinnings of public indebtedness.

Chapter Four develops an alternative theoretical framework anchored within the notion of capital *as* power. This framework develops more explicitly and systematically the conceptual linkages between ownership and power in arguing that the institution of private ownership derives its very meaning from the principle of exclusion, which is itself a matter of organized power (Nitzan and Bichler 2009: 228). In contrast to the liberal and Marxist dual quantity theories of value, the power theory of value argues that the capitalist order has both quantitative and qualitative aspects. The quantitative architecture of capitalist power is denominated in universal units of price and governed by the process of capitalization: the discounting of risk-adjusted future earnings into present value. In terms of methodology, the linkages drawn between this quantitative architecture and the qualitative manifestations of power are inherently speculative and depend on our abilities to link the two together in a compelling, rigorous story.[3] Crucially, as a process of power, the accumulation of ownership titles is both dynamic and differential: the guiding objective of capitalists is to augment the capitalized value of their ownership titles *over time* and *relative to some average benchmark*. As a top-down approach, the power theory of capital as power is focused not on 'capital in general' but on the dominant capitalist owners at the center of the process of accumulation.

This alternative framework offers new theoretical-empirical insights into the distributive and redistributive dynamics of the public debt. The remainder of Chapter Four fleshes out the power-centered research methods that will be employed to explore

[3] Conventional dual quantity theories of value, like any other theory, are also speculative. Yet the main difference is that these value theories tend to deny or gloss over this speculative dimension, whereas capital as power makes it explicit.

the distributive and redistributive dynamics of the public debt. As we will see, a focus on the top-down nature of power leads us to examine the differential ownership share of dominant owners. A focus on the dynamic aspects of power leads, where possible, to a replacement of narrow 'snapshots' of ownership data with long-term historical time-series that map the ownership of the public debt over time. And taking into consideration some of the empirical limits on what we can know about the redistributive dynamics of the public debt leads us to focus on the role of the federal income tax system in redistributing the federal interest income received by dominant owners.

Before proceeding to map the distributive and redistributive dynamics of the public debt, Chapter Five provides a primer on the nature of government borrowing. Using Post Keynesian macro accounting techniques, the chapter examines the role of government borrowing in contemporary capitalist societies and systematically decomposes the sectoral ownership of the public debt. The purpose of this chapter is to provide a much-needed de-mystification of the public debt, which, since the birth of political economy in the eighteenth century, has been treated almost religiously. Overall, this primer provides the groundwork for the disaggregate analysis of public debt ownership and redistribution that follows in the remainder of the study.

Chapter Six offers the first systematic effort to historically map the distributive and redistributive dynamics of the public debt for the US household sector. Using the top 1% of households as an 'indirect proxy' for dominant capital (Bichler et al 2012: 5), my argument in this chapter unfolds in three-steps. First, I show how concentration in the ownership of the US public debt follows the general U-shaped pattern of wealth and

income inequality in the US over the past century. Second, I demonstrate how the federal income tax system has done little to progressively redistribute the federal interest income received by the top 1%. Third, I assess the claim made by orthodox Keynesians that the intra-governmental portion of the public debt serves the interests of ordinary Americans by analyzing the distribution of federal transfer payments. Recent data collected by the Congressional Budget Office indicate that the top 1% of households has received a paltry share of these transfer payments. But this small share, I argue, is no reason to celebrate intra-governmental debt as a progressive force. Once we dig deeper and examine the distribution of transfer payments within the bottom 99%, it becomes clear that over the past three decades intra-governmental debt has, if anything, intensified social inequality and polarization.

Overall, the research in Chapter Six leads me to conclude that over the past three decades the public debt has served as an institution of power working in the interests of the top 1%. Though much has changed since Adams's time, the research suggests that the powerful 'bondholding class' is alive and well in contemporary US capitalism.

Chapter Seven provides the first examination since Adams of the distributive and redistributive dynamics of the public debt for the corporate sector. Throughout history heterodox political economists have argued that ownership of the public debt has bolstered the power of dominant business groups (see Gottlieb 1956). Most famous in this regard was the work of Marx, who in various writings, made references to a powerful 'aristocracy of finance' in Western Europe and the United States that exercised power over state and society through the ownership and trading of government bonds.

Concentrated ownership of the public debt was combined with regressive taxation on 'the most necessary means of subsistence' (Marx 1867: 920). And this meant that the public debt redistributed income from the laboring masses to the financial aristocracy. Yet there has been almost no research into the linkages between the public debt and business power.

My research indicates that corporate sector holdings of the public debt have become rapidly concentrated in favor of the top 2,500 corporations over the past three decades and especially in the context of the current crisis. Though the federal income tax system is marginally progressive in the household context, my research Chapter Seven shows that it has been practically neutral for the corporate sector. In other words, federal income taxes have done nothing to stem the rapid concentration in the distribution of federal interest income. A sectoral analysis of the distribution of the public debt indicates that corporations classified within Finance, Insurance and Real Estate (FIRE), own a dominant and increasing share of the public debt. And digging deeper, an analysis of the sub-sectoral distribution of the public debt within FIRE reveals that institutional investors have replaced 'traditional' bank intermediaries as the dominant owners of the public debt.

Taken as a whole, the research in Chapter Seven suggests that Marx's notion of a powerful 'aristocracy of finance' at the heart of the public debt is not a relic confined to an earlier phase of capitalist development, but a very real feature of the contemporary US political economy.

Chapter Eight concludes the study by suggesting avenues for future research and by fleshing out some of the implications of the research findings. The bulk of the chapter

taps into recent debates that have emerged in light of the explosive rise in the US public debt. Underpinning these heated debates is an assumption that the US faces a 'debt dilemma' over whether it should bring its fiscal house in order through tax hikes on the rich or cuts to entitlement programs. At the heart of this debate is the question of which groups should bear the burden of debt repayment and fiscal adjustment.

As we will see, it is primarily thanks to the efforts of anti-austerity groups that issues of power and inequality have been forced into the current debate over the 'debt dilemma'. With stubbornly high unemployment and increasing income and wealth inequality, these groups advocate gradual debt reduction through tax hikes on the 'super-rich' that have gained the most from the political economic regime in place since the early 1980s. But in the end the anti-austerity groups do not go far enough.

As the research findings in this study suggest, power is not only central to the issue of public debt repayment, but also to the very existence of the public debt in the first place. And the public debt is not simply related to the issue of inequality. Instead, the public debt, through the power dynamics of ownership distribution and redistribution, directly contributes to income and wealth inequality in America. And once these power relations underpinning public indebtedness are brought to the fore, we gain a totally different understanding of America's 'debt dilemma'. Increases to the public debt without progressive redistributive policies are likely to aggravate an already explosive situation characterized by inequality, while decreases to the privately held portion of the public debt are likely to encounter resistance from dominant owners of the public debt.

This, I conclude, is America's *real* debt dilemma.

2 What Happened to the Bondholding Class?

A Survey

> The capitalists are in a very small minority, and any legislation repudiating in whole or in part the obligations of the bonds of the government would fall most severely upon widows, orphans and people of small capital…Out of the three million subscribers to our various public loans, over nine-tenths are of the class called *the people*.
>
> —Jay Cooke[4]

Introduction

Debates about the ownership of the public debt have raged in the US since the country gained independence from British rule. The original system of public debt, established in 1790 and based on Treasury Secretary Alexander Hamilton's *Report on Public Credit*, drew the ire of critics who argued that it created a 'new monied [sic] interest' that produced nothing and wished only for 'oppressive taxes' (Wright 2008: 153). Robert Livingston (1790: 4), an early opponent of the US system of public debt, claimed that only 0.025 percent of the US population owned government bonds. The inequalities in the ownership of the public debt, Livingston suggested, were a source of great social instability, as the taxes of the many would go to enrich the few public creditors (cf. Wright 2008: 162).

During the American Civil War (1861-1864) President Abraham Lincoln claimed that large increases in the public debt would create political and social unrest unless efforts

[4] Quoted in Macdonald (2003: 398; original emphasis).

were made to ensure that government bonds were widely distributed amongst the US population.[5] In 1865 Lincoln's successor, Andrew Johnson, suggested that the country had failed to widely distribute government bonds. In Johnson's view the Northern States had merely replaced their slave oligarchy with an aristocracy based on the ownership of the public debt (ibid: 393). Jay Cooke, a banker and government loan contractor during the Civil War, vehemently denied such claims.[6] According to Cooke, his campaigns to market government bonds to the masses had made large capitalists minority investors in the public debt. Attempts to repudiate the public debt would, Cooke proclaimed, bring great harm to all the widows, orphans and small-time savers across the US who had invested their meager savings in the public debt.

But it was only in the late nineteenth century that any concerted effort was made to theorize and empirically map the pattern of US public debt ownership. In 1887, Henry Carter Adams published a pioneering study that examined the 'concentration of bondholding interests' in the US. Focusing specifically on household and corporate sector holdings of federal government bonds, Adams (1887: 44) uncovered the 'spectacle of a highly centralized public debt'. The public creditors, according to Adams's assessment, formed a powerful 'bondholding class' that controlled the government much like dominant shareholders control a corporation. Adams (ibid: 41) went on to suggest that the public debt reinforced a strict class division between the majority whose burdensome

[5] The account in this paragraph relies on Macdonald (2003: 392-399).
[6] Cooke's role in financing the Civil War is told in Matthew Josephson's masterful history of US capitalism (53-58). It may have been that Cooke had Marx (1867: 940) in mind when he proclaimed that the Civil War had led to 'the creation of a finance aristocracy of the vilest type'.

taxes financed government debt servicing, and the bondholding class that received the tax-financed interest payments.

Over a century has passed since Adams produced his analysis. In that time, there has been plenty of heated debate about the pattern of US public debt ownership. Some emphasize continuities with Adams's era and claim that the public debt is still heavily concentrated and that interest payments on government bonds still redistribute income regressively from poor to rich. Others stress change and insist that the public debt has become widely held and that interest payments on government bonds now redistribute income progressively. The debate has become so polarized that contemporary political economists, whether 'mainstream' or 'critical', cannot agree on even the most basic facts concerning ownership of the US public debt and its redistributive effects. As a result, political economists have failed to give any convincing explanation of what has happened to the bondholding class that Adams theorized and mapped over a century ago.

In this chapter I survey the existing political economic literature on the distributive and redistributive dynamics of the US public debt. Focusing on some of the key contributions, I develop an historical account of the debate over the past century. The twists and turns in the debate, I suggest, are bound up with deeper transformations in the US political economy, which have brought in their wake changes in the thinking about, and also in the overall level of, public indebtedness. The purpose of this survey is not to exhaust everything written on the subject matter, but rather to highlight the lack of consensus regarding the actual pattern of public debt ownership and its redistributive effects. This survey sets the stage for Chapter Three, in which I dig deeper and attempt to

explain *why* political economists have faced such difficulties reaching a consensus on these issues.

The rest of the chapter will be organized as follows. First, I offer a detailed overview of Adams's theoretical and empirical analysis of the late nineteenth-century bondholding class. Second, I discuss the debates about the distributive and redistributive dynamics of the public debt that accompanied the rise of Keynesianism in the 1930s. Third, I examine changes in the nature of the debate in the postwar period. I argue that this period is noteworthy less for what was said about the distributive and redistributive dynamics of the public debt, and more for what was not said. Instead of debating whether the public debt redistributed wealth and income between classes or social groups, postwar liberals instead became embroiled in a debate about whether the public debt redistributed wealth and income between generations. Even postwar Marxists treated the distributive and redistributive effects of the public debt as little more than a historical curiosity. Fourth, I review the resurgence of debate about the distributive and redistributive dynamics of the public debt since the early 1980s. In conclusion, I set up the task for the next chapter, which will be to explain why political economists have such difficulties coming to consensus on even the most basic facts concerning the distributive and redistributive dynamics of the public debt.

H.C. Adams and the 'Science of Finance'

Since the founding of the American Republic, politicians, political economists, the media and ordinary citizens have fiercely debated the distributive and redistributive

consequences associated with public indebtedness. In the early years of the republic these sentiments were often based on political expediency rather than any systematic theory. Furthermore, there were no attempts to subject these claims about the distributive and redistributive dimensions of the public debt to any rigorous empirical scrutiny. With little data available on the distribution of the public debt, the arguments were backed up by little more than rumour and conjecture.

By the late-nineteenth century, however, the debate started to change. In his *Public Debts: An Essay in the Science of Finance*, Henry Carter Adams (1887) developed a coherent theoretical framework that analyzed the effects of public indebtedness on the class structure of capitalist societies. What is more, Adams sought to substantiate his theoretical claims with a careful empirical examination of US Census data from 1880. For the first time, the distributive and redistributive consequences of the US public debt were to be subjected to serious theoretical-empirical research.

Public Debt and Class Politics

Adams's contribution to the study of public indebtedness was shaped by developments that were unfolding in the latter half of the nineteenth century. In that period, the act of public borrowing had become a nearly universal feature of the global political economy. What had started as the exclusive practice of the commercial powers, such as Holland and England, had become an 'established fact' that was being adopted by advanced Western powers and imitated by societies in all corners of the world. The guiding

purpose of Adams's study was to provide an explanation for this unprecedented spread of the practice of public borrowing.

For Adams (1887: 7), successful systems of public borrowing, such as the one that developed in England in the seventeenth century, depended on two things. First, successful systems of public borrowing grew out of established money markets, which in turn depended on 'a somewhat advanced state of industrial development' and the emergence of a new propertied class, the capitalists, with surplus capital that could be loaned to the government (ibid: 7-8). Second, successful systems of public borrowing required that the government make an explicit guarantee against repudiation, and this guarantee was best secured by republics or 'by peoples possessing some form of constitutional government' (ibid: 8).

Adams (1887: 7-11) suggested that these two factors were inherently intertwined. Constitutional governments emerged out of the principle that people should be able to govern themselves (ibid: 9). But according to Adams (ibid: 9), '…the historical fact is that, in the attempt to realize this theory, the actual control of public affairs has fallen into the hands of those who possess property'. Public creditors that lent to government, Adams (ibid: 9) argued, therefore '…lend to a corporation controlled by themselves'. On the one hand, the new class of capitalists possessed surplus funds, and on the other, the government was in need of these funds to carry out wars. And the principles of constitutionalism had, according to Adams's assessment, emerged out of this historical symbiosis. The capitalists' decision to lend to the government was not based on

patriotism or any other sentiment; it was merely a sign '…that in some way the moneyed interest has captured the machinery of government' (ibid: 9).

Adams (1887: Chapter Three) went on to analyze the 'social tendencies' of public indebtedness, which he defined as the influence of public debt on class relations. In general, social tendencies could have two effects on class relations: they could change the existing class structure or they could serve to '…render permanent such classes as are already established' (ibid: 39). The social tendency of the public debt was, in Adams's view, only of the second variety (ibid: 39).

Large fortunes had indeed been amassed from trading in government bonds. But Adams (1887: 40) held that these fortunes were the result of poor financial management by the government and not the existence public debt *per se*. 'Men', Adams (ibid: 41) states unequivocally, 'hold bonds because they are rich, they do not become rich by holding bonds'. After all, Adams (ibid: 41) had argued that a strict class division, under which private property was sufficiently concentrated in the hands of the capitalist class, was one of the main prerequisites to the development of successful systems of public borrowing. All the emergence of the public debt does is render existing class relations permanent by dividing society into '…those who pay taxes for the support of the debt, and those who receive interest payments out of the proceeds of the taxes' (ibid: 41). In this way, the division between public creditors and taxpayers would mirror the class division in capitalism between propertied and property-less (see Ferguson 2001: 191). Adams never spells out who, in class terms, the taxpayers are that support the public debt,

though by definition Adams implies that the class identity of taxpayers is somehow distinct from the capitalist class of public creditors.

According to Adams (1887: 41), the bondholding class refers more to a particular set of interests that the capitalist class holds in relation to the public debt than to a specific group or 'fraction' of capitalists. Most importantly, the bondholding class of rich individuals and large corporations advocates the permanency of public borrowing, claiming that this permanency is essential to the economic wellbeing, or 'commercial interests', of the nation and to the stability of the national banking system (ibid: 42). In this way, Adams (ibid: 42-3) argues, the bondholding class tries to convince people that 'what proves to be of personal advantage must of necessity benefit the community at large'.

Mapping the US Bondholding Class

Ultimately, the social tendencies of the public debt would hinge on how the public debt was distributed. A highly concentrated public debt would confirm the existence of a powerful bondholding class. Adams set out to measure the 'concentration of bondholding interests' in the US. Luckily for Adams's purposes, data on the disaggregate pattern of public debt ownership had recently surfaced. In 1880, the U.S. Census published for the first time data on the ownership of the public debt, disaggregated by gender, by amounts held and by region.[7] Adams (1887: 44) analyzed extensively these census data and

[7] The 1880 US Census was an anomaly in this respect. Not only was the 1880 census the first to publish disaggregate data on the ownership of the US public debt, it was also the last to do so. These data are conspicuously absent from next decennial census in 1890. And the US Census Bureau has not bothered to collect these data ever since. The census data on the disaggregate ownership of the public debt captured not

uncovered the 'spectacle of a highly centralized public debt' for both the US household and corporate sectors.

The main 1880 census data cited by Adams (1887: 46) are reproduced in Table 2.1. The first column in the table divides the public creditors into investment classes based on the total amount they invested in the public debt. These classes range from class I, which includes investments of $50-$500, to class VIII, which includes investments exceeding $50,000. The next four columns provide data on the percentage of investors in each investment class and on the percentage held by the respective investment classes for both US individuals and US corporations.

Let's begin with the data on individual holdings of the public debt in columns 2 and 3. Though it represented only 1.4 percent of the total population of individual public creditors in 1880, the top investment class with investments exceeding $50,000 (class VIII), owned 48 percent of the individual holdings of the US public debt.[8] The unequal distribution of the US public debt becomes even more apparent when we divide the investment classes in half. Public creditors in classes V through VIII, those with investments exceeding $5,000, made up only 15 percent of the population of individual public creditors, and yet they owned 82 percent of the individual share of the public debt. Given the fact that the average annual per capita income in the US in 1880 is estimated at around $176 (Klein 2009), it could be safely assumed that only the wealthiest individuals had any significant ownership stake in the US public debt.

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only the attention of Adams, but also of the *New York Times*, which ran an article discussing these data (see Anonymous 1881).

[8] The total public debt in 1880 was $1.2 billion (Adams 1887: 44).

Table 2.1: The US Bondholding Class in 1880

1. Classes Designated by Amounts Held	**2. Number of Individual Holders** *(% of total number of individuals)*	**3. Amounts Held by Individuals** *(% of total held by individuals)*	**4. Number of Corporate Holders** *(% of total number of corporations)*	**5. Amounts Held by Corporations** *(% of total held by corporations)*
I. $50-$500	36	1.8	4	0.007
II. $500-$1,000	21	3	4	0.03
III. $1,000-$2,500	17	5	4	0.04
IV. $2,500-$5,000	12	8	10	0.3
V. $5,000-$10,000	7	9	13	0.8
VI. $10,000-$25,000	5	13	17	2
VII. $25,000-$50,000	1.8	12	15	4
VIII. Over $50,000	1.4	48	35	93

Note: Percentage values in columns may not total to 100 due to rounding.

Source: Adapted from Adams (1887: 46).

The data on corporate ownership of the US public debt in columns 4 and 5 of Table 2.1 are less clear. When it comes to corporate holdings, we would expect individual corporations to hold more government bonds than individuals, given that the size of the average corporate balance sheet normally outstrips that of the average household. Yet even with this discrepancy, the same 'classes' are used to differentiate the amounts held by individuals and corporations. As a result, the census data on corporate holdings tell us

very little about the relative ownership shares of large versus small corporations. Given average corporate holdings of around $22,500, we would expect that even fairly insignificant players would be included within the top investment class (class VIII). And with such a low cut off point, 35 percent of corporations make it into the top investment class (holdings exceeding $50,000). Still there is nothing within the data in Table 2.1 to suggest that the pattern of ownership concentration for the corporate sector differs significantly from that of individuals. The top class of owners may be 'diluted' by this low cut off point. Yet the fact that top corporate owners held around 93 percent of government bonds indicates a staggering pattern of ownership concentration.[9]

Overall, the census data cited by Adams appear to confirm his arguments about the public debt being concentrated in the hands of a 'bondholding class' of wealthy individuals and large corporations. In contrast to Jay Cooke, Adams (1887: 47) argued there was no reason to suggest that the public debt is 'a good thing because it permits easy and safe investments for the funds of those who are weak and dependent'. Given the level of concentration in the hands of society's most powerful elements, Adams (ibid: 48) held it 'ludicrous' to suggest that the public debt was maintained for the benefit of widows, orphans and other members of society in need.[10]

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[9] If corporate shares are widely held, then a broader base of the population may have indirect investments in the public debt. But Adams (1887: 47) suggests that there is nothing to suggest that corporate shares are more equitably distributed than government bonds (see Chapter Seven).

[10] In a recent study, Robert E. Wright (2008: 162) accuses Adams of underestimating '…for political gain the dispersion of the national debt as it then stood'. The main reason for the underestimation, Wright (ibid: 162; emphasis added) claims, is that Adams measured concentration only in 'registered' federal debt, 'which was probably more concentrated than ownership of the government's [unregistered] bearer bonds'. But alas, Wright does not make any attempt to estimate, even roughly, how unregistered bonds would alter the pattern of ownership concentration. Without even a rough estimate, one could just as easily accuse Wright of underestimating Adams's findings for his own 'political gain'.

In many ways, the timing of Adams's pioneering study was inopportune. In the late-nineteenth century, the level of US public debt had declined significantly. As Figure 2.1 indicates, the level of US public debt as a percentage of GDP fell from around 32 percent in the immediate post-Civil War period to 12.6 percent in 1887, the year Adams's study was published.

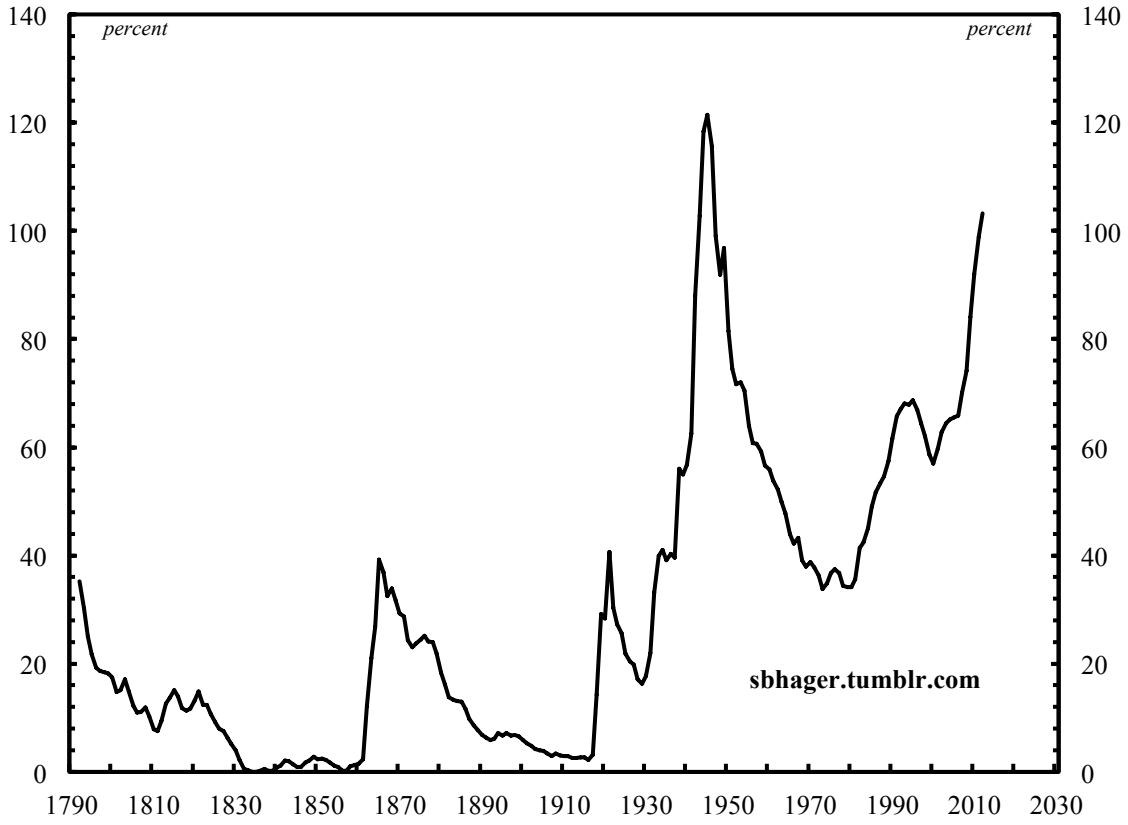

Figure 2.1 US Gross Public Debt as a Percentage of GDP

Note: Gross public debt includes intra-governmental debt (the debt held in government trust fund accounts) and 'debt held by the public'.

Source: From 1792-2010, Global Financial Data (series codes: for GDP, GDPUSA, for public debt USFYGFDA); from 2010-2012, Office of Management and Budget (Table 7.1)

With the public debt in decline, debates about its distributive and redistributive effects all but disappeared in the late nineteenth century (Hansen 1941: 113; Rowley 1987: 62). It was not until the first half of the twentieth century, which witnessed two world wars, the Great Depression and the largest expansion of public borrowing in US history, that the debates would resurface.

The Keynesian Revolution

The next wave of discussion would come with the rise of Keynesianism. With unemployment exceeding 20 percent in the US and Britain during the Great Depression, Keynes (1936: 27) and his followers were compelled to develop to a liberal alternative to the 'classical' theory of employment.[11] In the *General Theory*, Keynes (1936: 6) explains how liberal political economy had previously assumed that all unemployment was either frictional or voluntary. In the former case, unemployment was a short-lived phenomenon due to temporary mismatches of demand and supply in isolated markets, while in the latter case it was due to workers demanding wages higher than their marginal productivity (ibid: 6). In the long run, however, there was simply no room for chronic involuntary unemployment within the classical framework. The classical liberal view elevated the market to a self-regulating mechanism governed by Say's Law, which Keynes (ibid: 18) summarized as 'supply creates its own demand'. This meant that in the long run, aggregate supply and aggregate demand would reach an equilibrium point at full employment.

[11] Keynes (1936: 3) used the blanket term 'classical' to refer to both classical and neoclassical thinkers.

The situation in the 1930s flew in the face of the classical explanation. Unemployment was proving to be stubbornly persistent rather than temporary and that persistence remained, at least in the US, even in the context of *declining* wages and unemployed workers *willing but unable* to find work at any wage (Blaug 1997: 643). For the most part, Keynes argued, the unemployment of the 1930s was not frictional or voluntary, but *involuntary*. And involuntary unemployment, it followed, was to be understood as a problem of 'effective demand'. According to Keynes, the aggregate supply of goods and services willingly supplied by capitalists could, and often did, equal aggregate demand at an equilibrium point *below* full employment. As such, Keynes argued that active government intervention was needed in order to combat involuntary unemployment. Expansionary government spending would serve as a compensatory mechanism filling in for the lull in effective aggregate demand in the private sector.

In providing the first systematic theoretical justification for active government intervention from within the liberal tradition, Keynes and his followers would need to provide a convincing alternative to the liberal faith in the doctrine of sound finance, which called for balanced budgets and minimal government borrowing.[12] In other words, Keynesians would have to develop a framework that determined how the government would finance its expenditures in a way that would most powerfully boost aggregate demand while minimizing the negative side effects that the dogma of sound finance feared. This challenge involved demonstrating how the public debt, once used to fund

[12] Keynes (1925) himself was somewhat ambivalent in his allegiance to liberalism and this ambivalence is reflected in his theoretical framework. Throughout this study I argue that Keynes falls within the liberal tradition insofar as he tacitly accepted – or at best never provided a coherent alternative to – neoclassical thinking save for the crucial exception of Say's Law.

war making – and in the latter half of the nineteenth century, also to fund public works projects – could be used as an effective tool of macroeconomic management (Gottlieb 1956: 266; Hansen 1941: 138). Keynes left it to his followers to flesh out the mechanics of how government policy would be used to achieve stability (Burkhead 1954: 207). And in the 1940s, the most prominent early Keynesians, Alvin Hansen and Abba Lerner, took up the task of re-thinking the role of the public debt within capitalist societies.

'We Owe it to Ourselves'

The views of Keynesian theorists of the public debt are diverse (Burkhead 1954: 206-10; Lerner 1943: 43-4). Yet the kernel that unites the arguments of Hansen and Lerner and, in turn, provides the basis for a Keynesian critique of the sound finance doctrine, is that the public debt differs fundamentally from private debt (Hansen and Greer 1942: 491; Lerner 1948: 255).

For private individuals and businesses, success or failure is determined by the principles of private accounting and the primary benchmark for success is net wealth, which is calculated by subtracting debts from assets (Lerner 1948: 255). In the private sphere, Lerner (ibid: 255) proclaims, 'Indebtedness is impoverishment' and all of the traditional rules of sound finance, to minimize indebtedness, to keep debt within a sustainable ratio to net income and to balance the budget, formed '…an eminently well-established rule of private prudence'. Private debt, Lerner (ibid: 255) maintains, is restricted by the principles of sound finance because it is *external* to the debtor. Any private individual or group who owes money to another private individual or group is

burdened by interest payments on their debt because they involve an external transfer of income from one entity (the debtor) to another entity (the creditor).

In contrast, Keynesian theorists argued that the success or failure of the government should not be subjected to the same principles as private accounting (Dillard 1948: 105). According to Lerner (1943: 39), government policy actions 'shall all be undertaken with an eye only to the results of these actions on the economy and not to any established traditional doctrine about what is sound or unsound'. The benchmark of success for the government was whether its policies were successful in creating non-inflationary full employment. So long as non-inflationary full employment was achieved and maintained, the outstanding level of public debt was inconsequential.

The reason, Keynesians argued, was the public debt was *internal*. When viewed in aggregate macroeconomic terms, the income transferred from taxpayers to public creditors in the form of interest payments flows internally within the same entity – the national economy.[13] In aggregate accounting terms, one person's asset is another person's liability and so in the aggregate macro-economy the two cancel each other out. As Lerner (ibid: 256) explains, an internally held public debt involves no external creditor: 'we owe it to ourselves'.

[13] Keynesians point out that the public debt held by foreigners is an external form of debt (Hansen and Greer 1942: 492; Lerner 1948: 256). In this case the interest payments constitute a transfer of income from one entity (the borrowing government) to an external entity (a foreign citizen or nation). In the case of foreign held public debt, the rules of sound finance apply.

'We' ≠ 'Ourselves'

In the aggregate, Keynesians argued that the public debt was not subject to any pre-defined limits, but conceded that, in the disaggregate, there were potential threats that accompanied a rapidly growing public debt. One of the potential dark undersides of a rapidly growing public debt was the effect it had on the distribution of income and wealth. Lerner (1948: 260) admits that once we start to disaggregate the national macro-economy, '"we" does not consist of the same people as "ourselves"'. If the identity of bondholders is distinct from the identity of taxpayers, then the public debt will redistribute income from the latter to the former.

Both Hansen (1941: 174) and Lerner (1948: 260-1) were keenly aware of the negative effects that a rapidly growing public debt might have on distribution. Hansen (1941: 179), for example, argued that lower and middle class investors could invest in the public debt in the event of small, gradual increases in the public debt and that this would not present any regressive effects on distribution. But he went on to suggest that the rich would disproportionately purchase government bonds in the event of large increases in the public debt, and that this process would only serve to intensify existing inequality. The negative effects of public debt on the distribution of wealth were in Hansen's (ibid: 179) view '…the most fundamental objection that can be raised against financing mainly by borrowing'.[14]

[14] Even dominant capitalists during this period were attuned to the distributive and redistributive dynamics of a large public debt. According to Winthrop Aldrich (1943: 122), Chairman of Chase National Bank: 'If a public debt is widely distributed among all income groups in the community, a larger number of people will acquire conscious personal interest in government fiscal policy. This is as it should be in a democracy.

Early Keynesian theorists of the public debt were uncomfortable with the idea that government borrowing might have such adverse effects on the distribution of wealth and income. Although this point is never made explicit in the work of Hansen or Lerner, from a Keynesian perspective any regressive effects of a growing public debt on distribution would only aggravate the deficiency of 'effective demand'. The so-called 'marginal propensity to consume' was, after all, much higher for those with lower incomes, and a pattern of distribution skewed towards top earners would, if unequal enough, eventually undermine, rather than enhance, the much vaunted 'multiplier effect' (Dillard 1948: 102-3; Brown 2004). These dynamics, if pushed far enough, would eventually undermine the government's ability to engage in counter-cyclical deficit spending.

Though they recognized the potential distributive and redistributive dynamics of the public debt, the early Keynesians did not believe that these dynamics were of much practical concern. Hansen and Greer (1942: 497) declared unequivocally that the distribution of government bonds in the 1940s was more equitable than at any other point in history, and that, as a result, it is 'not true that the wealth represented by the [federal] bonds is mainly concentrated in the hands of a relatively few of the very rich'. Wide swaths of the population, Hansen (1941: 179) went on to argue, benefitted indirectly from the public debt through their stake in 'institutional thrift institutions' such as life insurance, savings banks and social security trust funds, which held government bonds. Furthermore, both Hansen (1941: 181) and Lerner (1948: 261) argued that the negative effects of the public debt on distribution would, within certain limits, be a reasonable

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Moreover, if the debt is widely distributed, political controversies between bondholders and non-bondholders are not likely to arise' (see also Lasdon 1942).

trade-off for the attainment of full employment. Finally, both Hansen (1941: 179) and Lerner (1948: 261) were confident that any lingering distributive inequality created by the public debt could be offset through progressive taxation.

Enter the Critics

Neither Hansen nor Lerner offered any compelling evidence to back up their assertions about the distributive and redistributive dynamics of the public debt. This void left the issue unsettled and opened the way for critics who questioned the feasibility of the Keynesian approaches to public borrowing. Most of the hostility came from more free market-oriented liberals.

The University of Chicago's Harold Moulton (1943: 59), for example, attacked Hansen for failing to provide convincing data to back up his claim that the public debt had become more widely held, though Moulton himself offered no disaggregated ownership data of his own. Instead, Moulton (ibid: 59-60) mentions how nearly 40 percent of the public debt is held by commercial banks that, he claimed, serve the interests of big business and 'individuals of substantial means'. Moulton's evidence was just as fuzzy as Hansen's, but with both sides failing to produce any detailed data on the disaggregate ownership pattern, his claim was enough to bring into doubt some of the Keynesian arguments about the public debt. Meanwhile the Austrian School economist Albert Hahn (1949: 18) accepted the Keynesian claim that the public debt had become more widely held and taxation more progressive. But Hahn (ibid: 18) argued that this dynamic of progressive redistribution would have devastating consequences for capitalist

societies because it would transfer wealth from 'productive' entrepreneurs to the 'unproductive' state, stifling risk taking, innovation and entrepreneurship.

In the 1940s, the debate raged back and forth between those who claimed that the public debt was highly concentrated and those who claimed that it was widely held (Reinhardt 1945; Harris 1947). Yet as one commentator put it, when it came to the ownership of the public debt, there was 'rarely […] any substantive evidence offered for conclusions reached' (Cohen 1951: 267). In the first book-length study of Keynesian views on the public debt, Seymour Harris (1947: 180) was forced to concede that 'available information on distribution of holdings of government securities is scanty and scattered'.

Keynesian Vindication

Things started to change, if only modestly, very early in the postwar period. In the early 1950s, a pair of empirical studies surfaced, both of which appeared to corroborate the arguments of Hansen and Lerner. In a study based on his PhD dissertation, Donald Miller (1950: 134-5) found that, for 1945, just over 5.3 percent of US households received almost 60 percent of the total household share of interest payments on federal bonds. Yet Miller (ibid: 134-5) also found that the share of federal taxes paid and the share of federal interest income received by the top income earners in the US was more or less equal at around 60 percent. This led Miller (ibid: 142) to claim that the US public debt was not an important 'redistributive force'. In a short article, Jacob Cohen (1951: 267) used rough estimates to gauge the distribution of federal interest and federal income taxes; he

declared that, for 1946, the US public debt actually had a '…distributional effect in favor of lower-income groups'.

Miller's research suggested that ownership of the public debt was still highly concentrated, but that the tax structure was sufficiently progressive to ensure that what the rich received in federal interest payments was matched by what they gave in federal taxes. As a result, Miller's research appeared to support the claims of Hansen and Lerner that any lingering inequalities in public debt ownership would be offset through a progressive tax system. Federal taxes had, it seemed, come to neutralize the regressive redistributive dynamics of the public debt. The class conflict that pitted rich public creditors against poor taxpayers no longer seemed clear-cut. And in the immediate postwar period, the bondholding class did seem to be a relic of the nineteenth century (Hansen and Greer 1942: 497).

From Classes to Generations

Later in the postwar period, the debates concerning distributive and redistributive effects once again faded into the background. This ebbing of the debates in the postwar period, much like in the late nineteenth century, proceeded alongside substantial decreases in the public debt (see Figure 2.1). Aside from various studies of wealth and income inequality in general, which contain only traces of data on the ownership of government bonds, there were no stand-alone studies of the distributive and redistributive dynamics of the public debt for the period from the 1950s through the 1970s (Lampman 1962; Smith 1974).

Liberal political economists continued to debate whether the public debt had redistributive effects. But instead of arguing about whether the public debt redistributed income between classes and social groups in the here and now, liberals became embroiled in a protracted dispute over whether the public debt redistributed income between generations (see Ferguson 1964).

Children and Grandchildren

The rather esoteric debates centered on the temporality of public debt repayment and whether the 'burden' of repayment could be shifted to future generations. Keynesian theorists of the public debt more or less dismissed the entire thrust of these debates. They were adamant in suggesting that any burden or sacrifice associated with public borrowing must be borne by the current generation. According to the Keynesian argument, the 'real' burden of government expenditures, whether financed by taxation or borrowing, is created from the transfer of current purchasing power from the private to the public sector (Hansen and Greer 1942: 491; Lerner 1948; 256; Buchanan 1958: 6).

According to the Keynesian argument, public borrowing does shift the repayment of government expenditures forward. But in aggregate terms, an internally held public debt does not create a future burden, as the tax bill of future taxpayers to service the debt is cancelled out by the interest income that is received by future bondholders (Lerner 1948: 256). In other words, the drain of purchasing power from taxpayers is cancelled out by the increase in the purchasing power of bondholders. For Keynesians, the problem was

not that the public debt created an aggregate burden, but that it could, as we have already seen, potentially aggravate existing inequalities in the distribution of wealth and income.

The Keynesian denial of any 'future burden' of public indebtedness came under close scrutiny from James Buchanan, the founding father of the 'public choice' school of political economy. Expounding an alternative set of 'principles', Buchanan attacked the logical foundations of Keynesian theories of the public debt. The bulk of Buchanan's critique was focused precisely on the issue of whether the public debt placed a burden on future generations. Buchanan (1958: 33) defines the future generation as '…any individuals living in any time period following that in which the debt is created'. As a result, Buchanan is not concerned per se with the specific burden borne by children or grandchildren, but with whether '…the debt burden can be postponed' (ibid: 34). And it is on the issue of the postponement of the burden that Buchanan claimed to expose some of the key fallacies of Keynesian theories of the public debt.

Buchanan first sets his sights on attacking the Keynesian postulate that any 'burden' or 'sacrifice' associated with the public debt is borne by the current generation in the form of lost purchasing power. In liberal capitalist societies, Buchanan says, exchange is voluntary and is based on the 'mutuality of advantage' for both sides of the transaction (1958: 34). One who purchases a government bond does so voluntarily, and is 'moving to a preferred position on his utility surface by doing so' (ibid: 34-5). This voluntary – but temporary – exchange of command over current resources merely shifts these resources from the private to the public sphere. No sacrifice takes place because the utility-

maximizing bondholder is shifting the time preference of their income stream to give them future command over resources (ibid: 39).

Utility and Subjective Cost

This critique of the Keynesian location of the burden of public indebtedness points at what Buchanan argued to be the major shortcoming of Keynesian theory: its privileging of macroeconomic aggregates over individual utilities. Buchanan (1958: 35) argues that the organic or monolithic conception of the state at the heart of Keynesianism is completely at odds with the principles of liberal democratic societies 'whose social philosophy lies in the individualistic and utilitarian tradition' (ibid: 35-6). In place of the monolithic state, Buchanan suggests that the individual/family needs to be made the 'basic philosophical entity' of liberal society (ibid: 36). Thus for Buchanan, the individual must form the focus of any attempt to locate the burden of public indebtedness. And in place of the 'sacrifice' arguments, which derive from the 'abstinence' theories of profit of the late classical writers, Buchanan (ibid: 37-8) shifts the focus to individual choice and (subjective) opportunity cost, which claims that prices are determined by the 'marginal productivity' of resources in alternative uses.

Based on this alternative utility/cost analysis, Buchanan identifies what he sees as the true burden of public debt. Buchanan argues that the 'real' burden of the public debt is not borne by the public creditor, who, as was already mentioned, is engaged in a voluntary, utility-maximizing, exchange. The burden is also not located with the current taxpayer, who escapes taxation when a government decides to finance its projects with

debt. The locus of the problem is that debt-financed public projects are *inferior* to private projects. If we assume for a moment that the debt-financed public project is inferior to the point of being entirely wasteful, then Buchanan (ibid: 40) argues that the burden of public indebtedness can only lie with the future taxpayer who: (1) must transfer funds to the bondholder, and (2) has no productive asset to offset their 'genuine sacrifice'.

It should be stressed that the argument outlined thus far has to do with the *gross* burden on future taxpayers. In Buchanan's (1958: 40) words: 'If the debt is created for productive public expenditure, the benefits to the future taxpayer must, of course, be compared with the burden so that, on balance, he may suffer a net benefit or net burden'. This recognition means that a more inclusive conception of the burden, incorporating both gross and net aspects, hinges on the opportunity cost, or *relative productivity* of public expenditure. The future taxpayer is the final 'purchaser' of public goods and services 'whether he is a party to the decision or not' (ibid: 42). Since the future taxpayer is the only one to bear a burden, it is only their sacrifice 'which is offset, if at all, by the income yielded by the public investment of resources made possible by the debt' (ibid: 42).

According to Buchanan, the logic of his argument held up for full employment, as well as for depression. In the context of a depression, says Buchanan (1958: 125), Keynesians hold that the government is purchasing the services of unemployed private resources, so no 'real' burden of transfer needs to take place. Since there is no 'real' cost associated with public expenditure in the context of a depression, debt-financed public

projects are always justified regardless of their productivity (so long as that productivity is not negative) (Dillard 1948: 103).

Buchanan (1958: 133) rejects this view on methodological grounds. The Keynesian argument, he argues, justifies public expenditure by comparing it with the alternative of taking no action at all. For Buchanan, this is not the relevant comparison: what is relevant is comparing debt-financed government expenditures with other financing options. In the context of depression it is much more efficient for government to secure funds through currency creation than through interest-bearing debt. The reason is that currency creation is an inflationary policy that increases private purchasing power, while the issuance of interest-bearing debt is a deflationary policy that reduces private purchasing power (ibid: 145). Relative to the currency creation alternative, debt issuance therefore involves unnecessary real costs and a sacrifice of individual utilities. Even with unemployed resources these costs are inevitably shifted to future generations (ibid: 126-7). The relevant comparison, so the argument goes, is not between debt issue and doing nothing, but between debt issue and currency issue. The latter places a burden on the current generation through the 'inflation tax', while the former shifts the burden to future generations.

Ricardian Equivalence

Framed as a set of abstract logical principles, Buchanan's arguments unfold through the development of various propositions and caveats. One of the most important caveats introduced by Buchanan has to do with the behavior of the current generation to public

borrowing. As Buchanan (1958: 44) acknowledges, his arguments about the location of the burden of public debt apply only so long as the current generation does not fully discount the value of future interest payments.

Elaborating on an off-the-cuff remark made by David Ricardo (1820: 186), Buchanan held that if taxpayers correctly anticipate their future tax burden needed to service the public debt by writing down the value of their capital assets, public borrowing and taxation would be equivalent forms of financing. This set of assumptions, which hold, one must note, only if the current taxpayers are blessed with perfect foresight and altruism towards future generations, leads Buchanan to modify his critique of Keynesianism. The 'real' burden of public debt will only be shifted forward in time if the current generation of taxpayers fails to 'currently anticipate their own or their heirs' roles as future taxpayers, and take action to discount future tax payments into reductions of present capital values' (ibid: 46).

Buchanan (1958: 36) readily conceded that this caveat was based on an 'extremely restrictive' set of assumptions. Even Ricardo, who first recognized the hypothetical equivalence of borrowing and taxation, expressed doubts about its empirical validity (Ricardo 1817: 247; O'Driscoll 1977). These doubts, however, did not stop others from contemplating the equivalence of public borrowing and taxation. And in the 1970s, a dispute broke out over what came to be known as 'Ricardian equivalence theorem'.

In addition to formalizing the mathematics of the Ricardian equivalence theorem (RET), Robert Barro (1974; 1979) fleshed out its logic and assumptions and explored its implications for government policy making. Barro (1974: 1095-6) begins his analysis by

claiming that existing theories of the public debt operate under the assumption that the private sector perceives government bonds as net wealth. According to this logic, an investor purchasing $20,000 in Treasury bonds will perceive that these holdings represent $20,000 in wealth and boost their spending based on this perception (Cowen 2011).

Yet according to the RET this perception is illusory because the current asset (the Treasury bond) is offset by a future tax liability that may fall on the bondholder (Barro 1974: 1097; Cowen 2011). As long as we assume perfect foresight, perfect capital markets, intergenerational altruism and infinite planning horizons, any rational individual will recognize that the interest payments on government bonds will eventually be offset by the future tax liabilities needed to service the debt. In response to a government debt issue, rational individuals will fully discount the value of their bond holdings to save the exact amount needed for future tax payments. There will be no change in (perceived) aggregate wealth and no increase in private consumption. And in this way, borrowing and taxation would represent equivalent forms of financing government expenditures in the sense that the current generation would bear the burden of both financing methods.

The Three-Ringed Circus

Postwar liberals thus found themselves in what Karen Vaughn and Richard Wagner (1992: 37) have described as a 'three-ringed circus': a debate involving three different theoretical approaches that could find little common ground when it came to the inter-generational redistributive effects of the public debt. The growing fixation of liberal political economists on the inter-generational redistributive effects of the public debt had

two main consequences. First, it placed the doctrine of 'sound' finance, which had come under sustained attack from Keynesians, back on seemingly firm footing. For Buchanan, democratic societies had an in-built bias towards debt financing and this bias, he argues, unfairly shifts the real burden of public debt forward in time.[15] This unfair bias could only be corrected by placing strict limits on when public borrowing could take place. RET lent further credence to sound finance doctrine. If the decisions of perfectly rational and utility-maximizing individuals made borrowing equivalent to taxation, then why try to engage in specifically *debt-financed* counter-cyclical spending in the first place?

The second consequence of the generational debates was to completely remove class conflict from the analysis of the public debt.[16] Postwar theorists of the public debt debated whether future taxpayers bear the burden of public debt repayment, but it is never clear precisely *who* these future taxpayers are. By shifting the terms of the debate towards generations, more free market-oriented liberals such as Buchanan were able to purge the debates of any uncomfortable talk about the redistributive effects of the public debt between classes. At the same time, immersed in a debate about generations, Keynesians were let off the hook from having to defend their ideas concerning the class redistributive effects of public indebtedness.

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[15] The in-built bias towards debt-financed spending is supposedly strong in democratic societies because the self-interested (non-Ricardian) individual is free to choose the fiscal policy action that will maximize their individual utility (i.e. debt issuance over taxation), passing on the burden of taxation to future generations (Buchanan 1958: 157).

[16] Buchanan (1958: 106-7) claims to follow the 'classical' theory of public debt, which he claims was formulated by C.F. Bastable, P. Leroy-Beaulieu and H.C. Adams in the mid-nineteenth century. Buchanan cites a passage in which Adams criticizes the 'sacrifice' view of the burden of public indebtedness and claims this was Adams's 'theory' of the public debt. But Buchanan completely glosses over Adams's much more extensive arguments concerning the class-based dynamics of public indebtedness.

The Marxist Retreat

Surprisingly, even postwar Marxists, who are otherwise attuned to issues of class, treated the distributive and redistributive effects of the public debt as little more than a historical curiosity.[17] In his study *The Fiscal Crisis of the State*, the Monopoly Capital school's James O'Connor (1973: 188-96) dedicates less than ten of 250 pages to discussing various forms of government debt (federal, state and local). Following Marx, O'Connor (ibid: 188-9) argued that the US public debt in the eighteenth and nineteenth centuries gave rise to an 'aristocracy of finance'; a powerful group of banks and other financial institutions that not only traded and distributed government bonds, but who were also the dominant creditors to governments (see footnote 6).

According to O'Connor (1973: 190), during this earlier era of US history 'the control of the national treasury was placed in the hands of the commercial and banking interests which owned the debt'. Assessing the situation at the tail end of the postwar era, O'Connor (ibid: 190-1) claimed that the 'aristocracy of finance' was 'still very powerful', but that it failed to wield the same influence over the state that it did in the earliest phase of US capitalist development. O'Connor (ibid: 191) argued that in the postwar era the US state had achieved 'relative autonomy' from its powerful creditors, and an important reason for this was that the federal government started to issue special 'intra-governmental' debt that allowed it to borrow from itself.[18] With the level of public debt

[17] This neglect is evidence even in the celebrated works of postwar Marxist state theorists. Ralph Miliband (1969) makes no mention of the public debt in *The State in Capitalist Society*, nor does Nicos Poulantzas (1973) in *Political Power and Social Classes*.

[18] As we will see in Chapter Five, the idea that the government 'borrows from itself' by issuing intra-governmental debt is based on a misunderstanding of government trust fund accounting.

in decline during the postwar period (see Figure 2.1), the postwar aristocracy of finance instead shifted its focus towards lending in the rapidly expanding markets for private business and consumer debt (ibid: 190).

By the 1970s, issues concerning the distributive and redistributive dynamics of the public debt no longer seemed relevant. Liberals had completely transformed the debate and were now fixated on the inter-generational redistributive effects of the public debt. Meanwhile, the linkage between the public debt and the 'aristocracy of finance' no longer captivated postwar Marxists as it did Marx. The vision of a powerful bondholding class, and the class conflict between the bondholding class and the masses of taxpayers, seemed completely out of touch with the postwar realities.

Resurgence

Today, and within mainstream economics, theorists of the public debt are still preoccupied with debating inter-generational redistribution (see Elmendorf and Mankiw 1999; Cochrane 2011). But in the marginalized corners of political economy, talk about the class dimensions of public indebtedness has made a modest comeback. Apart from a brief downward trend due to the Clinton-era budget surpluses of the late 1990s, the level of US public debt has climbed steadily over the past three decades (see Figure 2.1). And over this period, a handful of political economists have become embroiled in a renewed debate about the distributive and redistributive dynamics of the public debt.

The Return of the Bondholding Class?

A group of heterodox political economists and journalists continue to insist that ownership of the public debt is highly concentrated and that interest payments on government bonds redistribute income from the majority of taxpayers to a tiny elite of bondholders (Schmid 1982; Michl 1991; Kinsley 1986; Shields 1990). For some, the 'bondholding class', a tiny elite of 'super- or supra-rich families', still uses its power over the government purse strings to influence policy in contemporary US capitalism (Canterbery 2000, 2002: 365).

Many of the recent heterodox arguments are based on mathematical models, rather than empirical evidence (You and Dutt 1996; Michl and Georges 1996; Michl 2006). One exception to this is the work of Thomas Michl (1991), who makes a concerted effort to quantify the distributive and redistributive dynamics of the public debt. Analyzing data for 1982 from the Federal Reserve's Survey of Consumer Finances, Michl (ibid: 358) found that the top 1% of the population ranked by gross income owned 6.2 percent of savings bonds, and 43.3 percent of other Treasury issues. Meanwhile Michl (ibid: 358-61) estimated that the top 1% received approximately 22.5 to 33.3 percent of direct and indirect interest payments and paid 11.9 to 14.6 percent of federal taxes. The results led Michl (ibid: 364) to reject the Keynesian view that the public debt is harmless because 'we owe it to ourselves'. Michl's research led him to a definitive conclusion: 'interest on the national debt redistributes income regressively'.

John Q. Public

Some Keynesians were willing to concede that the regressive redistributive effects of the public debt had become a genuine concern. In their primer on the federal debt and deficit, Robert Heilbroner and Peter Bernstein (1989: 50) noted that wealthy households held over 20 percent of federal bonds, while 'the average American family owns no government bonds directly'. The US public debt was therefore, according to Heilbroner and Berstein (ibid: 50), a 'net expense' for the bottom 75 percent of the US population and a 'net benefit' for the top 25 percent.

Yet for the most part, orthodox Keynesians continue to follow the line of argument first laid down by Hansen and Lerner; the vast majority of them suggest that not much has changed since the early postwar period. Some continue to insist that the public debt is widely held and that interest payments on federal bonds have no regressive effects on the redistribution of income. Robert Eisner (1986: 42; cited in Michl 1991: 352), for example, argued that although the rich hold the bulk of government bonds they also pay the bulk of taxes. This leads Eisner (ibid: 42) to suggest that a 'large public debt does not particularly affect the distribution of income as between rich and poor'.

Francis Cavanaugh (1996: 65) goes even further by making a series of claims that purportedly dispel the 'myth' that the public debt creates an inequitable interest burden. First, Cavanaugh suggests that the public debt is widely held, mostly in savings bonds, 'which are especially designed for people with modest sums to invest'. Second, he suggests that the public debt held by institutions, and especially by government trust fund accounts such as social security, largely benefits the lower and middle classes. Third, he

cites data from a U.S. Treasury report that suggests that the interest payments on the public debt are more progressively distributed than the payment of federal taxes.[19] This leads Cavanaugh (ibid: 68) to conclude that there '…is no basis for the widely held view that interest on the public debt is paid to investors who are much wealthier than the average taxpayer, who gets stuck with the interest bill'. Based on these three claims, Cavanaugh (ibid: 63) confidently asserts that the 'principal investor in U.S. Treasury securities is John Q. Public, not John D. Rockefeller'.

Taking Stock

There have been many twists and turns in the debates concerning the distributive and redistributive dynamics of the US public debt. Yet one thing remains constant: political economists have never managed to come to any lasting consensus on even the most basic facts. Since Adams produced his groundbreaking analysis, political economists have not come to any agreement about the pattern of public debt ownership, let alone on whether the public debt redistributes income from taxpayers to public creditors or vice versa. And as such, the existing literature has fallen short in providing a clear answer to the question that matters most: what has happened to the bondholding class that Adams theorized and empirically mapped over a century ago?

The purpose of this chapter has been to survey the existing debates about the distributive and redistributive dynamics of the public debt in order to outline the various theories and highlight their lack of consensus. In the next chapter, I address the question

[19] Despite multiple queries to the Library of Congress, the US Treasury Department and the National Archives, I have been unable to track down the 1984 Treasury report cited by Cavanaugh.

of *why* the existing literature has, despite over a century of debate, failed to come to any agreement. The answer can be traced to deeper theoretical and empirical problems that plague the existing literature, both 'mainstream' and 'critical'. I argue that these problems are so deep-seated that we need to radically re-think and research the distributive and redistributive dynamics of the public debt. And the first step in developing a radical alternative is to start thinking seriously about the concept that matters most to issues of distribution and redistribution: namely, *power*.

3 Public Debt, Ownership and Power I
The State of the Art

> It is absurd to say that our country can issue $30,000,000 in bonds and not $30,000,000 in currency. Both are promises to pay; but one promise fattens the usurer, and the other helps the people.
>
> —Thomas Edison[20]

Introduction

Chapter Two surveyed the existing literature on the distributive and redistributive dynamics of the US public debt. Throughout US history there have been many twists and turns in the debates but one thing remains constant: political economists have been unable to come to any lasting consensus on even the most basic facts concerning the ownership of the US public debt and the redistributive consequences associated with that ownership pattern.

In this chapter the task will be to explain *why* political economists have been unable to come to any consensus on these issues. I argue that this lack of consensus is due to interrelated empirical and theoretical problems that plague the existing literature. On the one hand, there have been few attempts within the existing literature to empirically map the disaggregate pattern of public debt ownership and even fewer attempts to measure its redistributive consequences. On the other hand, the studies that do engage in empirical research offer little theoretical reflection on the concepts, categories and measures that

[20] Quoted in Anonymous (1921).

they use. Mired in narrow empiricism, the few empirical studies that do exist have failed to outline a set of transparent conceptual criteria through which to justify and compare their respective research methods.

The exception is the work of H.C. Adams (1887), which provided our point of departure in Chapter Two. In developing the first theoretical-empirical study of the distributive and redistributive dynamics of the public debt, Adams drew implicit linkages between the ownership of the public debt and the exercise of power by the 'bondholding class'. Yet even in Adams's work these linkages between ownership and power are underdeveloped, and at no point does Adams systematically theorize the ownership-power nexus and its relationship to the concepts – including value, capital and state – that are foundational to political economy.

At an intuitive level, Adams's attempts to link the distributive and redistributive dynamics of the public debt to power make a great deal of sense. We are, after all, talking about the ways in which public indebtedness generates 'fiscal conflicts' between social classes, and one would be hard-pressed to view these conflicts as anything but struggles over power, or at least related to power (Ferguson 2001: 191). These power dimensions become all the more apparent when we acknowledge that questions of distribution and ownership concentration – which ask 'who gets what?' – and also questions of redistribution – which ask 'who gets what at whose expense?' – are at their root questions of power (Laswell and Kaplan 1950). Yet I argue that it is these power dimensions of public indebtedness that conventional theories of political economy, both liberal and Marxist, find difficult if not impossible to integrate into their frameworks. Without any

way of theorizing these power dimensions, existing approaches cannot help us to generate the ideas, concepts and categories that would allow empirical research on the distributive and redistributive dynamics of the public debt to flourish.

The remainder of this chapter is organized into four sections. The first section scrutinizes the empirical and theoretical track record of the existing literature. The next two sections examine and critique the deeper theoretical underpinnings of the literature surveyed in Chapter Two. Specifically these two sections explain why conventional theories of political economy, both liberal and Marxist, have been unable to theorize the power dimensions of public indebtedness. The conclusion then recaps the argument and sets out the task for Chapter Four, which will be to develop a new theoretical framework, one that contributes to a growing body of literature that conceptualizes capitalism as a *mode of power*.

The Track Record

Before trying to explain why political economists have been unable to come to any agreement on the basic facts concerning the distributive and redistributive dynamics of the public debt, I should emphasize that I am *not* trying to suggest that consensus itself is the ultimate benchmark of scientific progress. Sustained consensus can lead to stagnant thought when a community of researchers faces no outside challenges to engrained concepts and assumptions (Bohm and Peat 1987: 54). In fact, it is often the *absence* of consensus that spurs theoretical-empirical creativity and innovation.

Perhaps the most prominent example of scientific progress amid conflict came in the field of physics in the early twentieth century (see Lindley 2007). Fundamental disagreements over the nature of the physical world pitted proponents of classical determinism against proponents of quantum uncertainty. And the heated intellectual battles between these two camps led to some of the most important advancements in the history of science. In particular, Einstein's steadfast criticisms forced quantum physicists to clarify and sharpen the contours of their new theory (ibid: 170).

The lack of consensus in the field of public debt, however, bears little resemblance to the one that spurred advancement in physics in the early twentieth century. Over the past century since H.C. Adams produced his pioneering study, protracted disagreements over the pattern of public debt ownership and its redistributive consequences have done little to stimulate empirical and theoretical innovation. Let us begin by first reviewing the empirical track record of the existing literature.

Empirical Shortcomings

Table 3.1 lists all of the existing studies that have offered some empirical mapping of the disaggregate pattern of US public debt ownership and redistribution. At least four things stand out. First, even though data have become more readily accessible, existing studies have done little to improve upon the rather rudimentary empirical methods developed by Adams. Like Adams, the subsequent studies offer narrow 'snapshot' measures for single years. Second, all the studies use different methods to measure ownership concentration and redistribution. This makes it difficult to adjudicate between their competing claims

and impossible to compare their research results over time. Third, apart from Adams, who offers disaggregate data on corporate ownership of the public debt, existing studies are focused on the US household sector. Fourth, there has been no attempt to measure the pattern of public debt ownership and its redistributive effects since 1996.

Table 3.1 The Empirical State of the Art

Author, Date of Publication	Study Year(s)	Findings	Conclusions
Adams (1887)	1880	1.4% of private investors in the public debt owned 47.8% of privately held US federal government bonds. Top 35% of corporations hold 93% of corporate share.	Revealed the 'spectre of a highly centralized public debt' (44).
Miller (1950)	1945	5.31% of taxpayers in the top income class ($5000 or more) paid ca. 50-56% of all federal taxes and received 58.7% of interest payments on the public debt.	The progressivity of the federal tax and public debt structures the same; the public debt does not redistribute income.
Cohen (1951)	1946	The top income class ($5000 or more) paid 47-55% of all federal taxes and received 39% of interest payments.	Public debt has distributional effects in favour of lower income groups.
Michl (1991)	1982, 1984 for taxes	Top 1% of households owned 6.2% of savings bonds, 43.3% of other Treasury issues, received 22.5-33.3% of direct and indirect interest payments and paid 11.9-14.6% of federal taxes	"It seems clear that the conventional textbook wisdom that we 'owe to ourselves' is wrong. Interest on the national debt redistributes income regressively" (364).
Cavanaugh (1996)	1992	Lorenz curve for 1992 shows that distribution of interest on the public debt more progressive than federal income taxes.	"…the principal investor in U.S. Treasury securities is John Q. Public, not John D. Rockefeller" (63).

As Table 3.1 suggests, the empirical record on the disaggregate ownership of the US public debt is, at best, patchy. Throughout different periods, pundits have fiercely debated the distributive and redistributive dynamics of the public debt. But competing claims, regardless of whether they assert that the pubic debt is concentrated or widely held, are constructed upon shaky empirical foundations. The scant empirical record outlined in Table 3.1 gives us a starting point for explaining why the existing literature has had such difficulties agreeing on even the most basic facts: there has been insufficient effort to establish these facts in the first place.

Part of the problem has to do with the data themselves. As already mentioned, empirical data have become more readily accessible since Adams first mapped the US bondholding class, yet subsequent researchers have done little to improve upon his rather rudimentary research methods. This fact is not meant to imply that the task of collecting and analyzing data on the pattern of public debt ownership has become obstacle-free; like many other forms of data, the data on the ownership of the public debt suffer from an aggregate bias. Fairly reliable, long-term data breaking down the ownership of the public debt into various sectors (e.g. domestic households, domestic businesses, foreigners) are easy to access (see Chapter Five). Yet mapping the disaggregate pattern of public debt ownership concentration (i.e. the amount of public debt owned by a specific class or social group) presents a whole host of challenges. The headaches involved and the obstacles faced in collecting these data will become more apparent in Chapters Six and Seven.

It suffices to note at this point that researchers interested in mapping the disaggregate pattern of public debt ownership must rely on data that are sporadic, incomplete and inconsistent. The use of narrow snapshots and inconsistent cut-off points for measuring concentration is often a reflection of limited data rather than a conscious choice of the researcher.[21]

Theoretical Ambiguities

Unfortunately, this pragmatic explanation only gets us so far in trying to understand the lack of consensus in the current literature. While issues of data accessibility are important, the paltry empirical record outlined in Table 3.1 does not just stem from a shortage of reliable data. Most importantly, these empirical shortcomings are bound up with deeper theoretical problems that plague the existing literature. Though existing studies often employ the slogans, concepts and categories of conventional theories of political economy, they can all, to varying degrees, be accused of engaging in narrow empiricism. Specifically, existing studies present a set of data without taking into account the theoretical assumptions underpinning their empirical research methods.

Without having to veer too far off course, we can briefly discuss some aspects of the philosophical critique of empiricism to highlight some of the shortcomings of the existing studies outlined in Table 3.1. Several philosophers of science have argued that empirical

[21] As we will see in Chapter 4, in order to measure ownership concentration over long periods of time, we need to isolate either a fixed number or a fixed proportion of top households or corporations (e.g. the top 200 or the top 1%). The exact cut-off point used to isolate top households and top corporations is always to a certain extent arbitrary (assuming that the data source allows us to choose this cut-off point in the first place). This choice, however, should be transparently discussed and theoretically motivated.

facts are shaped and mediated by assumptions that are inescapably theoretical (see Morick 1972: 16; Hansen 1958; Quine 1951).

First, we assume that distribution and redistribution are significant objects of investigation that are worthy of attention. This judgment about the significance of these processes is in itself value-laden (see Weber 1949). Second, we must make assumptions in the empirical research methods we choose to explore these processes. The fact that we use a certain cut-off point to measure ownership concentration can never emerge from the data itself and must therefore result from a system of beliefs that makes the data intelligible in the first place.[22]

By ignoring theoretical matters, the existing studies in Table 3.1 offer little justification for why they have chosen certain methods over others. And this lack of justification leaves fundamental methodological questions unanswered: what are the potential explanatory limits of using snapshot data instead of historical time series? Why choose certain cut-off points to measure ownership concentration and what do these cut-off points tell us about social conflict and 'class' (an undeniably *theoretical* construct)? Why focus on the household sector instead of the corporate sector? What does comparing the federal tax structure to the distribution of federal interest payments tell us about the redistributive effects of public indebtedness?

Unless we have set out in a transparent way the theoretical concepts and assumptions that underpin our empirical methods, we have no way of exploring the validity of those

[22] Recognizing the value and theory 'laden' nature of our research does not mean we have to accept the postmodern denial of facts and scientific inquiry. What it does mean is that our theoretical constructs are developed in a dialectical interplay with empirical research. Theoretical concepts and assumptions shape our empirical observations, yet these empirical observations in turn come to shape, refine and even modify those concepts and assumptions.

methods or of comparing them to rival methods. How can we therefore expect any consensus on even the most basic facts regarding the distributive and redistributive dynamics of the public debt when the few empirical studies that do exist have failed to outline a set of transparent conceptual criteria through which to justify and compare their respective research methods?

As mentioned in Chapter Two, Adams, the exception in this regard, was careful to situate his empirical analysis of public debt ownership within a fairly coherent theoretical framework. Adams's (1887: 9) argument that the public debt is evidence that the capitalist class has captured the 'machinery of government' has obvious affinities with the 'class domination' or instrumentalist theory of the capitalist state, which '…sees in the state an instrument in the hands of the ruling classes for enforcing and guaranteeing the stability of the class structure itself' (Sweezy 1942: 243). Furthermore, Adams offers a coherent account of how the class structure of capitalist societies relate to the institution of public borrowing. Citing the first volume of Marx's (1867) *Capital*, Adams (1887: 8) argues that capitalist production based on the private ownership of the means of production is the underlying cause of inequality in capitalist societies. The public debt merely reinforces the divide between propertied capitalists and property-less labourers (ibid: 41; for a similar argument, see Ferguson 2001: 191).

If only implicitly, Adams's theoretical framework draws clear conceptual linkages between the ownership of the public debt on the one hand and the exercise of class power on the other. Adams sought to explore the empirical basis of this power by measuring the concentration of the public debt owned by the 'bondholding class'. Yet even in Adams's

work, the linkages between ownership and power are not developed in any systematic fashion and there is no attempt to explore the implications of these linkages for broader theories of political economy and their foundational concepts of value, capital and the state.

Power

Few would deny that issues of distribution and ownership concentration are related to the question of power. And the power dimensions of these issues become all the more explicit once we accept that they generate conflicts between social classes. Yet I argue that it is the concept of power that conventional theories of political economy have trouble integrating into their frameworks and analyses. Unable to account for the power dimensions of public indebtedness, existing theories offer no concepts and categories that would guide empirical research examining the distributive and redistributive dynamics of the public debt.

Chapter Two surveyed the history of political economic debates on these dynamics in the US context, but it did not examine in any detail the theoretical underpinnings of the various perspectives within these debates. A more in-depth theoretical discussion will allow us to see the problems conventional theories of political economy, both liberal and Marxist, encounter in theorizing and empirically mapping with the power dimensions that underpin the distributive and redistributive dynamics of public indebtedness.

Liberal Political Economy

As we saw in Chapter Two, within the liberal tradition, Keynesianism has been most attentive to the distributive and redistributive dynamics of the public debt. Both Hansen and Lerner recognized that a rapidly growing public debt could potentially have regressive effects on the distribution of income and wealth. Unless coupled with a progressive system of taxation, these regressive effects would eventually aggravate the deficiency of 'effective demand', and in turn undermine the government's ability to engage in counter-cyclical deficit spending. In other words, the disaggregate dynamics of power that underpin the public debt would come to limit the government's efforts to manage and steer the aggregate macro-economy.

Keynesianism: The Ambivalence of Power

By arguing that the public debt engenders a potential social conflict, Keynesians open up the possibility of incorporating power into their theoretical frameworks. Yet recognizing the power dimensions of distribution and redistribution as a potential barrier to Keynesian macroeconomic policy is not the same thing as offering a coherent theory of these dynamics. And at no point do Keynes or the Keynesian theorists of the public debt attempt to provide a *theoretical explanation* for the distributive and redistributive dynamics of the public debt: who exactly are the 'groups and economic classes' at the heart of these dynamics that Hansen (1944: 136) discusses? And how do we explain exactly why one class comes to hold a larger share of the public debt relative to other classes or social groups?

The reason Keynesians fall silent on these important questions has to do with lingering conceptual ambiguities in the relationship between the aggregate and the disaggregate in their theoretical frameworks. These ambiguities are themselves a reflection of the ambivalent relationship of Keynesianism to the neoclassical doctrine that has come to dominate liberal political economy over the course of the past century (see Bleaney 1985: Chapter One).

Neoclassical Influence

In the *General Theory*, Keynes set out to dismantle Say's Law and the notion of the self-regulating market. Rather than question the implications of his critique for the entire theoretical structure of liberal political economy, Keynes proceeded by splitting the economy into two distinct spheres. Nitzan and Bichler (2009: 46) explain how, after the *General Theory*, liberals were forced to make a grand concession: 'there was not one, but two economic realities: a competitive microeconomic sphere where the interaction of atomistic consumers and producers generates the efficient outcome stipulated by neoclassical manuals; and another macroeconomic realm that unfortunately produces occasional failures'.

Whereas the microsphere allowed liberals to maintain the laissez faire vision of a powerless economy governed by principles of competition and efficiency, the macro-sphere served as a conceptual 'cesspool' in which imperfections requiring the 'political' intervention of governments could occur in complete isolation from the pristine world of microeconomics. Thus as Nitzan and Bichler (2009: 46-7) argue, with the *General*

Theory power had entered the liberal economy, but only through the back door (see also Dowd 2000: 127–31). And aside from the rather crucial exception of Say's Law, Keynes's *General Theory* ended up accepting most of the key facets of neoclassical thinking (Dobb 1973: 215; Robinson 1977: 18).

Most crucially, this included a tacit acceptance of the theory of marginal productivity, which provided the neoclassical explanation of (and ideological justification for) the distribution of wealth and income in capitalist societies (Keynes 1936: 17). Expounded by J.B. Clark (1899) in the late nineteenth century, marginal productivity theory starts out from the standard neoclassical assumption of perfect competition under which atomistic and fully rational 'agents' attempt to maximize their utility in a context of scarcity. Clark further assumed there was a functional relationship between factors of production, which economists have dubbed the 'production function'. The factors of labour, land and capital, are assumed to be distinct and quantifiable so that we can directly measure the input and output associated with each of them (Nitzan and Bichler 2009: 69). The production function is then employed to explain the 'natural laws' governing the process of distribution.

In Clark's (1899: 3) own words, when 'free [i.e. perfect] competition' reigns, '…the share of income that attaches to any productive function is gauged by the actual product of it'. More specifically, in a perfectly competitive market the income of each factor will be proportionate to its *marginal* contribution: '…the wage rate is equal to the productive contribution of the last worker added to production, the rent is equal to the contribution of

the last hectare of land, and the profit rate is equivalent to the contribution of the last unit of capital' (Nitzan and Bichler 2009: 70)

Marginal productivity theory and its production function assumed away any concern for power. In the context of perfect competition, there was no room for class analysis or class conflict: there were only power-less 'agents'. The origins of the inputs that these agents added to the production process were explained away by referring to them as 'initial endowments' (Kirman 1992). There was no room for government, which stood outside the market and would only distort the 'natural laws' of perfect competition (Clark 1899: 77). There was also no room for money, debt or other financial instruments; the inputs and outputs of production were measured in their hedonic units of pain and pleasure that were at their root based on barter (ibid: Chapter 24).

In short, the marginal productivity theory that Keynes tacitly accepted in the *General Theory* had little bearing on the distributive and redistributive dynamics of the public debt outlined by Keynesians such as Hansen and Lerner.[23] With no guidance on how to theorize and map the power dimensions of distribution and redistribution in this area, Keynesian theorists of the public debt were unable to offer much insight into a problem that they nevertheless identified as a potential barrier to their macroeconomic agenda. Given the assumptions of neoclassical theory, it is little wonder that liberal theorists of

[23] Much ink has been spilt debating to what extent Keynes actually endorsed marginal productivity theory and whether Keynes had an alternative theory of distribution (see Kaldor 1955-6; Sen 1963; Asimakopulos 1980-1; Eatwell and Milgate 1983; Wells 1987). The reason I argue that Keynes *tacitly* accepted the marginal productivity theory of distribution is that he never developed a systematic alternative to the neoclassical utility theory of value (see Robinson 1962: 79). Any theory of distribution, as Veblen (1909: 620) points out, always relies on a theory of value. Without a coherent theory of value, we can have, at best, only a partial explanation of the prices of goods and services, and in turn, a partial explanation of the distribution of those goods and services.

the public debt shifted the focus from class to inter-generational redistribution in the post-war period (see Chapter Two). Focusing on the utility-maximizing behavior of the 'representative' individual taxpayer and public creditor enabled postwar liberal theorists of the public debt to ignore the uncomfortable questions that Keynesians had raised but could never account for within the prevailing assumptions of their theory.

Marxist Political Economy

Marxism, with its emphasis on class struggle as the engine of history, offers more promising avenues through which to explore power and its relationship to the distributive and redistributive dynamics of the public debt. As we have already mentioned, H.C. Adams (1887) drew insights from Marx in his arguments about the effects of public indebtedness on the class structure of capitalist societies. And as we also mentioned, James O'Connor (1973) followed Marx in arguing that the US public debt in the eighteenth and nineteenth century gave rise to a powerful 'aristocracy of finance'.

Yet Marxists on the whole have treated the power nexus between the public debt and the financial aristocracy as little more than a historical curiosity. Writing in the 1970s, O'Connor argued, albeit with little empirical evidence, that the public debt no longer conferred the same power to financial groups that it did in the early history of US capitalism. Others make references to Marx's arguments about the public debt and the 'aristocracy of finance', but have not developed the analytical underpinnings of this relationship, let alone explored empirically its relevance for contemporary US capitalism (Gottlieb 1956; Sanderson 1963; Hayes 1993; Meckstroth 2000).

The handful of contemporary 'Marxist' accounts that attempt to model the distributive and redistributive dynamics of the public debt have, to put it mildly, a tenuous relationship to Marx's thought. Thomas Michl's (2006; see also Michl and Georges 1996) efforts to model how the public debt redistributes income from workers to capitalists are symptomatic of this tenuous relationship. Though Marx's class categories loom large in Michl's models, these categories are translated into the anti-Marxist language of neoclassical economics. Capitalists in these models are reduced to a fully rational 'representative capitalist' who is not bent on extracting surplus value through worker exploitation, but instead chooses '…an optimal path of consumption by maximizing a discounted log utility function' (Michl and Georges 1996: 51). Michl (2006), however, is not bothered by this seemingly incompatible adaptation of Marxist categories to neoclassical assumptions; after all, as he willingly concedes, his models '…are best interpreted as analytical frameworks for answering logical questions about economic categories under conditions of full utilization *rather than for making statements about how real economies necessarily function*' (emphasis added).[24] The philosophers have only interpreted the world; the point is to model it.

So despite its focus on class power, Marxist political economy also has a rather underwhelming record when it comes to exploring the distributive and redistributive dynamics of the public debt. In order to explain *why* this is the case, we need to examine

[24] Taken as a whole, Michl's work is symptomatic of the broader criticisms made in this chapter against the existing literature. Michl's (1991) painstaking empirical study provides invaluable research on the pattern of household ownership of the public debt (see Table 3.1). Yet this empirical study is not connected in any meaningful way to a theoretical framework and certainly has no relationship to his later theoretical models.

the theoretical legacy that Marx left to subsequent generations of Marxist political economists.

Marx's Legacy

In his famous section on 'primitive accumulation' in Volume I of *Capital*, Marx (1867: 874) argued that the classical liberal account of the development of capitalist markets was a 'nursery tale'. The historical transition to capitalism was not, as classical political economy had argued, spontaneous or self-regulating: the process required state violence from the very beginning. During the phase of primitive accumulation, the state was not a fetter to but a direct facilitator of the extension and deepening of capitalist markets (ibid: 915-6). And crucial to state power, Marx (ibid: 919) argued, was the development of the system of public credit. As 'one of the most powerful levels of primitive accumulation', the public debt allowed governments to meet extraordinary expenses without having to immediately burden its population with excessive taxation (ibid: 919–21).

For Marx (1867: 920), the real significance of the public debt lay in its impact on class relations. On the one hand, the public debt gave rise to the 'aristocracy of finance', a group Marx referred to as a 'brood of bankocrats, financiers, rentiers, brokers, stockjobbers, etc.' that amassed fortunes from trading and also owning government securities. On the other hand, the tax revenues that were eventually needed to service the public debt were financed by over-taxation of 'the most necessary means of subsistence' (ibid: 921). This over-taxation was not accidental: for Marx (ibid: 921) it was an entrenched 'principle' of public indebtedness. Thus during the phase of primitive

accumulation the public debt created a clear-cut conflict, redistributing or 'expropriating' income from the working masses of taxpayers to the 'idle rentier' class of public creditors.

Yet Marx (1867) cautioned against assigning too much importance to the class expropriation at the heart of the public debt. Specifically, he criticizes socialist writers such as William Cobbett who identified the public debt and the fiscal system as 'the fundamental cause of the misery of the people in modern times' (ibid: 921).[25] Why the criticism? Marx (ibid: 922) argues explicitly that the (pre-modern) phase of primitive accumulation was merely an 'artificial' and transitory system that hastened the transition from the outdated feudal mode of production to the modern capitalist mode of production.

According to Marx, active and direct state power was necessary to sever workers from the means of production. But once the transition from feudalism to industrial capitalism is completed, state power lingers in the background. The sphere of industrial production takes over as the main site of exploitation and class struggle. Of course the state provides the necessary legal and ideological superstructure that enables and reinforces the *economic* power of capitalists to extract surplus value from the workers over and above the level of subsistence. Workers, however, do not need to be directly coerced into this exploitative relationship; without access to property, they are compelled by the market to seek out wage labour in order to survive.

[25] Niall Ferguson (2001: 195) highlights the anti-Semitic tone of Cobbett's invective against the public debt.

Under the advanced capitalist mode of production, industrial workers are pitted against industrial capitalists, and this struggle is for Marx the key site of class struggle and the engine of capitalist development (Marx 1867: 921; Bichler et al 2012: 8). The centerpiece of Marx's theoretical framework, the labour theory of value, explicitly demotes the public debt and other forms of finance to the status of 'fictitious' capital (Marx 1893: 423; 1894: 590-606; see also Hudson 2011: 16). The ontologically privileged realm of production has its own universal (quantitative) units of socially necessary abstract labour time, which stand apart from the nominal units of finance. Marx claims that it is this unit of labour time, and not epiphenomena of 'fictitious' finance, that provides the basis scientific study of capitalist mode of production, including the structure of prices and the distribution of wealth between capitalists and workers (Marx 1867: 188; Bichler et al 2012: 9).

Examining Marx's own writings gives us a better sense of why Marxists have had very little to say about the distributive and redistributive dynamics of the public debt. To the extent that these dynamics are discussed in the Marxist literature they are treated as a historical rather than contemporary aspect of capitalist society. And this is precisely how Marx also treated these dynamics: as a historical curiosity confined to the pre-capitalist phase of primitive accumulation. Those wedded to a Marxist analysis of contemporary capitalism have little reason to explore these dynamics, as the ontological primacy of production leaves the public debt clearly outside the core theoretical framework.

Moving Forward?

To recap, this chapter has provided an explanation for the lack of consensus regarding the distributive and redistributive dynamics of the public debt. This lack of consensus can be tied to empirical and theoretical factors, both of which are interrelated.

Empirically, the track record on the disaggregate ownership of the public debt is patchy, and attempts to empirically map the redistributive consequences associated with a given ownership pattern are few and far between (see Table 3.1). The few existing studies that do offer some empirical evidence all use different empirical research methods so that their research results cannot be brought into direct comparison with one another.

Difficulties in data collection aside, these empirical shortcomings are themselves partly a product of deeper theoretical problems with the existing literature. In particular the existing studies outlined in Table 3.1 border on narrow empiricism and provide insufficient theoretical reflection on the distributive and redistributive dynamics of the public debt. Without setting out in a transparent way the (inescapably) theoretical concepts and assumptions that underpin their empirical methods, existing studies have no way of exploring the validity of their research methods or of comparing them to the research methods of those making competing claims.

H.C. Adams is a partial exception to this rule. In offering a theoretical-empirical framework to analyze the distributive and redistributive dynamics of the public debt, Adams's work draws implicit linkages between the ownership of public debt and the power of the 'bondholding class'. Yet even Adams fails to theorize in any systematic way the linkages between public debt ownership and power. And existing theories of political

economy, both liberal and Marxist, offer little guidance in helping us theorize and empirically map the power dimensions of public debt ownership and its redistributive consequences.

Keynesians are alone within contemporary liberal political economy in drawing attention to the potential class power relations underpinning the public debt. Yet with Keynes's *General Theory* tacitly accepting neoclassical microeconomics and its marginal productivity theory of distribution, Keynesian theorists of the public debt are left with no conceptual signposts to guide them in theorizing and empirically mapping these power relations. Marxists are better equipped to deal with class power relations, but neglect the distributive and redistributive dynamics of the public debt by giving ontological primacy to class conflict within the sphere of production.

Given the shortcomings in the existing literature, we have to look elsewhere in order to rethink and to research the power dimensions that underpin the distributive and redistributive dynamics of the public debt. The key question is: how do we move forward in order to rethink and research the distributive and redistributive dynamics of the public debt? In the next chapter I will develop an alternative framework for theorizing these dynamics, one that contributes to a growing body of literature that conceptualizes capitalism as a *mode of power*.

4 Public Debt, Ownership and Power II
An Alternative Framework

> Every man and woman who owned a Government Bond, we believed, would serve as a bulwark against the constant threats to Uncle Sam's pocketbook from pressure blocs and special-interest groups. In short, we wanted the ownership of America to be in the hands of the American people
>
> —Henry Morgenthau Jr.[26]

Introduction

The argument to this point can be summed up in three statements. First, there has been no consensus within the existing literature on the distributive and redistributive dynamics of the public debt and this lack of consensus is due to both empirical and theoretical shortcomings that plague existing studies. Second, questions concerning the pattern of public debt ownership and the redistributive consequences associated with that ownership pattern are inherently questions of power and these power dimensions cannot be easily if at all accounted for within conventional approaches to political economy. Third, in order to adequately map and explain these power dynamics of the public debt, we need an alternative theoretical framework, one that provides a more solid foundation for exploring the nature of power in capitalist societies.

This last statement provides the point of departure for this chapter. In what follows, I develop an alternative theoretical framework that contributes to a growing body of

[26] Cited in Tufano and Schneider (2005: 11).

literature that views capitalism not as a mode of production and consumption, but as a mode of power. Pioneered by Jonathan Nitzan and Shimshon Bichler, this framework, anchored within the notion of capital *as* power, offers new insights on how to theorize and empirically map the distributive and redistributive dynamics of the public debt (see Bichler and Nitzan 1996; Nitzan and Bichler 1995, 2000, 2002, 2009).

My aim here is to pick up where H.C. Adams (1887) left off and develop more explicitly and systematically the conceptual linkages between ownership and power. I argue that the institution of private ownership derives its very meaning from the principle of exclusion and that the ability to exclude others is itself a matter of organized power (Nitzan and Bichler 2009: 228). The accumulation of vendible ownership titles – ownership claims on the earnings of governments, consumers, industrial or financial corporations – is, in this way, the foundation and the measure of capitalist power. On the one hand, the institutional order of capitalist power has a quantitative architecture, denominated in units of price and governed by the process of capitalization: the discounting of risk-adjusted future earnings into present value. On the other hand, this quantitative architecture universalizes the qualitative manifestations of power. As a process of power, the accumulation of ownership titles is both dynamic and differential: the objective of capitalists is to have the capitalized value of their ownership titles increase *over time* and *relative to some average benchmark*. And as a top-down approach, the theory of capital as power is focused not on 'capital in general' but on the dominant capitalist owners at the center of the process of accumulation.

As we will see, this qualitative-quantitative power theory of value that underpins the

theory of capital as power stands in contrast to the dual quantity theories of value of conventional political economy (Cochrane 2011: 91). Despite glaring differences, the neoclassical utility and Marxist labour theories of value share a common bifurcated view that splits the economy into two distinct spheres. On the one side is the 'real' sphere of production and consumption, which is denominated in fundamental units of utility or 'utils' for the neoclassicists and 'socially necessary abstract labour time' for the Marxists. On the other side is the 'nominal' sphere of finance, denominated in universal units of price. Both theories give ontological primary to the 'real' sphere, whose fundamental units are supposed to explain both prices and the distribution of income and wealth. Yet closer scrutiny suggests that the fundamental 'real' units of both theories represent pseudo-quantities that cannot be observed or measured, and this, as we will see, means that neoclassical and Marxist theories of value fall short in explaining prices and distribution.

These intractable problems with conventional theories mean that we should focus on the singular quantitative reality that matters to capitalists: the quantities of finance in which their universal ownership titles are denominated, and contrast these universal quantities with the heterogeneous qualities of power. The shift to a qualitative-quantitative power theory of value may lack the seeming rigour of dual-quantity approaches, but it introduces novel empirical research methods that allow us to better map and explain the distributive and redistributive dynamics of the public debt.

The rest of this chapter will be organized as follows. The first section deepens the discussion of the power principles underpinning the institution of ownership and outlines

some of the basic features of the capital as power approach that informs this study. The next three sections contrast the power theory of value to the dual quantity theories of value of both neoclassical economics and Marxism. The remaining section then fleshes out in greater detail the power-centered research methods that will be used to explore the distributive and redistributive dynamics of the public debt. The conclusion briefly summarizes the key theoretical propositions and sets up the task for the next chapter, which lays the groundwork for the disaggregate analysis of public debt ownership and redistribution in Chapters Six and Seven.

Ownership and Power: A Capital as Power Approach

As was discussed in Chapter Three, H.C. Adams (1887) developed a conceptual framework implicitly linking the ownership of public debt to the exercise of social power. As was also mentioned, these implicit linkages have considerable intuitive appeal, touching upon the very questions that are classically associated with power. The purpose of this section is to develop a conceptual framework that will make these implicit and intuitive linkages explicit and systematic.

This study builds upon a growing body of literature that conceptualizes capitalism not as a mode of production/consumption, but as a mode of power. Pioneered by Jonathan Nitzan and Shimshon Bichler, the theory of 'capital as power' brings together a diverse set of radically-mind researchers interested in exploring the possibilities and limitations of the concept of power as an alternative basis for re-thinking and re-searching political economy. The theory (or perhaps better yet, the set of theoretical approaches) does not

form a coherent theoretical 'school' or a 'paradigm' in the Kuhnian sense of taking for granted fundamental concepts and placing strict limitations on the aspects of social life that are to be researched (Kuhn 1962; Bohm and Peat 1987: 26). The driving force of capital as power is *theoretical-empirical* research on the constantly changing realities of political economy.

The theory of capital as power has given rise to an online research community, the *Critical Mass Forum on Political Economy and Power* (www.yorku.ca/cmass/forum), a peer-reviewed journal *The Review of Capital as Power*, a volume edited by Tim di Muzio (2013), *The Capitalist Mode of Power: Critical Engagements with the Power Theory of Value*, as well as an annual conference series.[27] Nitzan and Bichler have employed their capital as power framework to research, among other things, mergers and acquisitions, stagflation in Israel and the United States, wars in the Middle East, globalization and transnational ownership, financial crises and incarceration.[28] Other researchers embarking from a capital as power perspective have researched the political economy of NAFTA (Brennan 2013), campaigns against apartheid in South Africa (Cochrane and Monaghan 2013), fossil fuels and social reproduction (Di Muzio 2012), food price inflation (Baines 2013), the political economy of risk in the Hollywood film business (McMahon 2013), as well as investment banks and financial regulation (Hager 2012).

Substantively, the theory of capital as power draws upon a long lineage of radical thinking in political economy. Nitzan and Bichler (2009: 14-5), explain that their own

[27] The *Forum on Capital as Power* conference series at York University, Toronto, grew out of a set of panel series on the theme of capital as power at the *Rethinking Marxism* conference in Amherst, Massachusetts in 2009 and the *Eastern Economic Association* conference in Philadelphia, Pennsylvania in 2010.

[28] Most of their publications are freely available at the Bichler and Nitzan Archives (www.bnarchives.net).

approach draws on Karl Marx's emphasis on capitalism as a totalizing political regime whilst rejecting his main theoretical pillar, the labour theory of value. Their framework also draws on Thorstein Veblen, who emphasized the hologramic nature of production and power dimensions of absentee ownership, finance and credit, Lewis Mumford, who traced the historical power underpinnings of technology, and also some strands of neo-Marxism, especially Michal Kalecki, who developed empirical methods linking the distribution of national income and power (ibid: 14-5).

Together these diverse thinkers provide the 'stepping stones' for the theory of capital as power, which offers a radical new 'cosmology' of capitalism (Nitzan and Bichler 2009: 15; Bichler and Nitzan 2012b). The framework represents a wholesale rethinking of the fundamental concepts of political economy. In what follows, I outline what are the most essential features of the 'capital as power' framework as they relate to the themes of this study: namely, its conceptualization of the relationship between ownership and power.

The Institution of Ownership

To understand the linkages between private ownership and power, Nitzan and Bichler (2009: 228) point towards the etymology of the term 'private', which derives from the Latin words *privatus* ('restricted') and *privare* ('to deprive'). In other words, the institution of private ownership derives its meaning from the principle of *exclusion*. The right to exclude, as one legal scholar puts it, is not merely an essential element but the *sine qua non*, of private property: 'Deny someone the exclusion right and they do not

have property' (Merrill 1998: 730). It follows that private ownership is an institution of exclusion, and institutionalized exclusion, as Nitzan and Bichler (2009: 288) argue, '…is a matter of organized power'.

The power underpinnings of the institution of private ownership serve as the starting point for the capital as power approach developed in this study, with the accumulation of ownership titles representing the foundation and measure of capitalist power. In other words, in a (hypothetical) fully capitalized world the share of vendible ownership titles held by an individual capitalist or group of capitalists represents their '…share of control over the social process' (Nitzan and Bichler 2002: 36). These ownership titles are denominated in price, which is the fundamental *unit* of the institutional order of capitalist power (Nitzan and Bichler 2009: 150-1). Meanwhile prices themselves are generated and organized through the algorithm of capitalization, the discounting of risk-adjusted future earnings into present value. This capitalization ritual serves as the underlying *pattern* of capitalist order (ibid: 152-5).

In this way, capitalization is the symbolic quantification of capitalist power to restructure and reshape society. The goal of capitalists is to accumulate by augmenting their ownership titles and having capitalized value of those titles grow over time. This dynamic power process is inherently *relative*: capitalists do not accumulate in absolute terms, but relative to some average benchmark. As the capitalized value of a capitalist's ownership titles grows faster than the average the capitalist achieves *differential* accumulation and augments his/her relative power. Finally, this dynamic process is *top-*

down: the focus is not on 'capital in general' but on the dominant capital groups at the center of the accumulation process.

The quantitative architecture of ownership provides one side of a quantity/quality power theory of value. According to the power theory of value, the structure of capitalist power is mapped quantitatively by examining the distribution of ownership titles and this power conferred by ownership extends far beyond machines to anything that can be privately owned. This quantitative map, however, only acquires significance once we start to link it to the qualitative manifestations of power that underlie the struggle for differential accumulation. These linkages between the quantitative and qualitative are partly speculative. The validity of these linkages can sometimes depend not on statistical correlation, but rather, as Nitzan and Bichler (2009: 313) explain, mostly their hinge on our abilities to tell '…a "scientific story" – a systematic historical analysis that convincingly ties the quantities and qualities of capitalist power'.

Quality/Quantity versus Dual Quantities

In order to flesh the framework out, it is perhaps best to juxtapose it to the conventional theories of political economy that it negates and seeks to replace (Bichler and Nitzan 2012b: 66). The most important juxtaposition to be made is between the power theory of value and conventional theories of value. As was hinted at in Chapters Two and Three, both neoclassical and Marxist frameworks are anchored within *dual quantity* value theories. Despite obvious differences, both value theories are united in bifurcating the economy into two distinct spheres. On the one hand, both theories posit the existence of a

'real' sphere where production and consumption take place and where capital, a material-productive entity, is accumulated. This 'real' sphere is denominated in its own fundamental (quantitative) units of utility or 'utils' for liberals and 'socially necessary abstract labour time' for the Marxists. On the other hand, there is the 'nominal' sphere of money and prices.

As we already hinted at in Chapter Three, the material-productive ontology of these value theories means that the 'real' sphere gets privileged. For both value theories, the fundamental quantities of the 'real' sphere are meant to explain the oscillations of nominal finance, as well as the distribution of wealth and income. Now the problem with conventional value theories has to do with the supposedly universal quantities of the 'real' sphere: these universal quantities remain ever illusive and the efforts to pin them down have led both neoclassical and Marxists theories into intractable circularities and contradictions (Nitzan and Bichler 2009: 144).

Neoclassical Quantities

Capital as Power builds upon two existing critiques of neoclassical theory. The first critique has to do with the theory's conception of capital, which had already received considerable scrutiny from Veblen (1908: 161-7) at the turn of the twentieth century, and which would later fuel the so-called 'Cambridge Controversies' of the mid-twentieth century (Robinson 1953–4; for extensive summaries of the debates, see Harcourt 1972; Cohen and Harcourt 2003). The second critique has to do with the fundamental unit upon which everything else rests: the util.

Capital and the Production Function

As critics have pointed out, neoclassical theory has always relied on an ambiguous dual definition of capital: as a fund of 'financial wealth' on the one hand and a stock of physical assets, or 'capital goods', on the other. Recall from the discussion in Chapter Three of Clark's production function that each factor of production (land, labour and capital) could be counted in terms of its own 'natural' physical units (Nitzan and Bichler 2000: 70). In principle, we can aggregate land by hectares and labour by hours worked, but the same aggregation cannot take place for capital.[29] The reason is that capital, when defined in physical terms, is a *heterogeneous* entity; there is simply no way to add up diverse objects such as blast furnaces, robots for manufacturing Toyotas and shovels into a universal physical quantity. Instead, the only way to add up heterogeneous capital goods is by summing their values in money (Wicksell 1901–6; Robinson 1977; Nitzan and Bichler 2000: 71).

Neoclassical economists assume that the monetary value of a capital good, calculated by dividing its expected profits in perpetuity by the rate of interest, can be taken as 'indirectly' representative of the physical quantity of capital (expected profits / rate of interest = present value). Nitzan and Bichler (2000: 71) have illustrated the problems with this supposedly 'indirect' measure with simple arithmetic. A capital good that is expected to yield a yearly profit of $1 million at an interest rate of 5 percent will have a present value of $20 million. But if that same capital good were expected to earn $1.2 million at

[29] Of course land and, as we will see later, labour are also heterogeneous in crucial respects (e.g. fertile versus unfertile land, skilled versus unskilled labour). But as problematic as the aggregation of these two factors might be in practice, unlike capital they nevertheless have a physical quantity (hectares, hours) that can be counted in universal units separate from money.

an interest rate of 5 percent, its present value would increase to $24 million. Using this 'indirect' measure, the same capital good can have more than one physical quantity.[30]

Unable to measure capital apart from the rate of profit, the neoclassical production function invented by Clark descends into hopeless circularity: '…the magnitude of profit was explained by the marginal productivity of a given quantity of capital, but that quantity was itself a function of profit, which the theory was supposed to explain in the first place!' (Nitzan and Bichler 2000: 71).

This circularity robs the production function of any scientific footing to explain the distribution of income and wealth and places it firmly on the terrain of ideology. Without a viable measure of factor productivity to explain distributive shares, the theory instead uses distributive shares to explain distributive shares. According to the marginal productivity theory of distribution and its production function, if the CEO of a major commercial bank earns 600 times that of a Virginia coalminer, then at the margins that CEO *must* be 600 times more productive than the coalminer.

The Util

The measurement problem does not end with capital, but extends to the theory of value upon which the whole neoclassical framework is built. Neoclassical theory, as we have already seen, builds its theory of value on the concept of utility: hedonic pleasure that the

[30] Piero Sraffa's (1960) 're-switching' example demonstrated how, even if we ignore the impossibility of aggregating capital into its own physical units and assume that capital can be 'indirectly' quantified through the rate of interest, the theory still runs into trouble on purely logical grounds (see Nitzan and Bichler 2009: 78-9; Keen 2001: 137-46). In short, the reason is that a given production technique can appear capital intensive at a low rate of interest and labour intensive at a higher rate of interest, which means that the same capital goods represent different 'quantities' of capital (Nitzan and Bichler 2009: 79).

neoclassicists argue can be quantified in a fundamental unit called the 'util' (Keen 2001: Chapter Two). Now, neoclassical economists readily concede that the 'quantity of pleasure' that an individual gets from eating a taco or playing squash or listening to music is in practice entirely subjective and therefore unquantifiable (Jevons 1871; Edgeworth 1881; cited in Nitzan and Bichler 2009: 129). But instead of looking elsewhere, neoclassical economics instead proceeded to construct their entire framework on this impossible unit (Nitzan and Bichler 2009: 129).

In the end, neoclassical economists try to get around the insurmountable problem of quantifying utility by claiming that prices measure the utility of a given commodity:

> Utility is taken to be correlative to Desire or Want. It has been already argued that desires cannot be measured directly, but only indirectly, by the outward phenomena to which they give rise: and that in those cases with which economics is chiefly concerned the measure is found in the price which a person is willing to pay for the fulfilment or satisfaction of his desire (Marshall 1920: 78; cited in Nitzan and Bichler 2009: 130).[31]

This U-turn is itself plagued by hopeless circularity (Robinson 1962: 47; Nitzan and Bichler 2009: 129-30). Unable to measure the pseudo-quantities on the 'real' side of its dual quantity theory of value, neoclassical economists are left with no objective explanation of prices and distribution.

[31] Pigou (1952: 11) made a similar argument, claiming that utility could be known through the 'measuring rod of money' (see also Stigler 1950).

Marxist Quantities

Marx's labour theory of value, as we saw in Chapter Three, gave ontological primacy to the sphere of production. It is within the 'real' sphere of production where, for Marx, value is generated and where the capitalist appropriates surplus value in the form of profit. The 'real' sphere has its own fundamental unit of 'socially necessary abstract labour time' that Marx hoped would allow him to analyze with the precision of physics and chemistry the 'laws of motion' of the capitalist mode of production.

Yet Marx's unit of 'socially necessary abstract labour' is just as illusive as the neoclassical 'util'. In order to make labour, in all its complexity and diversity, a universal quantum, Marx needs to perform series of conceptual delineations and reductions that are plagued by their own logical circularities and contradictions.

Delineation

For Marx, labour employed directly in the productive process creates value and surplus value. Other forms of labour, including services, financial intermediation and government, are considered unproductive: they consume the value created in the sphere of production. Now, in order to operationalize Marx's equations – which determine the rate of exploitation, the rate of surplus value, the organic composition of capital and the rate of profit – in any empirically meaningful way, we require objective criteria to delineate productive from unproductive labour (Nitzan and Bichler 2009: 110). And this is where the theory runs into trouble.

If only labour employed in the productive process generates value, then we must have a clear idea of what constitutes 'production'. For Marxists, production is generally defined in broad terms as a process that mediates 'the relationship of society to nature' and that is contrasted to activities that only circulate and reproduce the social order (Nitzan and Bichler 2009: 112). Using a series of examples, Nitzan and Bichler (ibid: 112-3) illustrate how this delineation of the production process is anything but straightforward. For example, according to this classification, advertising would clearly fall under the category of unproductive labour, since it is designed to promote sales and enhance circulation but does not contribute directly to production (ibid: 112). But if we accept this argument, then how are we to classify activities relating to the remodelling of products, which, like advertising, are primarily intended to enhance sales and circulation (ibid: 112)? If we consider remodelling 'unproductive', then that means that any new characteristic of a product could potentially enhance its circulation, leaving us with no clear way to delineate the productive (value-creating) activities from the unproductive (circulation-enhancing) ones (ibid: 113).

Reductions

Even if we ignore the problem of delineating productive and unproductive labour, the labour theory of value still runs into serious problems trying to reduce labour to a universal quantum.

The first difficulty involves determining what constitutes the 'socially necessary' aspect of 'socially necessary abstract labour time'. Marx was able to steer clear of the

absurd argument that an inefficient worker who spends more time on the job creates more value than an efficient one. For Marx (1867: 129) it is not the total number of hours worked that determine the value of the product, but the 'socially necessary' or labour time expended *on average* to produce an article within a given branch of production (see also Robinson 1962: 43).

According to Cornelius Castoriadis (1984: 267-8) this emphasis on average time amounts to nothing more than an 'empty abstraction', one that simply assumes that the mechanistic forces of competition are constantly working to bring actual labour time in line with average labour time. For Castoriadis (ibid: 268), this elevation of competition to a 'sovereign mediation' within capitalist production requires that we accept 'the most delirious postulates of neoclassical bourgeois economics' – including the perfect and instantaneous mobility of capital and labour, the absence of impediments to entry, as well as market transparency and perfect information (see also Schumpeter 1942: 23-35). And in the end, even if we accept these assumptions, there is nothing to guarantee in practice that capitalists will obey the laws of an arithmetic exercise 'which nobody performs or could perform' (Castoriadis 1984: 267).

The second difficulty concerns the reduction of heterogeneous 'concrete' labour to homogeneous 'abstract' labour. Marx (1867: 134) states clearly that activities such as tailoring and weaving are qualitatively different and therefore incommensurable. Yet beneath their appearance as 'concrete' labour these diverse activities are both 'a productive expenditure of human brains, muscles, nerves, hands etc.' (ibid: 134). Thus human physiology provides the basis for universal 'abstract' labour, which can be

reduced to quantitative units of 'simple average labour', the labour-power of the 'ordinary' individual that is not 'developed in any special way' (ibid: 135). Skilled labour, in this way, can therefore be measured as a multiple, or a 'larger quantity', of simple labour (ibid: 135). This reduction of complex to simple labour, Marx (ibid: 135) claims, is 'constantly being made' and is '…established by a social process that goes on behind the backs of the producers'.

In this formulation, Marx treats the reduction of concrete to abstract labour in contradictory terms as both a social *and* a physiological abstraction (Castoriadis 1984: 273; Nitzan and Bichler 2009: 138). On the one hand, Marx (1867: 135) claims that simple average labour 'varies in different countries and at different cultural epochs, but in a particular society it is given'. Yet, on the other hand, if abstract labour has to do with physiology – brains, nerves, hand, etc. – then the particular spatial and historical context should be irrelevant. If abstract labour is a physiological substance, then, as Castoriadis (1984: 270) notes, 'Simple Labour is evidently the same in all societies and all historical periods, among the Aborigines of Australia, the Gauls, the serfs of Russia, and the Detroit factory workers'.

In practice, what takes place 'behind the backs of producers' is not a reduction of complex labour to simple labour but to money (Castoriadis 1984: 271). And indeed, Marx's followers, unable to quantify their illusive fundamental unit, resort to the claim that the socially necessary cost of labour is the actual wage, and that surplus value is what is left over once the wage has been deducted (Weisskopf 1979; Mosely 1985; Shaikh and Tonak 1994; for a critique, see Bichler *et al* 2012: 10). This move, however, is

undoubtedly circular: the labour theory of value sets out to explain wages through the quantities of 'abstract labour', but instead ends up explaining wages through wages.

Like the neoclassical utility theory of value, the Marxist labour theory of value falls short in measuring the fundamental unit on the 'real' side of its dual quantity theory. As a result, the labour theory of value fails to offer an objective explanation for prices and distribution (Bichler *et al* 2012: 11).

Toward an Alternative Theory

Thus the problem with existing theories of public debt runs much deeper than originally suggested in Chapter Three. Not only do conventional theories ignore the distributive and redistributive dynamics of the public debt; the dual quantity theories of value on which they are based also fall short in explaining the so-called 'productive' distributive processes that they claim to account for in the first place.

Using the quality-quantity approach mentioned above helps us to avert the intractable problems plaguing conventional theories. The linking of quality and quantity may lack the formal precision and rigour of the dual quantity value theories; but, as we have seen, this formal precision dissipates under closer scrutiny: the fundamental units on the 'real' side of neoclassical and Marxist value theories lack empirical foundations, and as a consequence, the inputs and outputs of production can never be meaningfully quantified independent of money. The alternative that I suggest here is to focus on the singular quantitative reality that matters to capitalists: the quantities of nominal finance in which

their universal ownership titles are denominated – and to link these quantities to the qualitative power institutions and processes that underpin them.

The Absentee Ownership of State Power

From this alternative power-centered perspective, in the capitalist order, capital means the discounting of future earning capacity into present value. This earning capacity, as was argued above, is associated not with production as such, but with the organized ability to control and limit production for profitable ends. In other words, earning capacity is a matter of institutionalized power. Like any other asset, the value of a government bond is generated through the discounting of its risk-adjusted future earnings into present value. And following this logic, the public debt, is not a 'fiction' but capital like any other capitalized asset.

In the case of government bonds, the income stream that finances interest payments and pays back the principle is derived largely from tax revenue. And in this way, the capitalized value of the government bond represents or is 'backed by' the government's powers of taxation (Nitzan and Bichler 2006: 36; see also Di Muzio 2007). And since the power of taxation ultimately rests on the threat and occasional exercise of force, what government bondholders therefore own is a share 'in the organized violence of society' (Nitzan and Bichler 2009: 294).[32]

[32] 'Organized violence' in this case refers to the state's power to mete out punishment for evading taxes. The penalty for tax evasion in most countries usually takes the form of fines, penalties, incarceration and sometimes the death penalty (in China, for example, tax evasion was still punishable by death until 2010) (Anderlini 2010). A simple thought experiment can help us to grasp the linkages between the discounted value of government bonds, on the one hand, and the state's powers of taxation, on the other. Imagine what would happen to the value of US federal securities if the US federal government were to declare tomorrow

A Guiding Hypothesis

Given our top-down focus, we can state, as a guiding hypothesis, that as the dominant bondholders increase their share of the public debt relative to other societal groups, they augment their relative power to restructure and reshape society.

Notice that this guiding hypothesis leaves open the question of precisely *how* this power manifests itself. As Bruce Carruthers (1996: 9) notes in his study of the English 'financial revolution' at the turn of the eighteenth century, the power relations underpinning contracts of debt and credit are 'complex' and run counter to the '…usual picture of a debtor beholden to his or her creditors' (see also Graeber 2011: 6–7). By contracting debt, a sovereign government is beholden to its creditors: it must pay back its obligations or else damage its credit-worthiness in financial markets. Yet on the flip side, government bondholders, through the act of lending, must take an interest in the power of the sovereign government if they hope to have their money repaid. In other words, 'The same obligation that binds the debtor to the creditor also, in a curious way, binds the creditor to the debtor' (Carruthers 1996: 9).

Given the complexity of the debtor-creditor relation, our guiding hypothesis does not suggest that the power conferred by ownership of the public debt be restricted to narrow 'power over' the state. While the ownership of the public debt may allow government bondholders to influence state behavior and policy making, this cannot be stated *a priori*. On the one hand, the distribution of assets and income streams, in the case of this study

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that all federal taxes were deemed completely voluntary. The issue of taxation is explored in greater detail in Chapter Five.

the distribution of federal bonds and federal interest income, map the 'quantitative manifestation' of the distribution of capitalist power (Bichler *et al* 2012: 5). On the other hand, we have the qualitative underpinnings and consequences of a given pattern of distribution. The linkages between quantity and quality – the manifestations of the social power conferred by ownership of the public debt – are to be explored empirically.

New Theory, New Methods

The exploratory nature of the research here means that the empirical analysis in this study is primarily focused on examining the quantitative aspects of capitalist power, providing the first comprehensive map of the distribution of the public debt and exploring its redistributive consequences. This shift from conventional theories of value to a power theory of value leads to novel empirical research methods, new categories, new data, new measures and estimates and also '…a non-equilibrium disaggregate accounting that reveals the conflictual dynamics of society' (Bichler and Nitzan 2012a: 65). In the remainder of this chapter I sketch the power-centered empirical research methods that will inform this study of the distributive and redistributive dynamics of the public debt.

Mapping Distribution

According to the theory of capital as power, the relative or differential ownership share of dominant capital groups is the key measure of power. As such, we need to be clear on how to measure the distribution (concentration) of public debt ownership. This task involves addressing three sets of questions. First, which sector(s) of owners should we

focus on? Second, given the top-down approach, who are the dominant owners of the public debt? Or keeping with Adams's terminology, who is the bondholding class? What cut-off point do we use to identify the bondholding class of dominant owners and why? Third, once we have chosen the relevant cut-off point for dominant owners, which method do we use to measure ownership concentration?

Sectors

Table 3.1 indicated that existing studies, apart from Adams's, are focused narrowly on measuring the distribution of the public debt within the US household sector. Yet as we will see in Chapter Five, there are in fact four aggregate sectors that dominate the ownership of the public debt: domestic households, domestic corporations, the foreign sector and the federal government itself.

Foreign ownership of the public debt raises a whole host of unique issues and debates that fall outside the scope of this study, and is therefore left out of the analysis. As will become clearer in Chapter Five, intra-governmental debt, that portion of the US public debt held in federal government trust fund accounts, is the peculiar outcome of government budget accounting and also raises its own set of debates and issues. Intra-governmental debt will therefore only be examined when it bears upon the sectors analyzed here. That leaves two sectors, domestic households and domestic corporations, which form the focus of the analysis in Chapters Six and Seven respectively. This then brings us to the second question: how do we choose the relevant cut-off point for dominant owners within each of these sectors?

Cut-Off Points

Turning once again to Table 3.1 we see that the cut-off points for measuring ownership concentration have been divergent. For the most part, the researcher does not freely choose these cut-off points. Adams's (1887) investment classes in Table 2.1 are taken directly from the 1880 U.S. Census (see Table 2.1), while the top income class ($5000 in annual net income or more) in Miller's (1950) and Cohen's (1951) studies outlined in Table 3.1 are based on the conventions of the Internal Revenue Service (IRS). In contrast, Michl's (1991) cut-off point of the top 1% of households was freely chosen from the micro-data of the Federal Reserve's Survey of Consumer Finances. Cavanaugh's (1996) Lorenz Curve takes into account the entire household distribution of federal income taxes and federal interest payments thereby avoiding the issue of cut-off points altogether.

When the available data does allow us to choose our own cut-off points to formulate proxies of dominant owners, we have two options. We can use either a fixed *number* of households or firms (i.e. the top 2000 households or the top 200 firms) or we can use a fixed *proportion* of households or firms (e.g. the top 1% of households or the top 0.01% of firms) (Bichler and Nitzan 2012a: 51). In either case, the exact cut-off point is always to a certain extent arbitrary and the task of the researcher is to provide some sort of conceptual motivation for the chosen proxy for dominant owners. This is paramount because different cut-off points lead to different ways of measuring what matters most: ownership concentration.

Concentration

The standard way of measuring concentration is to take a fixed number of top firms and measure their share of total assets, profits, sales, etc. (see Berle and Means 1932; Blair 1972). To use this conventional measure in the context of this study, we would take a fixed number of top households and top corporations and measure the share of the public debt held by the top group as a percentage of total share of public debt held respectively by each sector. This standard measure is commonly referred to as a measure of aggregate concentration (Nitzan and Bichler 2009: 316).

One important limitation with the standard aggregate measure of concentration has to do with the fact that the numerator (top households or firms) is fixed, while the denominator (total households or firms) is constantly changing. In order to illustrate this, we start with a simple equation: where (*s*) denotes average ownership of the public debt per dominant household or corporation, (*n*) the fixed number of dominant households or corporations, (*S*) the average ownership of the public debt per the average household or corporation and (*N*) the total number of households or corporations (Nitzan and Bichler 2009: 318):

1. $aggregate\ concentration = \frac{s \times n}{S \times N} = \frac{s}{S} \times \frac{n}{N}$

As we can see from this equation, the measure of aggregate concentration depends not only on the relative or differential ratio of the public debt held by a dominant household or corporation relative to the average household or corporation (*s*/*S*) but also on the ratio of the fixed number of dominant households or corporations relative to the total number

of households or corporations (n/N). Thus the relative share of public debt owned by dominant owners (s/S) may increase greatly over time, but if the number of total households or corporations (N) also increases, then aggregate concentration of public debt ownership may move sideways or decrease.

A decline in aggregate concentration due to an increase in the total number of households and corporations (N) suggests a decrease in the power of dominant owners. Yet this conclusion is difficult to accept at face value. As Nitzan and Bichler (2009: 319) point out in their analysis of aggregate concentration ratios for the corporate sector, a proliferation of total firms could just as well increase competition among the smaller firms, thereby increasing the power of dominant firms in the numerator. The same can be said of the household sector. A rapid increase in the total number of households may just as well increase competition at the bottom of the social hierarchy (e.g. for employment and for other resources) and this fracturing effect would only serve to increase the power of those at the top of the hierarchy.

There are two ways around this problem of measuring concentration. The first is to use not a *fixed number* of households or corporations as proxies for dominant owners, but a *fixed proportion* of them (i.e. the top 0.1% or the top 1%). The second solution is to measure the *differential* ownership shares of the typical dominant owner relative to the average (i.e. the relevant [s/S] in equation 1 above) (Nitzan and Bichler 2009: 320). The choice of the cut-off point for isolating top households or corporations [s] is, in the case of either measurement, arbitrary. In this study, both these proxies and measures of

ownership concentration are employed at different points and will be discussed in further detail in Chapters Six and Seven.

Finally, as a dynamic power process, our efforts to measure ownership concentration should map the changes in the ownership share of dominant owners as they unfold *over time*. This means that we should, wherever possible, expand beyond the narrow snapshots of ownership that the existing studies in Table 3.1 offer to develop long-term historical times series of ownership concentration.

Mapping Redistribution

As the existing literature makes clear, one of the most important implications of increased concentration in the ownership of federal bonds lies in the effect it has in redistributing income. Once again, the existing literature has come to no consensus on this issue. Those who claim that the public debt has become widely held by definition accept that the distribution of interest income on federal bonds is also diffused, and in turn claim that the public debt redistributes income progressively from wealthy taxpayers to lower and middle class public creditors. Meanwhile those who claim that the distribution of the public debt and the interest income that derives from it are heavily concentrated, claim that the public debt redistributes income regressively from lower and middle class taxpayers to wealthy government bondholders.

The underlying issue can be summarized as follows. Ownership of federal government bonds furnishes government bondholders with a stream of interest payments on its bonds. In accounting terminology, the 'stock' of federal bonds (wealth) provides bondholders

with a 'flow' of interest payments (income). If the group that receives the interest payments on the public debt (i.e. the government bondholders) is not the same as the group that pays the taxes that finances those interest payments (i.e. the taxpayers), then the public debt will serve as a mode of redistribution from the latter to the former. So in order to analyze the possible redistributive effects of the public debt, it is first necessary to map the distribution of federal interest payments and the distribution of federal taxes.

Limitations

In order to examine the redistributive effects of this pattern of distribution, we need to know whose taxes are financing the share of federal interest received by dominant owners. This task of measuring the redistributive effects of the public debt is much more difficult than the existing literature would have us believe. The few existing studies that attempt to measure the redistributive effects of the public debt offer some comparison of the share of federal interest received by top income groups relative to the amount top income groups pay in total federal taxes or in federal income tax (Miller 1950; Cohen 1951).

The problem with these existing measures is two-fold. First, they overlook some of the technical aspects of government accounting. Although interest payments constitute an important component of federal expenditures, there is technically no way to determine who pays the taxes that finance interest payments on the public debt.[33] This problem

[33] According to the Office of Management and Budget (OMB), since 1980, the 'net interest' paid by the federal government has on average accounted for 14 percent of current expenditures, and, expressed as a ratio, was equal to around two-thirds the overall amount dedicated to military spending. Over this same period, the amount paid by the federal government in interest has on average equaled about 27 percent of

stems from the fact that in government budget accounting there is not a particular subset of taxes 'earmarked' for government debt servicing (see Bell 2000; Wray 2012). As such, we have no way of knowing exactly whose taxes pay whose interest payments.

The second, and far more glaring, problem is that the share of taxes paid by dominant owners is a questionable indicator of the *progressivity* of the federal tax system. From introductory economics textbooks to more advanced studies, the progressivity of taxation is generally defined in relation to the *ability to pay* (Samuelson and Nordhaus 2001: 39; Suits 1977). A useful definition of tax progressivity is offered by Piketty and Saez (2007: 4), who state that a 'progressive tax is one in which the share of income paid in taxes rises with income'. As such, there is a consensus that the progressivity of the tax system is not determined by the share of taxes paid by dominant owners but by the tax rate that they pay as a percentage of their income relative to the average. The effective tax rate, or the amount of tax paid as a percentage of taxable income relative to the average effective tax rate, is therefore a more appropriate measure of tax progressivity than the share of taxes paid.

One way around these measurement problems is to estimate and compare the share of gross (before-tax) federal interest payments received by dominant owners to their share in net (after-tax) share federal interest payments (Piketty and Saez 2007: 5). Though there is no way to determine with any precision whose taxes finance whose interest payments, it

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total federal tax receipts. In the context of the current crisis, historically low yields on federal bonds mean that the federal government's interest expenses, even despite the massive build-up in debt, have been held in check (see also Johnson and Kwak 2012). OMB data indicates that from 2007 to 2012, net interest payments on average accounted for 9 percent of total federal government expenditures, 19 percent of military spending and 21 percent of federal tax revenues.

is nevertheless possible to get a sense of the role that the federal income tax system plays in redistributing the interest income received by dominant owners of the public debt.

Conclusion

The theory of capital as power provides a conceptual basis for the development of alternative empirical methods and accounting techniques to map the distributive and redistributive dynamics of the public debt. A focus on the top-down nature of power leads us to examine the dominant owners of the public debt, while the relative nature of power leads us to examine the differential ownership share of dominant owners. A focus on the dynamic aspects of power leads, where possible, to the replacement of 'snapshots' of ownership data with long-term historical time-series that map the ownership pattern as it changes over time. And finally, taking into consideration the intricacies of government budget accounting and the precise meaning of tax progressivity leads to a focus on the role of the federal income tax system in redistributing the federal interest income received by dominant owners.

Of course this alternative theoretical framework will ultimately be judged on the empirical insights that it generates, and whether or not these empirical insights help us to overcome the protracted lack of consensus that characterizes the existing literature on the distributive and redistributive dynamics of the public debt. The remaining chapters in this study will be dedicated to empirically exploring these dynamics through the conceptual lens of capital as power. The task of the next chapter will be to lay the groundwork for

the disaggregate analysis of the pattern of public debt ownership and its redistributive consequences found in Chapters Six and Seven.

Few issues have inspired more controversies amongst political economists than the issue of public indebtedness. Though it is a central institution of capitalist societies, much ambiguity surrounds the public debt, including how it operates, how it relates to taxation and spending, and how it is measured and accounted for in government budgeting practices. These ambiguities have meant that debates about the public debt have taken on a mystical, even religious, quality. An attempt to first de-mystify the public debt seems necessary before seeking to uncover its distributive and redistributive dynamics.

5 Accounting for the Public Debt
An Exercise in De-Mystification

> I must confess, that there is a strange supineness, from long custom, creeped into all ranks of men, with regard to public debts, not unlike what divines so vehemently complain of with regard to their religious doctrines.
>
> —David Hume[34]

> Like sex or religion, the public debt is a subject that it does little good to argue about, and yet nobody can help doing so.
>
> —Paul Samuelson[35]

Introduction

Few issues have generated more heated debate and controversy within political economy than the public debt. In the mid-eighteenth century, David Hume (1752) argued that the public debt had grown so large that it weakened British society and state to the point of rendering it vulnerable to foreign conquest. The situation seemed so dire that Hume (ibid: 102) warned: 'either the nation must destroy public credit or public credit will destroy the nation'. Over two decades later, Adam Smith (1776: 881) reiterated Hume's fears, asserting that the public debt '…has gradually enfeebled every state which has adopted it' and that, without a drastic change to its fiscal practices, the British state would eventually succumb to the same fate. Nearly a half century after Smith, Ricardo (1820: 197) proclaimed public debt to be 'one of the most terrible scourges which was ever invented to afflict a nation'. He also argued that without an immediate reduction in the level of

[34] Hume, D. 1752 [1970]. 'Of Public Credit' in E. Rotwein (ed), *David Hume:Writings on Economics*, Madison: University of Wisconsin Press, p. 101.
[35] Samuelson, P.A. 1948. *Economics*, New York, McGraw-Hill, p. 433.

public debt, Britain faced the prospect of public bankruptcy, with potentially devastating consequences for private commerce and trade.

In his magisterial tome on the history of economic thought, Joseph Schumpeter (1954: 327) lambasted the classical views on the public debt, which allowed 'judgment and advocacy' to prevail over 'analysis'. Schumpeter (ibid: 327) chastised the classics for their failed predictions about the impending cataclysmic consequences of Britain's heavy debt burdens, suggesting they did little more than reproduce the popular sentiments of the time. When it came to discussing the public debt, it seems even the earliest theorists of the capitalist regime substituted rigorous inquiry for emotionally charged political 'advocacy'.

The passage of time has done little to temper sentiments about the public debt. In the context of the current financial crisis, the US public debt has increased from 70 percent of GDP in 2008 to over 100 percent in 2012 (see Figure 2.1). And with this latest explosive rise in government borrowing has come a protracted and emotionally charged debate over how to deal with a large public debt that is expected to balloon even further unless existing budget policies are changed (an issue to be developed in Chapter Eight).

Yet no matter what side of the spectrum participants fall on within this feverish debate, most rarely ask fundamental questions about how the public debt actually works in contemporary capitalism: How do government budget deficits get accumulated as public debt? How is the public debt measured and accounted for? How do we explain the changing aggregate pattern of public debt ownership by various sectors?

Lacking any serious effort to address these fundamental questions, the current debates imbue the US public debt with a mystical, even religious, quality. And so, much like the classical political economists before them, contemporary political economists have allowed emotionally charged debate to prevail over rigorous analysis.

With this shortcoming in mind, the purpose of this chapter is to take a step back from the current debates and explore the fundamental questions about the public debt posed above. First, I make use of some macro accounting techniques developed and refined by Post Keynesians to outline how government borrowing works in practice in the contemporary US political economy. These techniques are anchored within a stock-flow consistent framework that matches flows of income to stocks of wealth. Second, I offer a systematic sectoral decomposition of the US public debt. I start with broadest 'gross' measure of the public debt and show through stock-flow consistent accounting how federal bonds come to be held by various sectors and how the sectoral ownership pattern shifts over time.

By focusing on how government borrowing works in practice and how it is accounted for, the overarching aim of this chapter is to provide a much-needed de-mystification of the public debt. This aggregate exercise lays the groundwork for the disaggregate analysis of the distributive and redistributive dynamics of the public debt that follow in the remaining chapters.

The chapter begins with a brief overview of the principles of stock-flow consistent accounting before starting to systematically decompose the broadest 'gross' measure of the US public debt. This exercise in decomposition starts out by dividing the gross public

debt into two categories: intra-governmental debt (i.e. the public debt owned by the US federal government) and 'debt held by the public'. Intra-governmental debt, we will see, is a peculiar outcome of government trust fund accounting and measures the stock-flow consistent transactions that take place *internally* between the US Treasury and the respective trust fund accounts. 'Debt held by the public', meanwhile, results from the US federal government's *external* transactions with the non-governmental sector.

Examining in greater detail the external transactions of the federal government, the chapter then proceeds by making use of the 'sectoral balances' accounting technique that is most commonly associated with Post Keynesian macroeconomics (Godley and Cripps 1983). This technique, derived from the standard national income and product accounts, allows us to see how the stock-flow consistent role of the federal government's budget balances within the macro-economy as a whole. The chapter then turns to examine the process through which a federal budget deficit is accumulated as a stock of 'debt held by the public', unpacking it into various sectors, starting with the broad division between foreign and domestic owners. Some concluding remarks discuss the limits of these macro accounting techniques and set up the task for the next chapter, where we will go beyond aggregate macro accounting and start to examine the disaggregate dynamics of distribution and redistribution that underpin the public debt.

Stock-Flow Consistency

As the name suggests, stock-flow consistent (SFC) accounting is a double-entry system that matches changes in stocks of wealth with increases and decreases in respective flows

of income (Juniper and Mitchell 2008: 16).[36] The basic principle behind SFC accounting is that, on the flow side, the deficit of one entity is another's surplus, and that, on the stock side, the debt of one entity is another's asset (Wray 2012: 6-7).[37] In order to clarify the relationship between stocks and flows for the macro-economy, Post Keynesians make use of a bathtub analogy (ibid: 30-3).

The Bathtub Analogy

The stock of wealth for a given entity – a household, firm, government or sector – is like the volume of water in a bathtub measured at a snapshot in time. The flow of income is like the water flowing into the tub from the faucet, while the flow of expenses is like the water flowing out of the tub through the drain. While stocks are measured at a snapshot in time, flows are measured per unit of time (a unit per year, a unit per minute, etc.). If the flow of water into the tub via the faucet over a period of time is stronger than the outflow from the drain, then the stock or level of water rises (and vice-versa). Similarly if the flow of income into a given entity is stronger than the outflow of expenses over a period of time, then the stock of wealth of that entity rises (and vice-versa).

To illustrate, suppose I have a stock of wealth in the form of a checking account with a balance of $500 at the start of the year (t). Over the course of the year, I receive a flow of income of $200 and spend $100. At the end of the year ($t+1$) the stock of wealth in my checking account has grown to $600.

[36] Irving Fisher (1896) developed a pioneering analysis of stock/flow consistent relations in the field of capital theory.
[37] The early pioneers of stock-flow consistent accounting in macroeconomics have likened it to the principle of conservation in physics (Godley and Cripps 1983: 14).

Of course the actual relationship between stocks and flows for the macro-economy as a whole is far more complex than the simple bathtub analogy suggests. We have examined the stock-flow consistent accounting framework for a single entity. This framework will become much more complex, as we gradually develop a stock-flow consistent framework for the US macro economy as a whole.

Gross Public Debt

We can start our task by discussing the broadest measure of the public debt: the gross public debt. This gross measure of the public debt includes all of the financial instruments (e.g. bills, notes, bonds and other securities) issued and backed by the 'full faith and credit' of the US government. The US Treasury issues most of these instruments, but they also include a small amount of securities issued by other agencies such as the Tennessee Valley Authority.[38] Not included in the gross public debt are the liabilities of state and local governments or 'government sponsored enterprises' (GSEs) such as Fannie Mae, Freddie Mac and Sallie Mae.[39]

Figure 2.1 offered a long-term historical view of the gross public debt expressed as a percentage of US GDP and is reproduced here as Figure 5.1. As we see, the level of gross

[38] As of June 2012, non-Treasury securities comprised a mere 0.25 percent of the gross US public debt. http://www.fms.treas.gov/bulletin/b2012_2.pdf

[39] Some have argued that GSE debt should be counted as part of the gross public debt. As Ambrose and King (2002) point out, the reductions in the public debt in the 1990s preceded alongside the growth of GSE indebtedness, suggesting that GSE debt, with its implicit backing of the US federal government, became a close substitute for Treasury securities. More recently, the US federal government's efforts to takeover and rescue the GSEs by injecting them with billions of dollars of federal funding has strengthened calls that GSE liabilities be put 'on budget' and thus counted as a part of the gross public debt (see Acharya *et al* 2011: 69; CBO 2010).

public debt outstanding has fluctuated greatly throughout US history. The data date back to 1792 and over time we see four significant waves of public indebtedness.

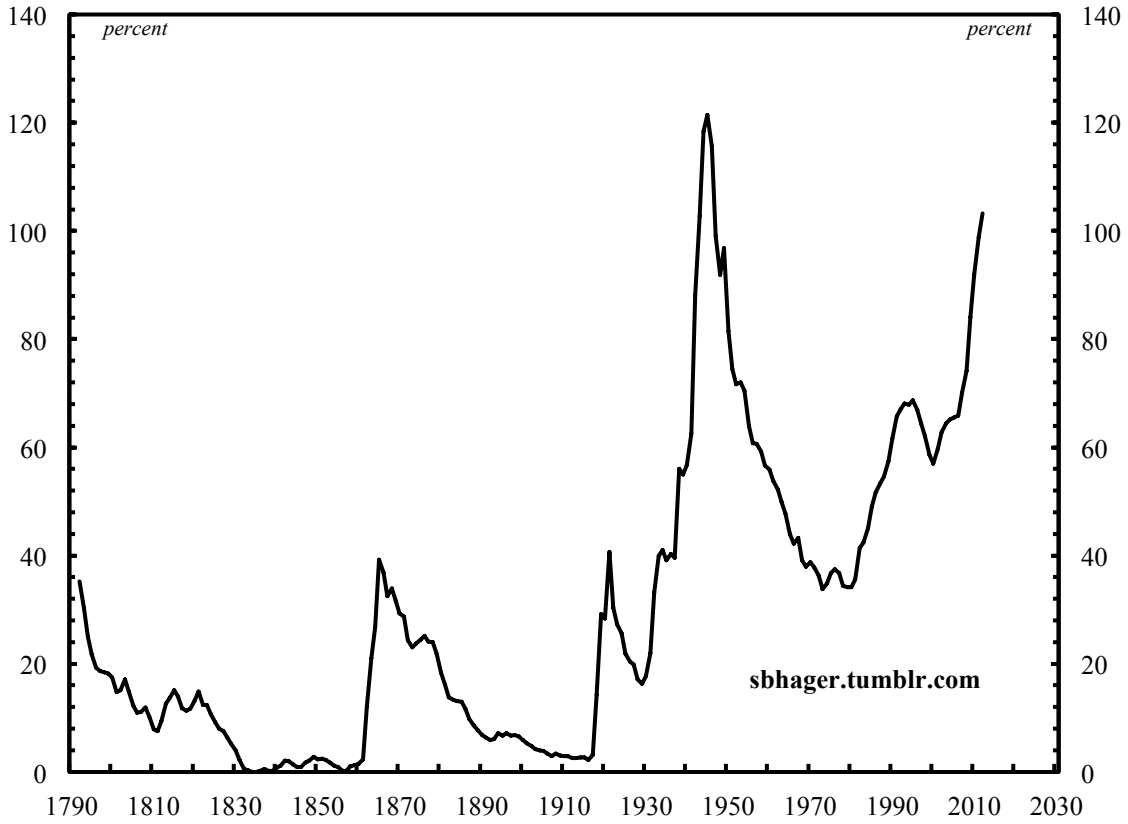


Figure 5.1 US Gross Public Debt as a Percentage of GDP

Note: Gross public debt includes intra-governmental debt (the debt held in government trust fund accounts) and 'debt held by the public'.

Source: From 1792-2010, Global Financial Data (series codes: for GDP, GDPUSA, for public debt USFYGFDA); from 2010-2012, Office of Management and Budget (Table 7.1)

Due largely to efforts to pay back the debts incurred during the Revolutionary Wars (1775-1783), we see a first wave: a gradual decline in the outstanding gross public debt from around 1792 to the mid-nineteenth century. The second wave of indebtedness follows in the wake of the Civil War (1861-1865). By far the most significant is the third

wave of indebtedness that comes with the turbulence of the early twentieth century, with its two world wars and inter-war global depression. Upon the conclusion of hostilities in World War II, we see a rapid decrease in the level of gross public debt outstanding during the so-called 'Golden Age' of the postwar period. The fourth wave of indebtedness begins in the early 1980s with the beginning of Reagan-era budget deficits and extends, with a brief downturn during the Clinton-era and its budget surpluses, to the present with the rapid accumulation of public debt in the wake of the current financial crisis. As we also see, in 2012 the level of gross public debt as a percentage of GDP breached the 100 percent mark, the only time this has happened in US history outside of WWII.

The Map and the Territory

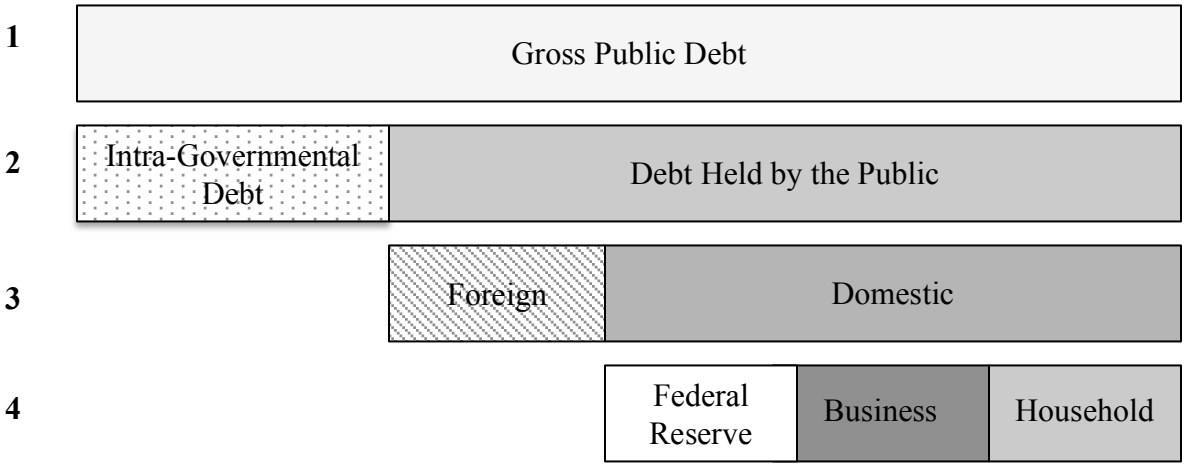
Starting from the broadest gross measure, we can begin to break down the ownership of the public debt. Table 5.1 provides an illustrative map of the sectoral breakdown of public debt ownership.[40] Note here that the table is not calibrated to reflect the relative size of each sector's holdings. The table is meant to serve as a visual guide for the sectoral deconstruction of public debt ownership that follows in the remainder of this chapter.

In line 2 of Table 5.1 the gross public debt is divided into two parts. The first of these parts is intra-governmental debt: the public debt that is owned by the government itself. When we 'net' out the intra-government holdings from the gross public debt, we arrive at our second part: debt held by the public. The levels of intra-governmental debt and debt

[40] This empirical technique is inspired by Bichler and Nitzan's (2012a: 32) mapping of the distribution of US national income.

held by the public, both expressed as percentages of GDP, are plotted in Figure 5.2. We now turn to discuss both these measures, starting first with intra-governmental debt.

Table 5.1 Deconstructing the US Public Debt



Intra-governmental Debt

As we can see from Figure 5.2, one of the most significant owners of the public debt is the government itself. From 1940 until the late 1980s, intra-governmental debt hovered steadily around 10 percent of GDP. This share has since grown to just over 30 percent of GDP. Expressed as a ratio relative to the outstanding level of debt held by the public (the dotted line in Figure 5.2), intra-governmental debt reached its record high in the first decade of the 2000s, climbing to around 0.7. Over the past four years, the debt held by the public has exploded, reducing this ratio to under 0.5.

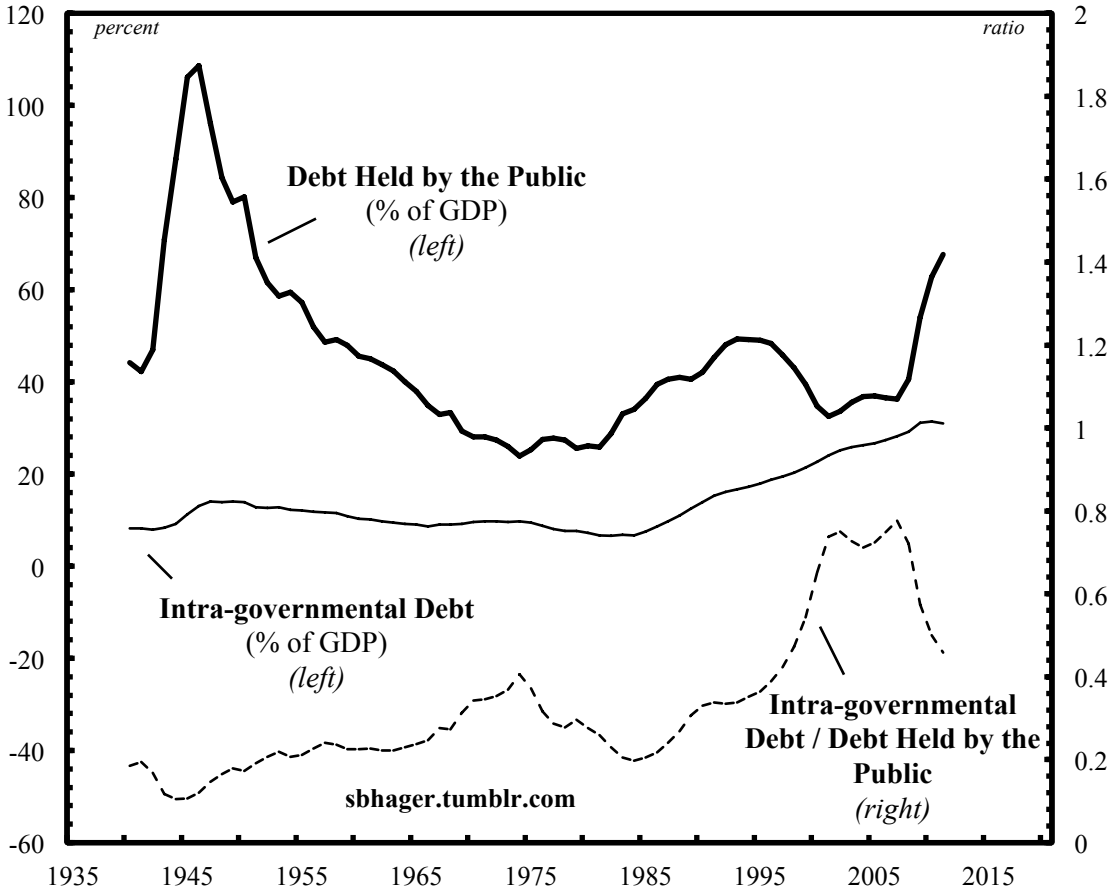


Figure 5.2 Intra-governmental Debt and Debt Held by the Public (% of GDP)

Source: Office of Managment and Budget (table 7.1)
http://www.whitehouse.gov/omb/budget/Historicals

Why does the US federal government hold its own debt? And why has the federal government's share of its own debt grown so rapidly over the past three decades? The answer to these questions lies in the operation of government trust fund accounts. In 2011, the largest five trust funds, the Federal Old Age and Survivors Trust Fund Account, the Federal Employees Retirement Funds, the Federal Hospital Insurance Trust Fund, the Federal Disability Insurance Trust Fund and the Federal Supplementary Medical

Insurance Trust Fund, accounted for nearly 80 percent of the ownership of intra-governmental debt (US Department of the Treasury 2012). By far the largest of the trust funds, the Federal Old Age and Survivors Trust Fund Account, referred to commonly as the Social Security Trust Fund, held 52 percent of intra-governmental debt in 2011.[41]

Trust Fund Accounting

To understand how the federal government comes to hold its own debt, we need to delve into the somewhat peculiar world of trust fund accounting. Government trust funds are accounting devices created by US federal law. Within the budgeting practices of the US federal government, certain taxes and expenditures are 'earmarked' for certain trust fund accounts. For example, in the case of social security, budget conventions dictate that payroll taxes be earmarked for the social security trust fund. The expenditures associated with paying out social security benefits are also earmarked in the same social security trust fund. When payroll tax receipts exceed the amounts paid out in social security benefits, the social security account runs a surplus. When the payroll tax receipts fall short of the amounts paid out in social security benefits, the social security account runs a deficit.

The trust fund is required by law to invest its surplus balances in special non-marketable, interest-bearing, US Treasury securities. In effect, the trust fund lends its surpluses to the Treasury in exchange for securities that are backed by the full faith and

[41] It is common to include the Federal Disability Insurance Trust Fund under the rubric of 'Social Security', in which case the amount of intra-governmental debt owned by Social Security in 2011 increases to 57 percent (Government Accountability Office 2012: 17).

credit of the federal government. This exchange is purely an internal transaction within the US federal government, hence the name *intra*-governmental debt. The outstanding level of intra-governmental debt reflects the overall balances of government trust fund accounts. A surplus in these accounts leads to an *increase* in intra-governmental debt, while a trust fund account deficit leads to a *decrease* in intra-governmental debt.

Large increases in the level of intra-government debt since the 1980s are primarily due to major reforms enacted in 1983 (Levit 2008: 15). Based on the recommendations of the National Commission on Social Security Reform, the Social Security Reform Act of 1983 mandated increases in payroll taxes due to a fear that the Social Security Trust Fund account was facing impending insolvency.[42]

Intra-governmental debt operates according to the principles of SFC accounting. A surplus in one entity, the trust fund account, is matched by a deficit for another entity, the US Treasury (and vice-versa). The inflow of payroll taxes becomes a stock of wealth, in this case, in the form of Treasury securities, which count as an asset to the creditor (the trust fund) and a liability to the debtor (the Treasury). It is important to keep in mind that this SFC relationship is an *internal* accounting device (Wray 2004). The overall balance in the trust fund accounts has no direct bearing on the federal government's surplus/deficit with *external* entities. Since trust fund accounting earmarks only a portion of federal taxes and expenditures, it has no direct relationship to the external budget surplus/deficit of the federal government. For example, as has been the actual case in the US for most of the past decade, the social security trust fund account could run a massive

[42] The commission is commonly referred to as the 'Greenspan Commission' because of its chairman, Alan Greenspan.

surplus (i.e. payroll taxes greatly exceed payouts) while the overall budget balance of the federal government could be massively in deficit.

The Great Equalizer?

It is difficult to situate intra-governmental debt within our analysis of the power underpinnings of public debt ownership. Given the fact that intra-government debt claims proliferate only due to internal transactions within the federal government, we can say that it constitutes one instance where 'we' do actually 'owe it to ourselves'. This is of course only if 'we' is defined as the federal government. And since intra-governmental debt represents an internal (and non-marketable) claim between government departments, it cannot be used to exercise exclusionary social power. Intra-governmental debt is indeed held exclusively by the federal government, but it does not hold this debt to the exclusion of any other social group. Without the power to exclude an external entity, intra-governmental debt is little more than an accounting device.

This does not mean, however, that intra-governmental debt has no bearing on our analysis here. Most importantly, as we saw in Chapter Two, Keynesians have suggested that intra-governmental holdings in trust funds such as social security serve to mitigate the domestic private concentration of public debt ownership (Cavanaugh 1996: 68; Heilbroner and Bernstein 1989: 34). The very significant holdings of intra-governmental debt, Keynesians claim, serve the public interest by providing the social security trust funds with a safe and secure asset to invest the future retirement benefits of low and middle class Americans.

The problem is that these claims are always asserted and never explored through systematic empirical research. How, then, do we go about exploring empirically the claim that intra-governmental holdings somehow benefit ordinary Americans? In and of itself, the overall level of intra-governmental debt tells us nothing about the underlying interests that are served by it. But technically speaking, when the federal government pays out social security benefits and other forms of transfer payments, what it does is cash in some of the Treasury securities from its trust fund account to pay out transfer payments to individuals and families in dollars and cents. It is therefore possible to examine the disaggregate flow of transfer payments in order to determine indirectly whose interests are served by intra-governmental holdings of the public debt.

The disaggregate flow of transfer payments bears on our analysis of the household sector in Chapter Six and will be dealt with further then. Suffice it to say at this point that once we start empirically mapping the disaggregate distribution of transfer payments, the issue becomes much more complicated than orthodox Keynesians would have us believe.

Debt Held By the Public

We are now ready to turn to the second part of line 2 in Table 5.1. Unlike intra-governmental debt, which accumulates from the internal transactions of the federal government, debt held by the public, as the name suggests, accumulates from the transactions of the federal government with *external* entities.

The Federal Budget Balance

Keeping within a SFC framework, we can start by dissecting the inflows and outflows of the federal government. It is important to note that when accounting for the federal government's transactions with external entities, no earmarking of specific tax revenues and expenditures takes place. When the federal government's total tax revenues exceed its total expenditures for a given period of time, it runs a budget surplus. When the federal government's total tax revenues fall short of total expenditures for a given period of time, it runs a budget deficit. And when the federal government's total tax revenues equal total expenditures for a given period of time, it runs a balanced budget.

The historical relationship between federal tax revenues, federal expenditures and the federal budget balance are plotted in Figure 5.3. All three series are plotted as percentages of GDP. The pre-twentieth century (1791-1899) US system of public finance tended balanced budgets and small government. Apart from the War of 1812 (1812-1815) and the Civil War period (1861-1865), tax revenues and expenditures were closely aligned. And for 69 percent of the years from 1791-1899, the US federal government registered a small surplus. The situation changes quite dramatically from 1900 onwards as budget deficits began to increase along with the size of government. Here we see very large deficits registered for the two World Wars. And in general terms since the early twentieth century, the federal government has tended to run budget deficits.

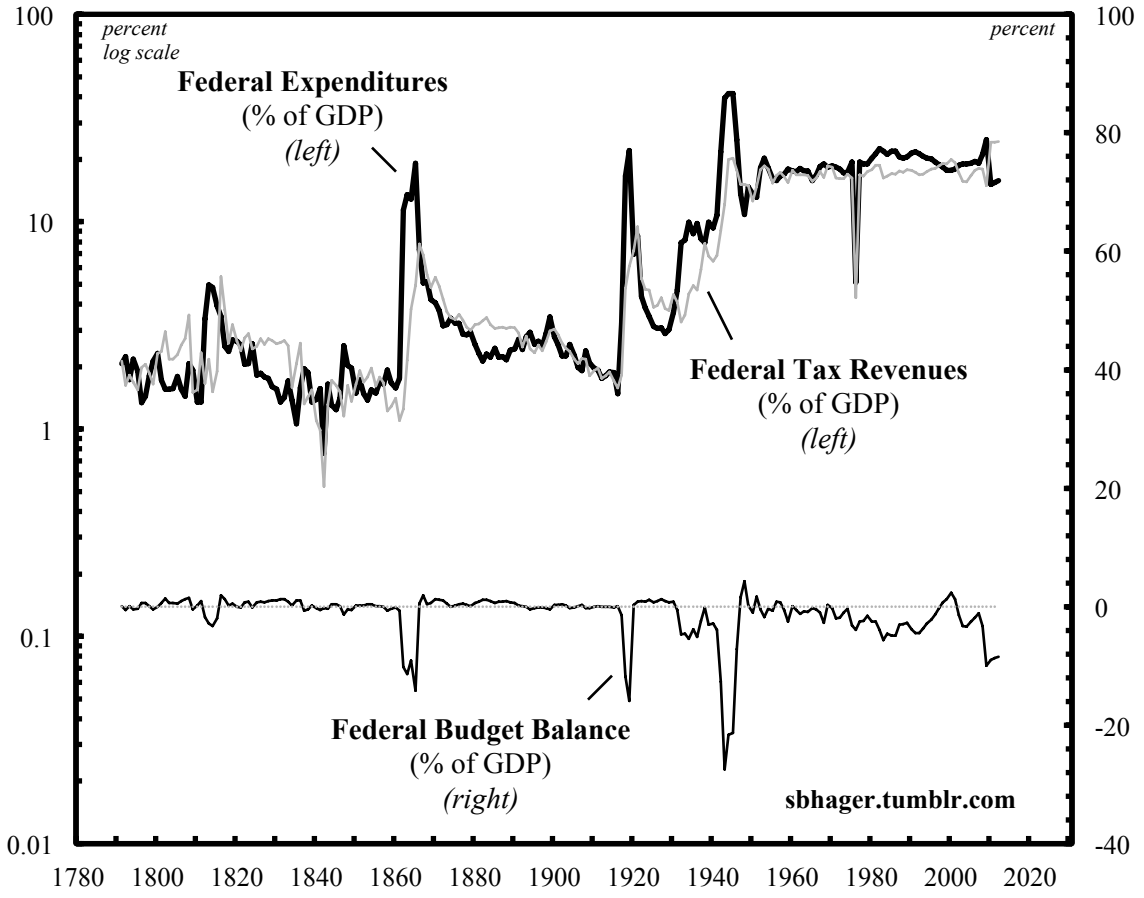


Figure 5.3 Spending, Taxation and the Federal Budget Balance

Source: From 1791-2009, Global Financial Data (series mneumonics: USFYONET for federal expenditures; USFYFRA for federal tax revenues; USFYFSDA for federal budget balance). From 2010-2012, Office of Management and Budget, Table 1.2 http://www.whitehouse.gov/omb/budget/Historicals

From 1900-2012 the federal government registered a small surplus in only 31 percent of years. Since 1950, the federal government has registered surpluses in only nine years or 15 percent of the total. The last budget surplus came in the second term of Bill Clinton's presidency. And since the onset of the crisis in 2007-8, the tax revenues of the federal government have collapsed while expenditures have increased, pushing the federal government deeply into the red.

According to our SFC, double entry, framework, a budget deficit of the federal government always registers as a surplus for external entities (and vice versa). This relationship between federal deficits and non-federal government sector surpluses is not a theoretical proposition, but an accounting identity that can be derived from the standard national income and product accounts. To better understand the relationship between the federal government and external entities, we can employ another accounting technique used by Post Keynesian macroeconomists: sectoral balances.

External Accounting and Sectoral Balances

Sectoral balances are accounting categories that are derived from the standard national income and product accounts. The balances are associated with a three-way aggregate division of the macro-economy: this division consists of the domestic private sector (households and firms), the government sector (which, in the US case, includes federal, state and local governments) and the foreign sector (households, firms and governments from the 'rest of the world') (Wray 2012: 4).

Each of these sectors has an inflow of income and an outflow of expenditures over a period of time. If the income of a given sector is more than its expenditures, the sector runs a surplus; if the income of a given sector is less than its expenditures, the sector runs a deficit; and if the income of a given sector is equal to its expenditures, the sector is balanced (ibid: 4). As an accounting identity, the overall balance of deficits and surpluses between the aggregate sectors must, by definition, sum to zero:

domestic private balance + domestic government balance + foreign balance = 0

The Algebra

In unraveling the balance between sectors, we start with gross domestic product (GDP), the most common measure of national income. GDP, a flow concept, is defined as the market value of all goods and services produced in a national economy over a period of time (Bureau of Economic Analysis 2007: 1). GDP can be tabulated either on the basis of sources of national income or on the basis of uses of national income.[43] From a sources perspective, GDP is the sum of consumption spending (C), private investment spending (I), government spending (G) and net exports, or exports minus imports (X – M):

1. GDP (sources) = C + I + G + (X – M)

From a uses perspective, GDP is the sum of consumption spending (C), private saving and taxation (T):

2. GDP (uses) = C + S + T

Given that these tabulations are different ways of expressing the same magnitude, GDP, we can combine them in the following identity:

3. C + I + G + (X – M) = GDP = C + S + T

When we subtract C, I, G and (X – M) from both sides of the equation and rearrange, we arrive at:

[43] This explication of sectoral balances has relied on various blog entries by Bill Mitchell: http://bilbo.economicoutlook.net/

4. $0 = (S - I) + (T - G) - (X - M)$

A simple re-arrangement of net exports (X – M) gives us the US foreign balance (M – X). This gives us the overall balances of income and expenditures for the government and non-governmental sectors. The sum of the government balance, government spending minus total taxation (G – T), the private sector balance, private saving minus total private investment spending (S – I), and the foreign balance, imports minus exports (M – X), sum to zero:

5. $0 = (S - I) + (T - G) + (M - X)$

[private balance + government balance + foreign balance = 0]

Finally, we break down the consolidated government sector balance into the federal balance ($G^f - T^f$) and the state and local balance ($G^{s+l} - T^{s+l}$):

6. $(S - I) + (T - G) + (G^f - T^f) + (G^{s+l} - T^{s+l}) = 0$

So to summarize, equation 6 states that the sum of government sector balances must be equal to the sum of the private sector and foreign balances. In other words, if two of the sectors are in deficit, the third must, by definition, run a surplus.

In Balance

We are now ready to look at the actual data to illustrate the historical relationship between the government and non-governmental balances. Figure 5.4 plots the quarterly

balances of each of our four sectors expressed as a share of GDP: the federal government, the state and local government, the private domestic and the foreign balance.

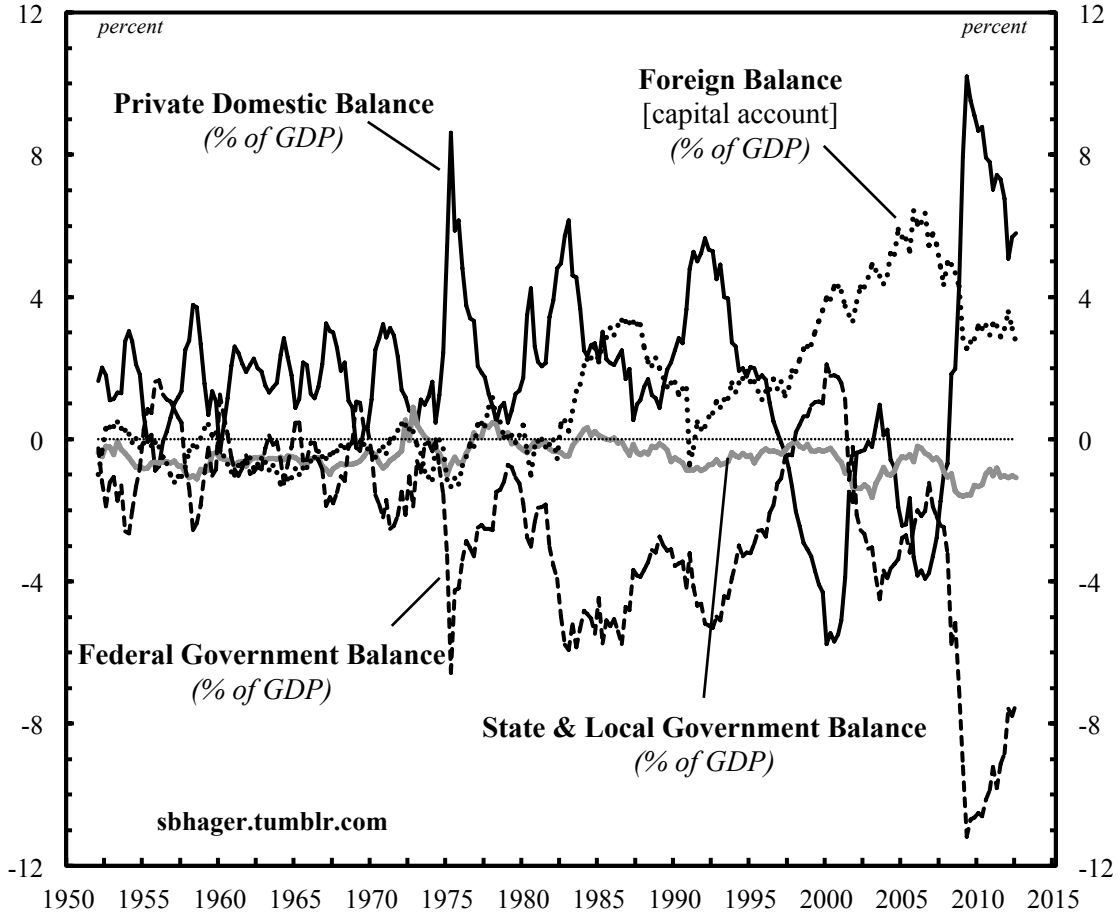


Figure 5.4. US Sectoral Balances

Source*:* Federal Reserve's Flow of Funds Accounts (series F.8).

The foreign balance as a percentage of GDP in Figure 5.4 is expressed in terms of the US capital account. According to balance of payments accounting, a current account deficit (the inflow of imports is greater than exports) must be matched by a capital and financial account surplus (the inflow of credits is greater than debits). This is another way

of saying that the US trade account deficit is registered by the rest of the world as a capital account surplus (see Carbaugh 2007: Chapter 10).

As we see, the sum of federal and state and local government balances are mirrored by the sum of private sector and the foreign balances. During the post-World War II period, the US capital account, as well as state and local government, were usually in a small deficit. Meanwhile small federal government surpluses/deficits oscillated counter-cyclically with small private sector surpluses/deficits. Since the early 1970s dramatic changes have taken place. The state and local government sector has continued to record a small and relatively stable deficit, while the other three sectors have fluctuated significantly.

To illustrate these fluctuations, we can explain the situation as it has unfolded since 2000. In that year, a federal government surplus, large by historical standards, was combined with a large capital account surplus and a very large private deficit. This dynamic started to change in the early part of the 2000s. From its previous surplus position, the US federal government went deeply into deficit, while the capital account surplus increased and the private sector went into surplus. During the mid-2000s, before the onset of the current crisis, the federal government moved towards a balance, the private sector fell deeper into deficit, while the capital account surplus continued to grow.

In the early stages of the current crisis, the federal government went very deeply into deficit, registering a deficit of 11 percent of GDP. Meanwhile the capital account surplus began to shrink and the private sector surplus increased. Since 2009, the federal government deficit has decreased from 11 to 8 percent of GDP, the private sector surplus

has decreased from around 10 to 6 percent of GDP, while the capital account surplus has stabilized at around 3 percent of GDP. If one factors in the 1 percent of GDP deficit registered by state and local governments and one sees that our accounting entities in equation 6 do indeed sum to zero (8 + 1 – 6 – 3 = 0).

As we saw earlier, the federal government has tended to run budget deficits since 1900, as the outflow of federal spending (G^f) has tended to exceed the inflow of federal taxes (T^f). Our exposition of sectoral balance accounting illustrated how these federal budget deficits flow to other entities as surpluses.

What is left to demonstrate is how these government flows accumulate as a stock of debt (liability) for the federal government and a stock of wealth (asset) in the form of 'debt held by the public' (the second part of line 2 in Table 5.1). To recap, a federal budget deficit leads to an increase in debt held by the public, while a federal budget surplus leads to a decrease in debt held by the public. This relationship between the flow of deficits and the accumulation of a stock of debt is illustrated in Figure 5.5. The figure plots the federal budget deficit as a percentage of GDP (the thin dotted series) alongside the annual percentage change in the debt held by the public (the thick series), also expressed as a percentage of GDP.

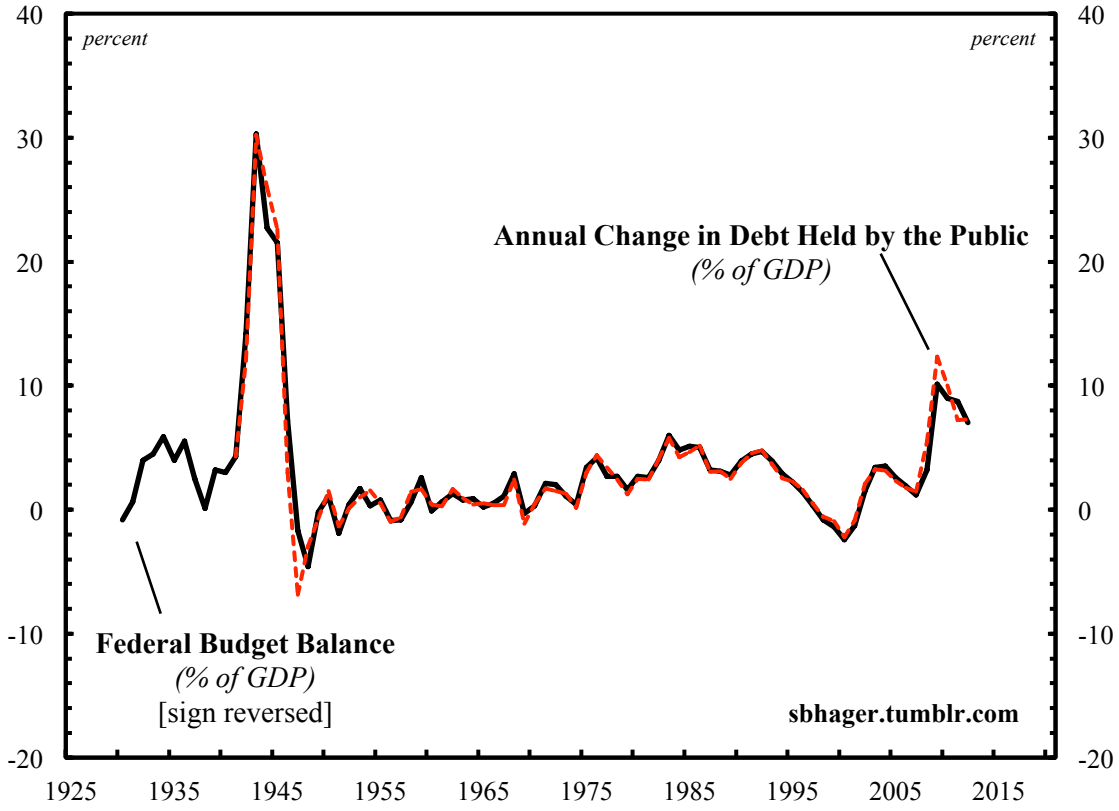


Figure 5.5 The Federal Budget Balance and Debt Held by the Public

Note: The annual change in debt held by the public is calculated as the difference in the nominal level of debt held by the public between successive years divided by the level of GDP.

Source: Office of Management and Budget (tables 1.1 and 7.1)
www.whitehouse.gov/omb/budget/Historicals

Here we see that the series are practically identical, as they should be, with fluctuations in the federal budget balance matched by fluctuations in the annual change of debt held by the public.[44] Now that we have outlined how the federal budget deficit is

[44] The intricate details of how the budget deficit is accumulated as public debt need not concern us here. One of the main contributions of Post Keynesian 'modern monetary theorists' or 'Chartalists' has been to outline, through careful dissection of policy and accounting, the fiscal and monetary operations of a monetarily sovereign government like the US federal government (i.e. a government that issues its own

accumulated as a stock of debt, we can start to unpack the debt held by the public. In line three of Table 5.1 we further de-compose the federal debt held by the public into foreign and domestic ownership.

The Globalization of US Public Debt Ownership

As noted earlier, the issue of foreign ownership will not be covered in this study. There are potentially interesting, and as yet, unexamined linkages between the rise of foreign indebtedness and the class dynamics of distribution and redistribution that form the focus of the analysis here. But given the rather exploratory nature of the research on these domestic dynamics, the task at hand is already fairly arduous. In order to explore in any meaningful way the potential linkages between the global and domestic aspects of this issue would require a research project in itself. And this is something I plan to pursue in future research. In the remainder of this section I outline the evolution of foreign ownership of the US public debt and elaborate on some of its potential linkages to this study.

The rapid globalization of public debt ownership is shown in Figure 5.6. Here we see that from the end of World War II through the 1950s, foreign ownership was

currency). As proponents of modern monetary theory (MMT) point out, the US Treasury spends by crediting accounts or issue cheques *before* it collects taxes or issues bonds (Wray 1998: 78; Bell 2000). Since the government is the monopoly issuer of the currency, it has the unique ability to inject *net* financial assets into the system (Wray 1998: 79). Taxation allows a government to drain purchasing power from the private sector and to ensure private demand for government currency. By demanding that tax obligations, as well as other government-imposed fines and fees, be met in its own currency, a monetarily sovereign government can induce the population to provide it with goods and services (Peacock 2003; Wray 1998). Bond issuance by the Treasury serves as a mechanism that 'mops up' the excess reserves in the banking system created by the initial government spending. Central bank purchases/sales from/to the public of (normally short term) bonds serves to inject/absorb liquidity to affect the short-term rate of interest (Wray 1998: 86; Ingham 2004: 143).

insignificant, with foreigners holding, on average, only 2.1 percent of the debt held by the public over the period. In the 1960s this share started to gradually increase, averaging 4.7 for the decade as a whole. Then, with the Bretton Woods System ending in the early 1970s, foreign ownership of the US public debt skyrocketed, and through the 1970s foreigners on average held a share of 15.6 percent. The foreign share of the US public debt remained more or less steady through the 1980s at 15.8 percent, then climbed significantly through the 1990s to 22.7 percent. Since 2000, the foreign share of the US public debt has increased rapidly, averaging 40.3 percent in the 2000s and 41.9 percent in the 2010s. In the final quarter of 2008, the foreign share breached the 50 percent mark for the first time, but has fallen slightly since then.

How do we explain this rapid accumulation of US public debt by foreigners? The main driver of foreign accumulation has been the US current account deficit, the primary component of which is the US trade deficit.[45] As we saw in the sectoral balances of Figure 5.3, the US has persistently run current account deficits since the early 1980s. The tendency for trade deficits to exist alongside federal budget deficits, often referred to as the 'twin deficits', was paralleled by the rapid increase in foreign ownership of the US public debt over this period.

[45] The other components of the current account include net earnings on US investments abroad, as well as unilateral transfers (gifts in kind or money gifts) (Carbaugh 2007: 340).

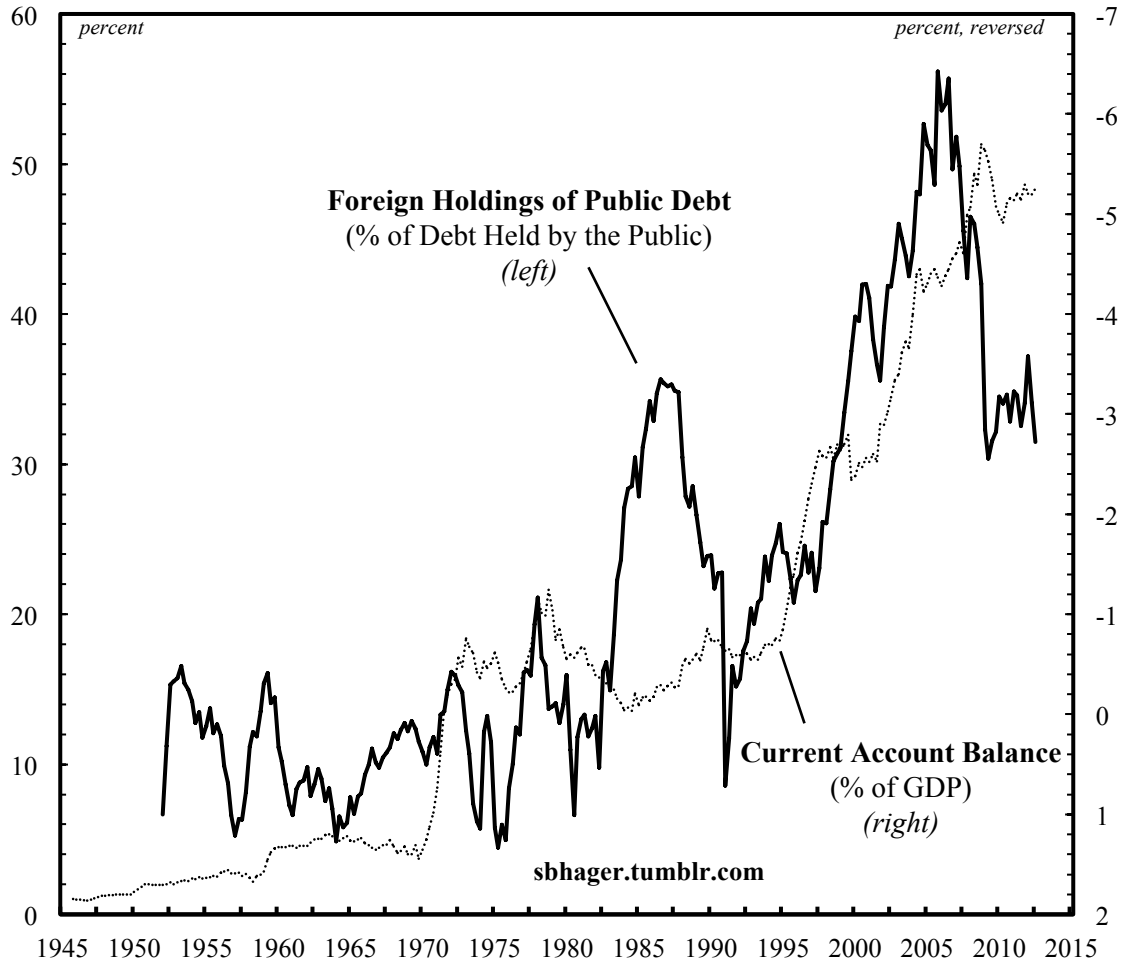


Figure 5.6 Foreign Holdings of US Public Debt and the Current Account Balance

Source: Federal Reserve's Flow of Funds Accounts (series F.8 and L.209).

Persistent current account deficits for the US mean that foreigners, either private entities or foreign central banks, accumulate surpluses in US dollars. And a significant amount of these surpluses get recycled back into the US as foreigners invest in US Treasuries (among other assets) as an interest-bearing alternative to dollar reserves. Without this recycling of dollar surpluses, the value of the US dollar would have plummeted, making the current account deficit unsustainable (Hudson 2002). As we see

in Figure 5.6, the foreign share of the US public debt tends to track the trend of the US current account deficit.

Foreign Ownership and Power

There are at least two substantive reasons why the issue of foreign indebtedness is relevant to the themes of this study. The first reason has to do with the fact that foreign ownership of the public debt involves a flow of tax-financed interest payments outside of the national economy. For Keynesian theorists of the public debt this outflow of interest income had potentially damaging consequences for the national economy (see Hansen and Greer 1942: 492).[46] Unlike an internally held debt, in which income flows between taxpayers and bondholders within the same national unit, a foreign held debt involves a transfer of income from domestic taxpayers to an external bondholder (private or official). According to Keynesians, the fact that foreign indebtedness involves an external transfer means that it is bound to the same rules of 'sound finance' as private forms of indebtedness (see Chapter Two).

Yet again one of the main limitations of the Keynesian argument is that it is overly preoccupied with the aggregate level and does not take into account the disaggregate power relations that underpin foreign indebtedness. While Keynesians recognize the potentially harmful effects of foreign indebtedness and the external transfer of income that it entails for national macro-economy, they do not investigate the possible linkages

[46] Keynesians were not the first to express concerns about the harmful effects of foreign ownership of the public debt. In his polemic against the British system of public borrowing, Hume (1752: 96) expressed similar concerns when he states: 'As foreigners possess a great share of our national funds, they render the public, in a manner, tributary to them, and may in time occasion the transport of our people and our industry'.

between foreign indebtedness and the domestic distributive and redistributive dynamics of the public debt. For example, if foreigners own major portion of the US public debt, and if this distributive pattern is combined with a regressive system of income taxation, then foreign indebtedness might serve to intensify domestic social inequality.

Another reason foreign indebtedness is relevant to this study has to do with its consequences for government policymaking. The issue involves two interrelated questions. First, does ownership of the public debt give foreign owners power over government decision-making and behavior? Second, do the motives of foreign owners of the public debt differ in any meaningful way from those of domestic owners?

In the US case, despite four decades of debate, political economists have come to no consensus on these questions. Some argue that foreign owners of US public debt have no power over the US federal government. According to this argument, the increase in US foreign indebtedness merely reinforces the role of the Treasury securities market as a powerful 'safe heaven' for global capitalism and may in fact allow the US federal government to influence or exploit its foreign creditors (Hudson 2002, 2005; Panitch and Gindin 2009).

Others see US foreign indebtedness as a sign of the mutual interdependence between the US government and its foreign creditors; this stable and symbiotic relationship, so the argument goes, is unlikely to unravel even in the context of the current crisis (Dooley *et al* 2004, 2009; Drezner 2009). According to this argument, foreign owners and the US federal government are locked into a power-less relationship of mutual advantage whereby neither side can influence the decisions of the other.

Still others argue that US foreign indebtedness represents a major threat to global security and financial stability (Kennedy 1987; Ferguson 2004; Arrighi 2005). According to some who espouse this argument, foreign indebtedness did not become a weakness until recently when the central bank of a major geopolitical rival, China, became the largest foreign creditor to the US federal government (Thompson 2007).[47] And now with substantial holdings of US federal debt, so the argument goes, China will somehow use these holdings to steer US policymaking to its own advantage.

What appears to be lacking within these existing studies is rigorous, in-depth empirical research that documents the impact of foreign ownership of public debt on US federal government behavior and policymaking. The evidence garnered to support these arguments is thin, often based on little more than a handful of newspaper reports or a few government documents. And without any effort to research systematically the consequences of foreign ownership of the US public debt, we are left with little understanding of whether foreign owners exert power over US policymaking and whether the motives of foreign owners somehow differ from domestic ownership of the US public debt.

Domestic Ownership

Leaving the issue of foreign ownership aside for future research, we are now ready to move to the right-hand side of line 3 of Table 5.1 and examine domestic ownership of the debt held by the public. The domestic debt held by the public is further divided into three

[47] Current estimates suggest that the Chinese central bank, the People's Bank of China, owns over $1 trillion, or over 20 percent, of the foreign share of the US public debt (Flitter 2012).

main sectors in line 4 of Table 5.1: the Federal Reserve (whose classification as 'public' will be explained below), domestic business and domestic households.[48] We will discuss each of these in turn.

Federal Reserve

As Figure 5.7 indicates, the share of the public debt owned by the Federal Reserve, the US central bank, is significant. Since 1945, the Federal Reserve has owned on average 14 percent of the debt held by the public, with its share peaking at a high of 24 percent in 1974 and reaching its nadir of 7 percent in 2008.

The existing literature on the distributive and redistributive dynamics of the public debt has had little, if anything, to say about the Federal Reserve's ownership of the public debt.[49] Given that this study is framed as an engagement with the existing literature, the share of the public debt owned by the Federal Reserve falls outside of the scope of this study.[50] Furthermore, the Fed's ownership of the public debt and its relationship to the

[48] Also excluded from this study is the portion of the public debt held directly by state and local governments, representing around 4 percent of the total 'debt held by the public' in 2012.

[49] James O'Connor (1973: 191) argues in passing that the power of the 'aristocracy of finance', the dominant owners of government bonds, is bound up with the power of the Federal Reserve, but does not make any effort to explore the disaggregate winners and losers associated with the oscillations in the central bank's ownership of the public debt (for further discussion of O'Connor's arguments, see Chapters Two and Seven). Similarly E. Ray Canterbery (2000) refers to Alan Greenspan, the former Chairman of the Federal Reserve as the 'pope' of Wall Street, working in the interest of the 'bondholding class'. But like O'Connor, Canterbery does not examine whose interests are served by the Federal Reserve's own holdings of the public debt.

[50] This is not to deny potentially important, if indirect, linkages between the distributive and redistributive dynamics of the public debt and Federal Reserve policy. For example, a recent study by the Bank of England (2012) examined the distributional implications of quantitative easing in the United Kingdom during the current crisis. Quantitative easing (or 'QE' as it has been dubbed by pundits) is an unconventional monetary policy that involves swapping longer-term government bonds and other assets for cash when conventional monetary policy, the manipulation of short-term interest rates through open market operations becomes ineffective (i.e. when short-term interest rate become zero bound). The study estimated that the £375 billion QE program in the UK had led to a 26 percent increase in the value of corporate shares

inner workings of monetary policy is an extremely complex topic that deserves a full book-length treatment in its own right.

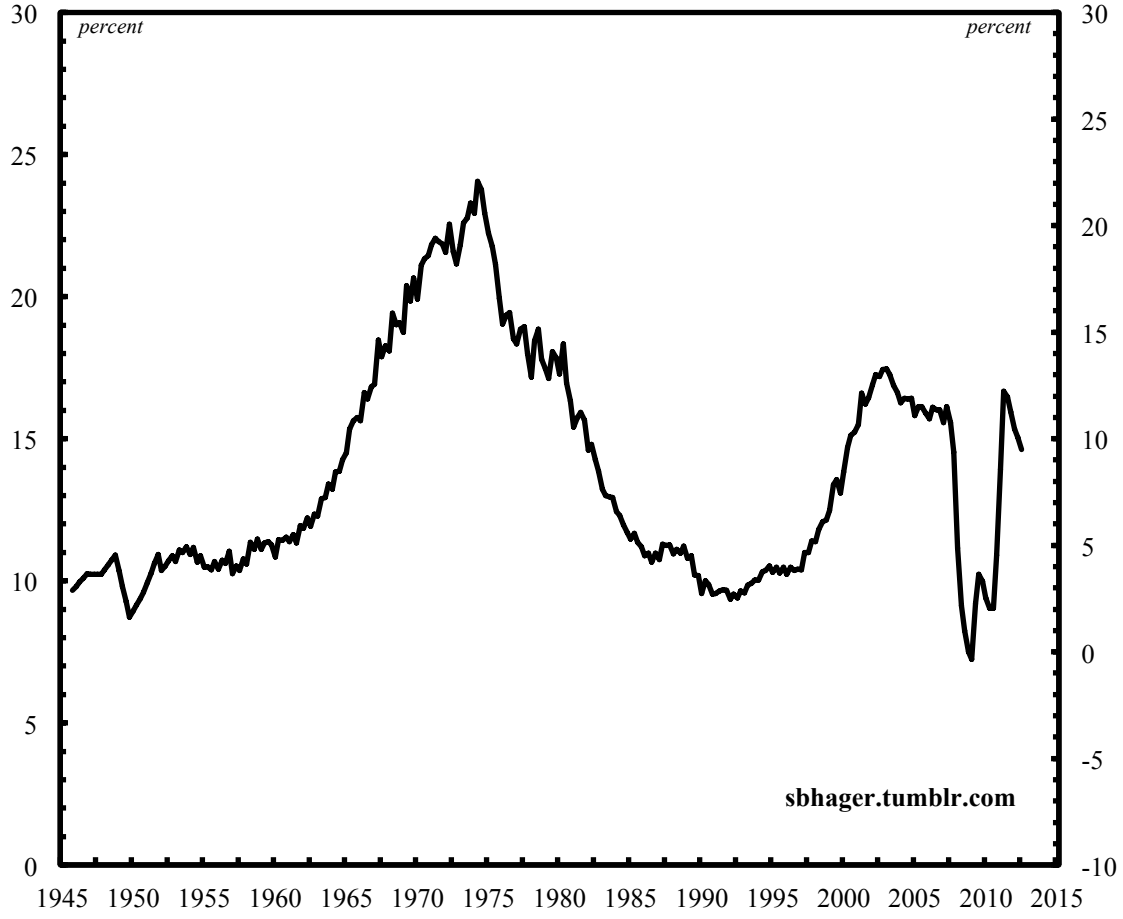


Figure 5.7 The Federal Reserve's Share of Debt Held by the Public

Source: Federal Reserve's Flow of Funds Accounts (series L.209).

In the remainder of this sub-section, I briefly explain the Federal Reserve's ownership of the public debt by exploring the following questions. First, why does the Federal

and bonds, with 40 percent of the gains from this increase going to the wealthiest 5% of households. In the US a debate, without the empirical evidence, has emerged over whose interests are served by the Fed's own successive rounds of QE (see Spitznagel 2012; cf. Krugman 2012a).

Reserve own the public debt? Second, why are Federal Reserve holdings of the public debt not counted as 'intra-governmental debt' (see line 2 of Table 5.1)?

The Federal Reserve comes to own the public debt primarily through its open market operations, which involve purchases and sales of short-term federal securities (e.g. Treasury notes and bills) as a method of adjusting the federal funds rate (the short-term interest rate at which depository institutions lend excess balances to one another) (see Meulendyke 1990; Akhtar 1997).[51] Bond purchases, which increase the Fed's share of the debt held by the public, are undertaken to increase liquidity in the banking system and put downward pressure on the federal funds rate. As such, bond purchases by the Fed are an expansionary policy action meant to increase the money supply and stimulate bank lending (Bernstein 1965: 93). Bond sales, which decrease the Fed's share of the debt held by the public, are undertaken to decrease liquidity in the banking system and put upward pressure on the federal funds rate. In other words, bond sales by the Fed are a contractionary policy action meant to decrease the money supply and discourage bank lending.

Federal Reserve holdings of the public debt therefore play a key role in the steering of monetary policy. And this raises the question of why the Fed's holdings are counted as part of 'debt held by the public' and not 'intra-governmental' debt. In short, the inclusion of the Fed's ownership of the public debt in 'debt held by the public' reflects the institution's role as '…a peculiar sort of public-private hybrid' (Graeber 2011: 364).

[51] I say primarily because the Fed also started purchasing long-term Treasury securities as part of its second round of quantitative easing (QEII), which lasted from late 2010 to mid-2011.

On the one hand, the US President appoints the Federal Reserve Chairman and the Fed coordinates its activities with the US Treasury in order to carry out the federal government's monetary and fiscal policies (Wray 2012: 98 –109). And in this way, the Fed is firmly planted with the institutional set-up of government. On the other hand, a consortium of banks privately owns the Fed whose expenses are primarily paid for, not out of federal taxes, but the interest it receives on its holdings of Treasury securities. In pursuing open market operations, the Federal Reserve can only change the overall composition of private sector assets (i.e. the amounts held by households and business as bonds or as cash, etc.). However, unlike the US Treasury the Federal Reserve cannot alter the overall amount of private sector assets in the system. The Fed is in fact legally prohibited from purchasing bonds directly from the Treasury. Thus the Fed's restricted access to federal securities through the 'open market' explains why its share of the public debt is counted as part of 'debt held by the public'.

The Household Sector

With intra-governmental, foreign and Federal Reserve ownership of the public debt out of the way, we are now ready to turn to the final two sectors remaining in line 4 of Table 5.1: domestic households and domestic business. The discussions of the public debt holdings of these two remaining sectors will be brief at this point, as they are discussed in much more detail in Chapters Six and Seven respectively.

Figure 5.8 plots two measures of household ownership of the public debt.[52] The top (thick) line measures the household share of *total* 'debt held by the public', while the bottom (thin) line measures the household share of the *domestic* 'debt held by the public' (total 'debt held by the public' minus foreign holdings).

Both series follow the same general trajectory as well as shorter-term fluctuations, with the household share of domestic public debt obviously higher than its share of the total public debt. In the first 25 years of the postwar period, the household share of total and domestic public debt held steadily above 30 percent, reaching highs of 35 and 37 percent respectively in 1970. From this high point, the household share of the public debt declined steadily until the mid-1980s, then climbed over the next decade. From the mid-1990s to the early 2000s, both series plunged before recovering in the mid-2000s. Since the onset of the current crisis, the household share of total and domestic 'debt held by the public' has fluctuated dramatically. Early on during the crisis, both series plunge, with the household sector share of total and domestic 'debt held by the public' reaching their respective nadirs of 3 and 7 percent in the fourth quarter of 2007. Since that time, both series have rebounded slightly: the household share of total public debt stood at 8 percent in the third quarter of 2012, while its share of domestic public debt stood at 16 percent. In

[52] It is important to note that the Federal Reserve's Flow of Funds household sector data plotted in Figure 5.9 is not directly comparable with Federal Reserve's Survey of Consumer Finances household sector data that forms the focus of the disaggregate analysis in Chapter Six. First, the flow of funds household sector comprises not only US households but also non-profit organizations and, somewhat curiously, hedge funds, while the survey household sector is focused solely on US households. Second, the flow of funds data measure only the portion of the public debt that is directly owned by US households, while the survey data includes direct holdings as well as some indirect holdings that households may own in investment funds that invest primarily in federal bonds (and which would fall under the 'domestic business' sector in the flow of funds accounts). A more detailed description of the Survey of Consumer Finances can be found in the appendix to Chapter Six.

absolute terms, the household share of the public debt amounted to $945 billion in the third quarter of 2012.

Figure 5.8 Household Ownership of Public Debt

Source: Federal Reserve's Flow of Funds Accounts (series L.209).

The most obvious observation to be made from Figure 5.8 is the long-term decline in the household's ownership share in the public debt. Even with the recent increases the household ownership of the total and domestic public debt is still well below its historical averages of 23 and 26 percent respectively.

If the household share of the public debt is in decline, then why dedicate a separate analysis to this sector in Chapter Six?[53] One reason is that the existing literature outlined in Chapter Two is focused almost exclusively on the household sector. To engage with this literature on its own terms, it is necessary to make reference to its object of analysis.

Another reason is that the relative share of households, though in considerable decline, is still significant. Though much has been made about the rise of financial intermediaries and 'pension fund capitalism' (Clark, 2000; Toporowski, 2000) or 'money manager capitalism' (Minsky 1990; see Chapter Seven), the share of the public debt held directly by households remains comparable to the amounts held in investment vehicles such as pension and mutual funds. Since 1980, the household average share of the total and domestic holdings of the public debt equals 16 and 22 percent respectively, while over the same period the amount held in investment funds is almost exactly identical at 16 and 23 percent respectively. So in the end, analyzing the household share is not only about being able to engage with the existing literature on its own terms: from an aggregate view, the household sector is still a major component in the ownership of the public debt.

The Business Sector

We now arrive at the final sector in line 4 of Table 5.1: domestic business. Figure 5.9 plots the US business sector's share of total and domestic 'debt held by the public'. Over the course of the postwar period, the business sector's share of the public debt, by both

[53] It should be pointed out that the household sector of the Federal Reserve's Flow of Funds accounts differs slightly from the household sector of the Federal Reserve's Survey of Consumer Finances, which is used in Chapter Six. The former contains only the share of the public debt that is owned directly by households, while the latter includes the share of the public debt owned directly by households, as well as some indirect household holdings of the public debt through federal bond funds.

measures, was gradually halved from over 50 percent to around 25 percent by the early 1970s.

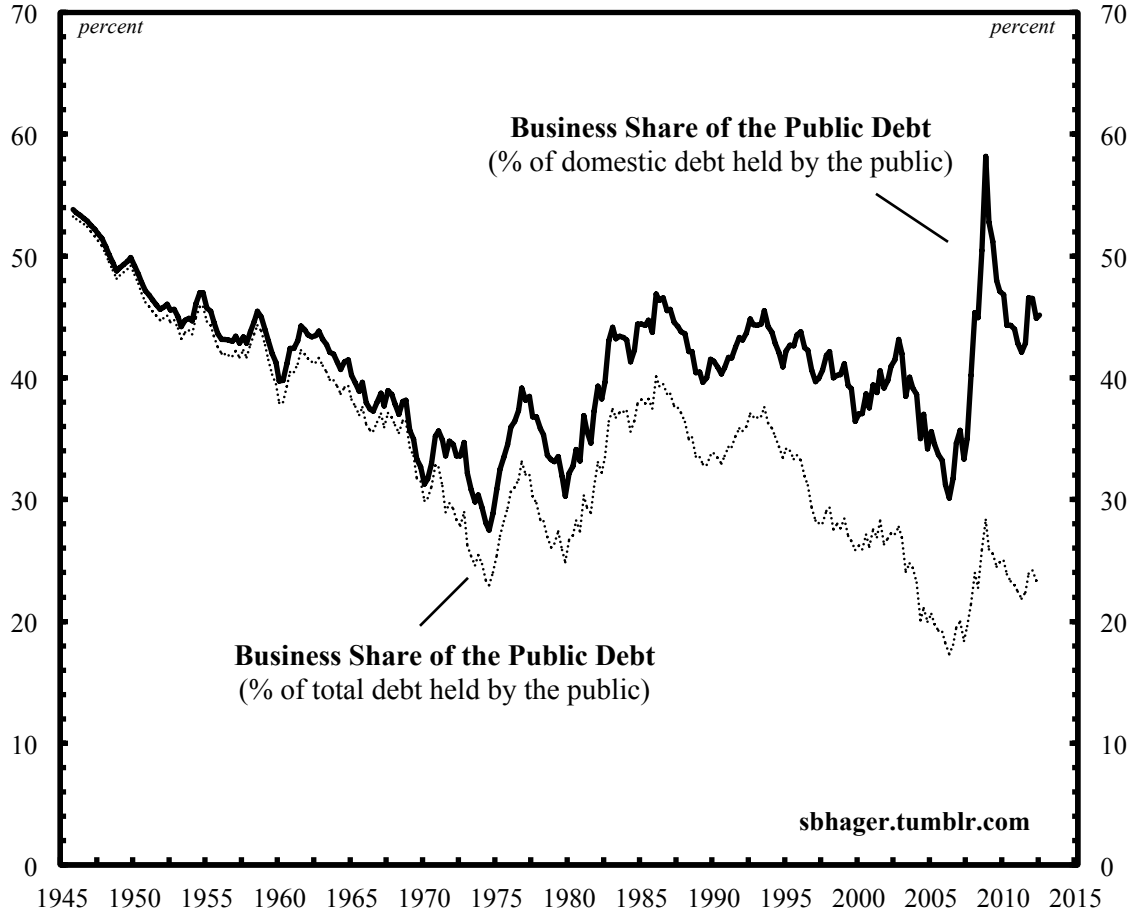


Figure 5.9 Business Ownership of Public Debt

Source: Federal Reserve's Flow of Funds Accounts (series L.209).

Both series show a recovery up until the mid-1980s, with the business sector's share of total and domestic public debt climbing to 42 and 45 percent respectively. These shares then declined up until the mid-2000s, before again shooting upwards with the initial onset of the current crisis. Over the past four years, both shares have once again fallen, so that

in the third quarter of 2013, the business sector held 23 and 45 percent of the total and domestic shares of the 'debt held by the public' respectively.

US business, as we see in Figure 5.9, is a major component in the ownership of the public debt. The disaggregate pattern of the business sector's ownership of the public debt will be examined in detail in Chapter Seven. The Internal Revenue Service (IRS) data used in Chapter Seven are focused on the corporate sector rather than the business sector as a whole. In the end, however, the distinction makes little difference given that the corporate sector is the dominant form of business enterprise within the US political economy. According to the IRS's Integrated Business Data, since 1980 the corporate sector has, on average, accounted for only 20 percent of all business tax returns, but 87 percent of the business sector's total sales and 71 percent of its net income.

The Outside Stakeholders

Excluding intra-governmental and Federal Reserve ownership, the analysis in this chapter indicates that there are three major outside stakeholders that dominate ownership of the public debt: the foreign, the private business and household sectors. Taken together, these three sectors have on average owned 92 percent of non-governmental holdings of the public debt since 2000. The distribution of non-government holdings of the public between these three sectors is plotted in Figure 5.10.

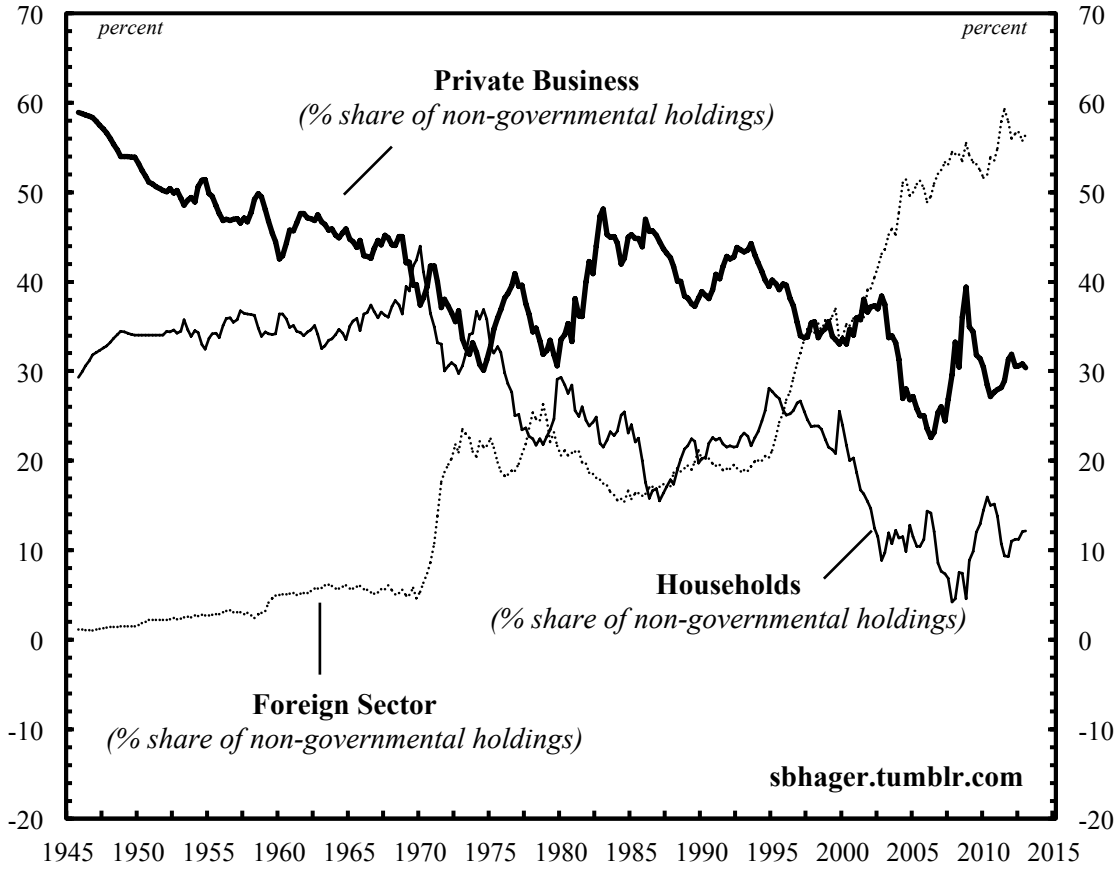


Figure 5.10 Non-governmental Distribution of the Public Debt

Note: Non-governmental holdings include the gross public debt less intra-government and Federal Reserve holdings.

Source: Federal Reserve's Flow of Funds Accounts (series L.209).

Conclusion: Whose Private Wealth?

This chapter has made use of the stock-flow consistent accounting techniques of Post Keynesian macroeconomics in order to systematically explain the relationship between budget deficits and public debt and to break down the ownership of the public debt into

several broad sectors. Proponents of these macro-accounting techniques have developed and refined them with the express purpose of de-mystifying the role of the public debt in the modern capitalist political economy.

Though macro-accounting plays a key role in de-mystifying public finances, it does not reveal anything about the disaggregate dynamics of power that underpin the public debt. Sectoral balances and stock-flow consistent accounting tell us nothing about public debt ownership concentration or about the potential redistributive consequences associated with that disaggregate ownership pattern. In other words, macro-accounting techniques allow us to see precisely how the public debt gets accumulated as private wealth, but they do not allow us to go one step further to uncover *whose wealth* the public debt represents. The remainder of this study goes beyond these macro-accounting techniques and systematically maps the distributive and redistributive dynamics of the public debt. We embark on this task in the next chapter, starting with the US household sector.

6 For Richer or Poorer?
Public Debt and the Top 1%

> We should never forget, then, that the National Debt represents the savings of the poorer classes, rather than the money-bags and coffers of the rich and luxurious.
>
> —William Stanley Jevons[54]

Introduction

As we saw in Chapter Three, the scant empirical evidence on the distributive and redistributive dynamics of the US public debt is focused almost entirely on the US household sector. Some claim that the public debt is heavily concentrated in the hands of a powerful 'bondholding class' and redistributes income regressively from poor to rich. Others claim that the public debt is widely held by middle class investors or 'John Q. Public' and redistributes income progressively from rich to poor. This lack of consensus, as we saw in Chapter Three, is partly due to the fact that researchers use snapshots of data for single years in different periods, all with different cut-off points for measuring ownership concentration and with questionable methods for measuring the progressive redistributive effects of interest payments.

Anchored within the new power-centered framework, with its top-down, differential and dynamic methods, this chapter offers that first systematic effort to map historically the distributive and redistributive dynamics of the public debt for the household sector. The argument I develop unfolds in three steps.

First, I use the top 1% of households as an 'indirect proxy' for dominant capital and

[54] Jevons, W.S. 1884. *Investigations in Currency and Finance*, London: Macmillan and Co., p. 92.

map its share of the public debt over the past century (Bichler et al 2012: 5). I show how concentration in the ownership of the US public debt follows the general U-shaped pattern of wealth and income inequality in the US. Over the past three decades or so the concentration of the public debt in the hands of the top 1% has increased at a rapid rate; by 2010, ownership concentration was nearly as high as it was in the early 1920s, the period of the highest concentration for which reliable data first becomes available.

Second, I explore the redistributive consequences associated with this growing inequity in the distribution of the public debt. I demonstrate how the federal income tax system has done little to offset the increasingly regressive pattern of public debt ownership. While the distribution of federal interest income has become more concentrated in favour of the top 1% over the past three decades, the relative federal income tax rate that the top 1% pays relative to the average has remained steady.

Third, I assess the claim made by some orthodox Keynesians that the intra-governmental portion of the public debt, the debt held by the federal government in trust fund accounts such as social security, serves the interests of ordinary Americans. The distribution of government transfer payments provides an indirect measure of the interests served by the federal government's holdings of its own debt. Recent data collected by the Congressional Budget Office indicate that the top 1% of households has never had much of a stake in transfer payments. But this is no reason to celebrate intra-governmental debt as a progressive force. If we dig deeper and examine the distribution of transfer payments within the bottom 99%, an admittedly diverse group with its own social hierarchy, it becomes clear that over the past three decades intra-governmental

debt has, if anything, intensified inequality and polarization.

These observations lead me to conclude that, over the past three decades, the public debt has come to serve as an institution of power that works increasingly in the interests of the most affluent Americans in general and the top 1% in particular. Though much has changed since Adams's time, the analysis here indicates that there is indeed still a powerful bondholding class in the US, one whose power has increased rapidly over the past three decades.

The rest of the chapter will be organized as follows. Picking up on the theoretical discussion of capital as power in Chapter Four, I begin by offering a brief conceptual justification for using the top 1% as my cut-off point to measure the distributive and redistributive dynamics of holding sector holdings of the public debt. Following the three-step argument outlined above, I then go on to empirically map the pattern of household public debt ownership and its redistributive consequences. I conclude the chapter with a brief discussion of the implications of these empirical findings and set up the task for the next chapter, which will be to examine corporate ownership of the public debt.

The Power of the Top 1%

In Chapter Four we discussed some of the conceptual issues surrounding the measurement of ownership concentration. Differential ownership was identified as the quantitative manifestation of the distribution of capitalist power. And top-down

differential measures of ownership require that we employ some form of cut-off point that isolates dominant owners of the public debt.

The choice of cut-off point is often dictated by the way that statisticians have organized the data. Yet when the data are organized in such a way that the researcher freely chooses the cut-off point, this choice is always arbitrary and requires some conceptual justification. In this chapter, I use the top 1% of households as my cut-off point for measuring ownership concentration. Why focus on the top 1%? What are the possible limitations of using this cut-off point? And what does an analysis of the top 1% tell us about dominant capital and capitalist power?

The onset of the current financial crisis has brought with it a growing awareness of inequality in the US. Due primarily to the efforts of the Occupy movement, the top 1% of the population has come under intense scrutiny for its growing shares of wealth and income. The very fact that the top 1%, and in some cases the 0.1%, has become the focal point of public debate, as opposed to say, the top 10% or the top 20%, points to a degree of polarization that has not been experienced in the US for quite some time. And even mainstream economists have begun to speak candidly, in language usually reserved for more radical circles, about the 'class warfare' that pits the top 1% against the bottom 99% (Stiglitz 2012: 179). Thus the main reason for focusing on the top 1% is simply convention: mapping the share of public debt owned by the top 1% will allow us to tap into and relate the research to the widespread debates that are currently taking place over income and wealth inequality.

This still begs the question of how the political economy of the top 1% relates to capital as power framework sketched in Chapter Four. In an interview with Tim di Muzio in the *Review of Capital as Power*, Shimshon Bichler and Jonathan Nitzan (2012) offer some ideas on how the division between the top 1% and the bottom 99% can be employed for more than catchy sloganeering and serve as the foundation for theoretical-empirical explorations of capitalist power. A focus on the wealth and income shares of the top 1%, they caution, cannot tell us everything about the capitalist ruling class, nor can the simple contrast between 'rich' and 'poor' at the heart of existing debates tell us everything about the capitalist mode of power (ibid: 3).

If we choose to focus on the differential wealth and income shares of the top 1% then we should recognize that this is one of many possible 'quantitative manifestations' of capitalist power (Bichler et al 2012: 5). In this way, the top 1% serves as an 'indirect proxy' for the power of the dominant owners at the center of accumulation (ibid: 5).

The Dynamics of Distribution

With these conceptual issues out of the way, we can begin to map the distributive and redistributive dynamics of the public debt for the US household sector. Figure 6.1 offers, to my knowledge, the first attempt to map the long-term historical share of the public debt that is held by the top 1% of US households (ranked by net worth). The series in

Figure 6.1 measures the top 1% share of federal bonds over the past century or so (see data appendix at the end of the chapter).[55]

Figure 6.1 The Top 1% Share of the Public Debt

Note: Missing data are interpolated linearlly by connecting adjacent observations. See data appendix for further details.

Source: Lampman (1962) for 1922-1961; the Federal Reserve's Survey of Consumer Finances for 1962-1968, 1970-2010; the IRS's Personal Wealth Report for the 1% share of the public debt in 1969:
http://www.irs.gov/pub/irs-soi/69inpwar.pdf
Smith (1974) for individual ownership of the public debt in 1969.

[55] The Survey of Consumer Finance data that Figure 6.1 is based on include the total direct holdings of federal securities by households as well as some of the indirect holdings in federal bond funds.

In 1922, ownership was heavily concentrated with the top 1% owning 45 percent of the public debt. This ownership share fell gradually over the course of the next four decades, and reached its nadir, at least according to the available data, of 17 percent in 1969. In 1983, the next year for which data is available, the ownership share of the top 1% increased to 33 percent. By 2010, the last year for which data is available, the ownership share of the top 1% approached the level of 1922, climbing to 42 percent. With the ownership share of the top 1% in 2010 nearing the highs of the 1920s, Figure 6.1 contradicts claims that the public debt has become widely held.

Expanding beyond snapshots and looking at the dynamic or historical rate of concentration, the existing data in Figure 6.1 show that there has been a rapid increase in the ownership share of the top 1% over the past four decades. However, any claims we make about the historical pattern of public debt ownership concentration must be tempered by the fact that the data in Figure 6.1 are incomplete (see the data appendix). In particular the 1970s present an empirical blind spot as no data available for public debt ownership concentration during this decade. Put simply, the nadir of ownership concentration may have come sometime in the 1970s, rather than in 1969. And if that were the case, then the upward trend towards concentration highlighted in Figure 6.1 could span three decades instead of four. With this in mind, we can say that over the past three decades *at least* the top 1% has rapidly increased its ownership share in the public debt. This steady upward trend towards concentration takes place through the so-called neoliberal phase, starting in the 1980s, through to the current global financial crisis.

Table 6.1 disaggregates the category of public debt further and measures the top 1% share of various types of federal government bonds alongside other major asset categories.

Table 6.1 Breakdown of the Top 1% Ownership of Financial Assets (percentage share)

	1922	1953	1962	1983	1992	2001	2010
Total Federal Bonds	45	31.8	24.6	33.6	28.7	36.7	42.0
Other Federal Bonds*			87.4	39.9	52.3	59.6	72.9
Federal Bond Funds					16.1	15.3	47.1
Savings Bonds			8.6	12.7	9.1	18.5	7.8
Corporate Stocks	61.5	76	61.0	56.8	48.8	52.8	51.3
Corporate Bonds	69.2	77.5	39.0	57.1	68.7	64.3	68.7
Life Insurance	35.3	11.5	12.4	14.8	7.3	12.7	21.2
Pension Assets	8	5.5	4.6	8.5	14.3	13.7	15.3

*Includes all Federal securities (notes, bills, certificates) other than savings bonds.

Source: For 1922 and 1953, Lampman (1962); For 1962-2010, Federal Reserve's Survey of Consumer Finances.

The table shows that the level of concentration of federal government bonds as a whole has historically been lower than for corporate stocks and corporate bonds, but much higher than for life insurance plans and pension assets. Ownership concentration for savings bonds is very low, approximating the levels of the most widely held financial assets. The limited data available for bond funds indicates a similarly diffuse pattern of ownership until 2010 when the ownership share of the top 1% increased dramatically. When it comes to other US federal government bonds, the level of concentration is comparable to the levels for corporate stocks and corporate bonds.

The Death of Savings Bonds

Table 6.1 gives some insights into why the misleading image of a widely held public debt persists. Recall from Chapter Two the arguments made by Francis Cavanaugh, who backs up his assertion that the public debt is widely held by claiming that most direct holdings of the public debt by US individuals and households comes in the form of savings bonds.

As Table 6.1 shows, household ownership of savings bonds is indeed very diffuse. Savings bonds were introduced in the 1930s with the express purpose of 'democratizing' public finance (Tufano and Schneider 2005: 2). Offering a safe and secure asset in smaller denominations, savings bonds were meant to appeal to lower and middle class households. During World War II, propaganda posters called on ordinary Americans to fulfill their patriotic duty by investing in war savings bonds, a move that not only would ensure ally victory, but also help ensure financial security for the bondholders. In the 1950s and 1960s, 'national bond drives' headed by NASA, as well as Hollywood and Broadway celebrities, continued to play on patriotic sentiments, urging Americans to 'underwrite' the might of the US government by investing in savings bonds (U.S. Department of the Treasury 1991: 36–46). Most personal encounters with the public debt are likely to come from investment in savings bonds, or at least for older generations, which were exposed to these high profile campaigns. And so it is little wonder that the image of a widely held public debt comes from its association with mass investment in savings bonds.

This image, however, is a relic of a distant past. In the brave new world of complex and highly vendible finance, savings bonds have been dying a rapid death. According to

flow of funds data, savings bonds on average accounted for just over 20 percent of the outstanding net public debt from 1945 to 1970. By the 1980s, this share fell to just over 6 percent and has fallen steadily ever since. In 2011, savings bonds made up a meager 1.8 percent of the public debt. Thus the U-shaped pattern of concentration that we witnessed in Figure 6.1 can at least in part be explained by the replacement over the past four decades of widely held savings bonds with more heavily concentrated types of federal government bonds.

Top Heavy

How does inequity in the ownership of the public debt compare to the distribution of wealth in general? Much has been made in recent years about growing wealth inequality in the US. In his pioneering study in the mid-1990s, Edward Wolff (1996) unveiled a U-shaped pattern in the share of wealth of the top 1% of US households in the twentieth century. Wolff demonstrated that the top 1% share of wealth had increased rapidly starting in the 1980s, leading him to proclaim that the distribution of wealth in the US had become increasingly 'top heavy'. Figure 6.2 charts the top 1% ownership of the public debt alongside its share of net wealth.

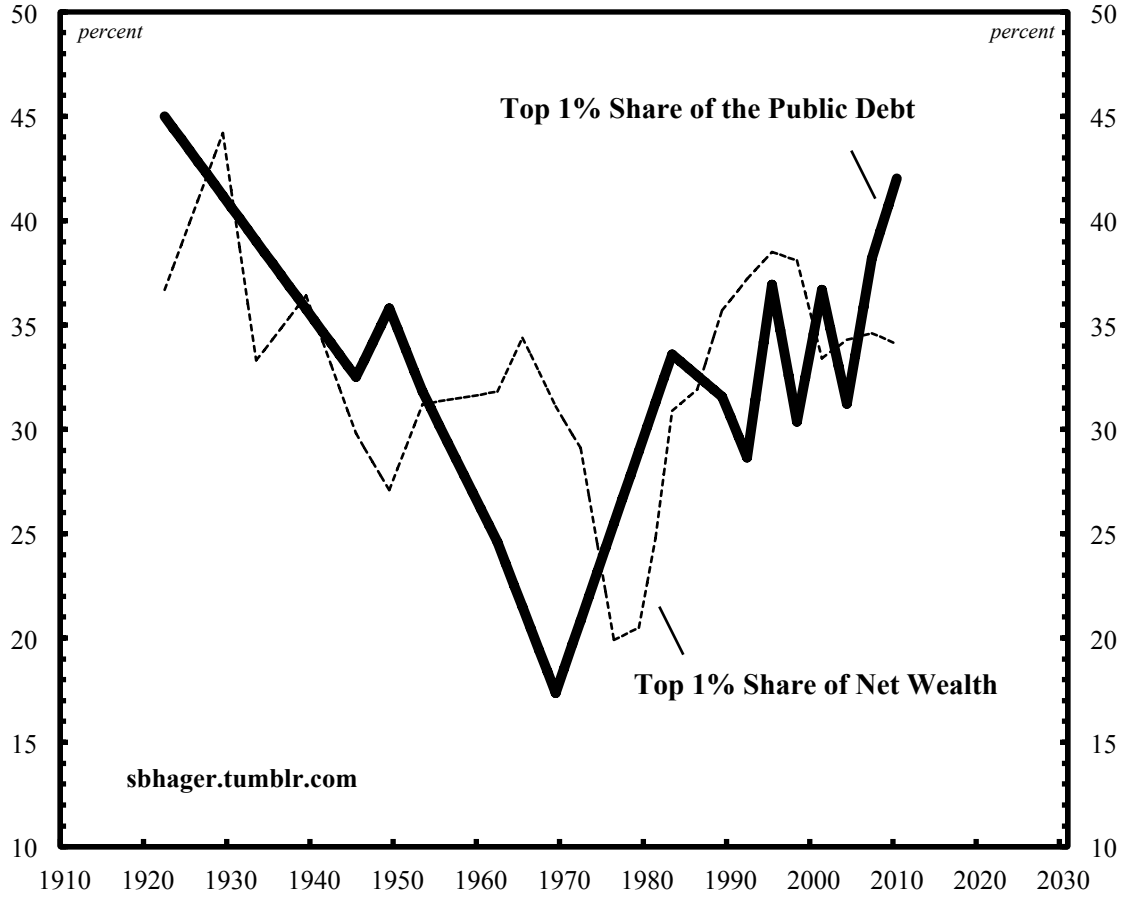


Figure 6.2 Top Heavy: The Top 1% Share of Net Wealth and the Public Debt

Note: Missing data are interpolated linearlly by connecting adjacent observations.

Source: For public debt, see Figure 2; For net wealth, Wolff (1996, 2010) cited in Domhoff (2012):
http://www2.ucsc.edu/whorulesamerica/power/wealth.html
The observation for 2010 is based on my own calculation from the Federal Reserve's 2010 Survey of Consumer Finance.

The thin dashed series reproduces the research results from Edward Wolff's original study, as well as some of his subsequent studies that have updated this research to 2007, and which I update to 2010. As is clear in Figure 6.2, the top 1% share of the public debt follows more or less the same U-shaped pattern as its share of wealth in general. The

results are clear: if wealth distribution is to be deemed increasingly 'top heavy', so too is the ownership of the public debt. In fact, in the context of the current crisis, concentration in the ownership of the public debt has increased much more rapidly than the concentration of wealth.

Figure 6.3 maps the distribution of federal interest income that flows from the ownership of federal bonds. This figure is also comprised of two series: the thin dotted series measures the share of federal interest income received by the top 1%, while the thick series measures its share of general or total income.

Once again we see that both series follow the same long-term U-shaped pattern, with high concentration in the 1920s and 1930s gradually giving way to more equitable distribution through the post-World War II period. Over the past three decades or so, the top 1% shares of both federal interest and general income have increased rapidly, returning recently to the historic highs of the pre-WWII era.

This analysis of the pattern of distribution indicates that the top 1% of households has rapidly increased its ownership share of federal bonds and federal interest income since the postwar period. Using the top 1% as a proxy for dominant owners or Adams's bondholding class, we see that over the past three decades at least, the power of this class has been rapidly resurgent. This power of the bondholding class has augmented at the expense of small-time investors or 'John Q. Public'.

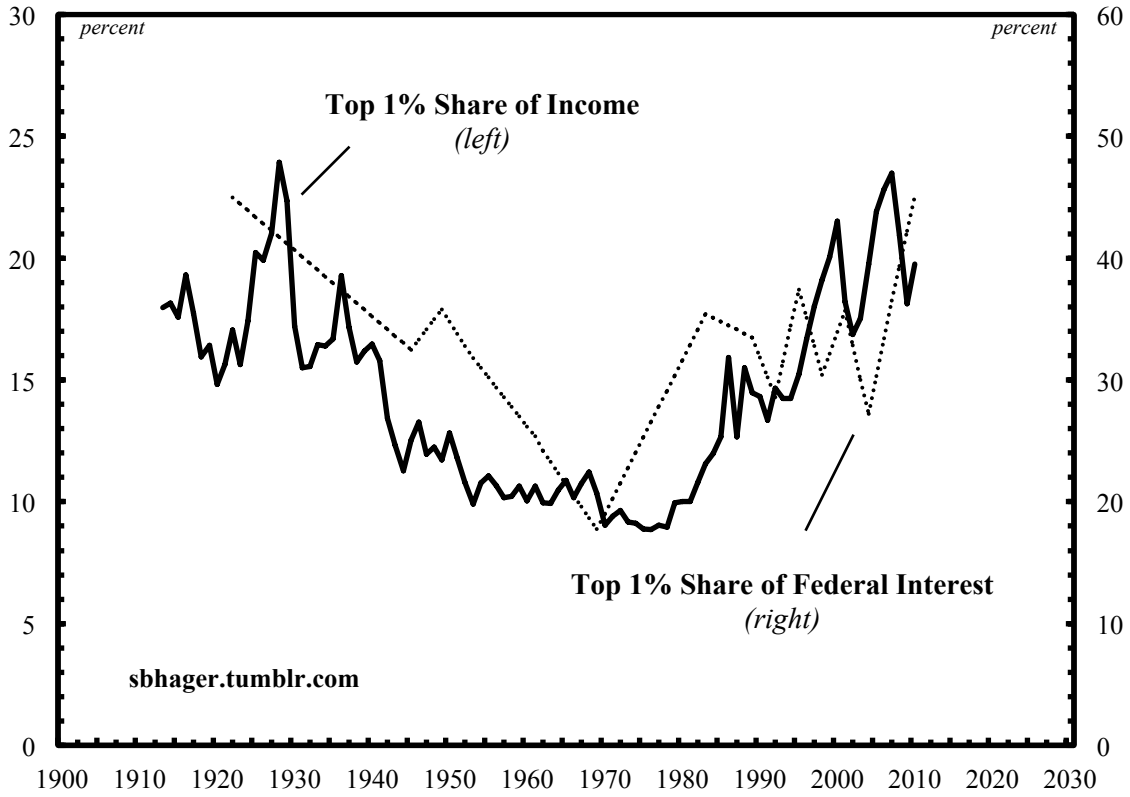


Figure 6.3 The Top 1% Share of Income and Federal Interest Income

Note: Missing data are interpolated linearlly by connecting adjacent observations. From 1922-1961, the top 1% share of federal interest is assumed to be equal to the top 1% share of the public debt. From 1962-2010, interest payments for both the top 1% and all debt holders are imputed by multiplying the dollar value of different types of Treasury securities held by the group (savings bonds, 'other' federal others and 'bond funds') by their corresponding year-end interest rate, and then adding the sum of these products.

Source: For ownership of the public debt, see Figure 2. For interest rates, the US Treasury's Monthly Statement of the Public Debt reports: (http:/www.treasurydirect.gov/govt/reports/pd/mspd/mspd.htm). For the top 1% share of income, The World Top Incomes Database: (http://topincomes.g-mond.parisschoolofeconomics.eu/).

The Dynamics of Redistribution

The significance of the pattern of distribution outlined above hinges in many ways on the role of the tax system in redistributing the federal interest income of the top 1%. Again, as we saw in our survey of the existing literature in Chapter Two, political economists have come to no consensus on this issue. Some claim that a regressive pattern of distribution has been combined with a regressive system of taxation, and that this combination has led to the redistribution of income from poor taxpayers to rich public creditors. Others have attempted to downplay this regressive pattern of distribution by invoking the progressive nature of the federal income tax system. According to this argument, the rich do indeed own most of the public debt, but they also pay most of the taxes and as a result, the vast sums of federal interest that federal government pays to the top 1% in the form of interest simply flow back to the federal government in the form of income taxes levied on the top 1% (Eisner 1986: 42).

The problem with these arguments, however, is that they are confidently asserted without ever being subjected to systematic historical and empirical scrutiny. And as was made clear in Chapter Four, there is no way to determine with any precision whose taxes finance whose interest payments. As was also made clear in Chapter Four, we can, however, get a sense of the role that the federal income tax system plays in redistributing the interest income received by the top 1% by comparing its share of gross (before-tax) federal interest payments to its share of net (after-tax) federal interest payments. [56]

[56] The net share of the top 1% in federal interest is calculated as follows:
$$\frac{\text{top 1\% federal gross interest received}}{\text{total federal gross interest received}} \times \frac{1 - \text{top 1\% effective federal income tax rate}}{1 - \text{average effective federal income tax rate}}$$

Gross and Net

A progressive federal income tax system will make the federal net interest share of the top 1% smaller than its gross interest share (the difference between the gross and net shares will be positive). A regressive federal income tax system will make the federal net interest share of the top 1% greater than its gross share (the difference between the gross and net shares will be negative). A neutral federal income tax system will keep the net and gross federal interest share of the top 1% the same.

Expressed in dynamic or historical terms, an *increasing* gap between the top 1% gross and net shares of the federal interest will indicate an increasingly progressive federal income tax system; a *narrowing* gap between the top 1% gross and net shares of the federal interest will indicate a decreasingly progressive federal income tax system; and a *steady* gap between the top 1% gross and net shares of federal interest will indicate a federal income tax system whose progressivity remains unchanged.

Figure 6.4 uses this template to gauge the effects of the federal tax system on the distribution of federal interest income. The top two series measure the gross and net share of federal interest received by the top 1%, while the bottom series is a ratio of the top 1% net and gross shares of federal interest. The closer the ratio is to 1, the less substantial the impact of the federal income tax system on the distribution of federal interest income.

Fluctuations in the ratio at the bottom of Figure 6.4 give us an indication of the changing effects of the federal income tax system on the distribution of federal interest income: when the ratio is rising/falling, the tax system becomes more/less progressive.

In the 1960s, the ratio of the gross to net interest shares moved sideways, indicating that the federal income tax system had neutral effects on the distribution of federal interest income. The data in Figure 6.4 suggest that in the 1970s the federal income tax system became more progressive, as the net interest share fell relative to the gross share. But again, missing data forces us to refrain from making any definitive claims about this decade. In the 1980s, the federal income tax system became less progressive, as the ratio of net to gross interest began to move downwards.

In the next decade or so, the federal income tax system once again had increasingly progressive effects, as the ratio followed an upward trend. In the early to mid-2000s the ratio began to move sharply downwards. In the context of the current crisis, the ratio has begun to move upwards. This is unsurprising given that the incomes of households in the bottom 99%, and therefore the rate at which they are taxed, have fallen significantly since 2007, while the tax rates of the top 1% declined only slightly or not at all.

As we can see from the ratio series in Figure 6.4, the effect of the federal income tax system on the distribution of federal interest income has fluctuated historically. Over the long term, however, the effect of federal income tax on the distribution of federal interest income has been fairly constant. Over the past five decades, keeping in mind the empirical blind spot of the 1970s, the gap between the net and gross series has widened, but only very slightly. Meanwhile the distribution of federal interest has become rapidly concentrated.

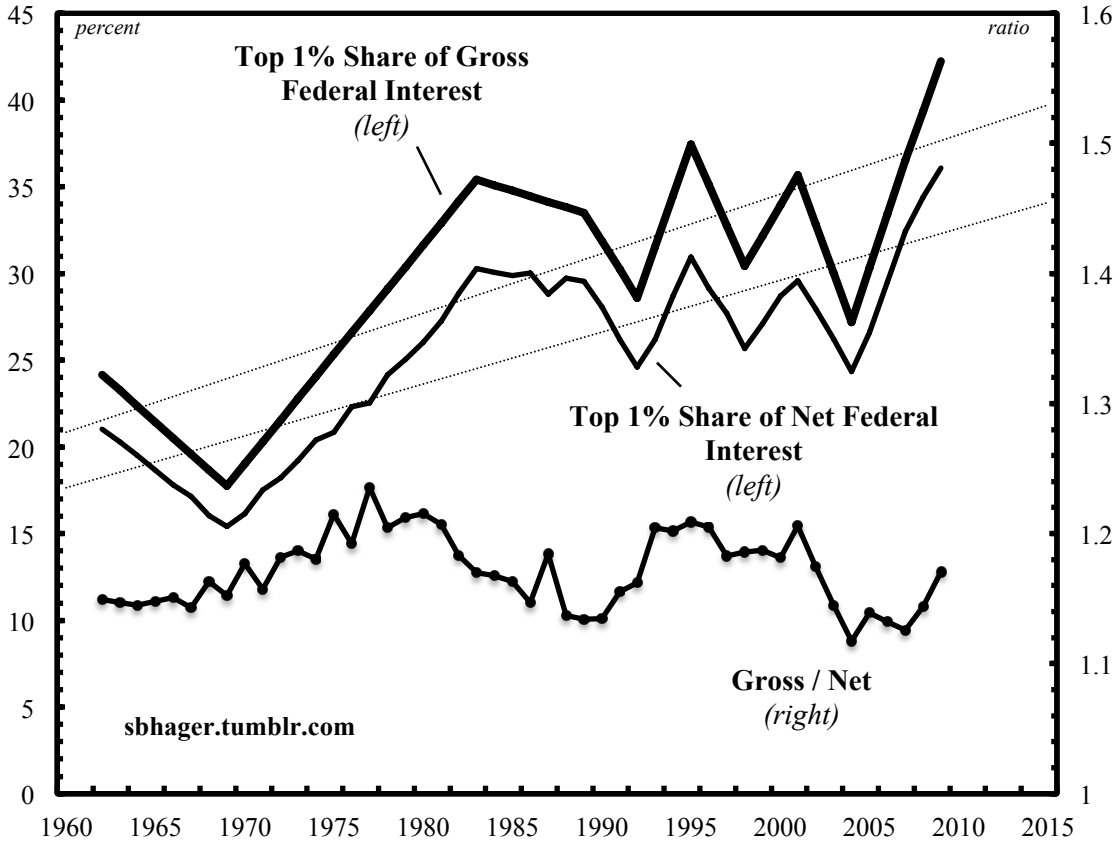


Figure 6.4 Giving and Receiving: Gross versus Net Federal Interest Income

Note: Missing data are interpolated from the trend growth rate. The net share of interest is calculated by multiplying the top 1% share of total gross interest by the differential complements of the income tax rate (see note 8).

Source: For the top 1% share of federal interest, see Figure 4. For the effective tax rate from 1962-2004, Piketty and Saez (2007):
(http://elsa.berkeley.edu/~saez/).
From 2005-2009, the IRS Statistics of Income:
(http://www.irs.gov/pub/irs-soi/12inwinbulratesshare.pdf).

In broad terms, there has been a massive concentration in the distribution of federal interest towards the top 1%, while at the same time the federal income tax system has done little to offset the growing inequity in the distribution of federal interest payments.

Put another way, what the top 1% gives to the federal government in income taxes as a percentage of its income has, at least since the early 1980s, failed to keep pace with what it receives in federal interest payments.

Intra-governmental Debt: The Great Equalizer?

There is still one more argument that ardent naysayers could invoke to downplay the regressive dynamics of distribution and redistribution that underpin the public debt. Recall again from Chapter Two one key argument made by orthodox Keynesian, Francis Cavanaugh (1996: 68), who suggested that the holdings of the public debt in federal government trust fund accounts such as Social Security, Medicare and Medicaid represent the interests of ordinary Americans or 'John Q. Public'.

Intra-governmental debt is a peculiar outcome of the government budget accounting process. The public debt held in government trust fund accounts represents the accumulated surpluses in the federal government trust funds. Unlike general government revenues and expenses where there is no one-to-one correspondence between revenues and the expenses they fund, government trust funds are budget accounting devices that 'earmark' certain types of taxes to corresponding expenditures (see Wray 2004).

For example, federal payroll taxes are earmarked specifically for the Social Security trust fund account. When the amount the federal government takes in from payroll taxes exceeds what it pays out in social security benefits, the social security trust fund account accumulates a surplus, which the federal government is required by law to invest in special interest-bearing Treasury securities. As we saw in Chapter Five, intra-

governmental holdings of the public debt are significant. In 2011, they stood at $4.6 trillion, equivalent to nearly half the $10 trillion of the public debt held by private investors.

The Distribution of Transfer Payments

How, then, do we go about exploring empirically Cavanaugh's claim that these substantial intra-governmental holdings somehow benefit ordinary Americans? And what bearing would this empirical exploration have on our analysis of the regressive dynamics of private household ownership of the public debt outlined above?

In and of itself, the overall level of intra-governmental debt tells us nothing about the underlying interests that are served by it. But technically speaking, when the federal government pays out social security benefits and other forms of transfer payments, what it does is cash in some of the Treasury securities from its trust fund account to pay out transfer payments to individuals and families in dollars and cents. It is therefore possible to examine the disaggregate flow of transfer payments in order to determine indirectly whose interests are served by intra-governmental holdings of the public debt. In the context of this analysis, the bottom 99% of households has served as a proxy for the ordinary Americans or 'John Q. Public'. In short, if the bottom 99% of households receives the bulk of government transfer payments, then intra-governmental debt would indeed serve ordinary Americans rather than the top 1% bondholding class.

A recent study by the Congressional Budget Office (CBO) (2012) on income inequality offers a rare glimpse into the distribution of government transfer payments

since 1979. The CBO data indicate that the share of transfer payments received by the top 1% of households has changed little over the past three decades. Since 1979, the top 1% has received on average a paltry 0.89 percent of transfer payments, and this share fell even further to 0.68 percent in 2009. As a result, there is really no question that over the past three decades intra-governmental debt has been an institution that serves the interests of the bottom 99%.

The Bottom 99% and the Hierarchy of Social Power

But the fact that the bulk of transfer payments flow to the bottom 99% of households should not lead us to overstate the role of intra-governmental debt as a progressive redistributive force. The reason for this can be seen once we start to break down the distribution of transfer payments within the bottom 99%. Though the 99% has in recent years become a catch-all category used to distinguish the majority from the wealthy elite, it is, in reality, a very diverse group with its own hierarchical structure. The bottom 99% includes social groups ranging from the 'power belt' of professionals in the 90th to 99th percentiles of income distribution that 'surrounds, serves and protects' the top 1% (Bichler *et al.* 2012: 5), all the way down to the 46 million Americans who live in poverty (Denavas-Walt *et al.* 2012: 13).[57] And once we take into account the hierarchical structure within the bottom 99% into our analysis of the distribution of transfer payments, we see that sweeping transformations have taken place over the past three decades.

[57] The Office of Management and Budget (OMB) develops statistical thresholds for determining who is in poverty. In 2010, the weighted average poverty threshold for a single individual was a total annual income of $11,139 or less, while the weighted average threshold for a family of nine people or more was a total annual income of $45,220 or less (Denavas-Walt *et al.* 2012: 61).

Figure 6.5 offers a breakdown of the CBO data on the distribution of transfer payments within the bottom 99% of households. Specifically, the figure is divided into two broad categories: the thin line shows the share of transfer payments received by households in the 60th to the 99th percentiles of income distribution (i.e. the top 40% minus the top 1%), while the thick line shows the share of transfer payments received by households in the bottom 40 percent.

The CBO data indicate that the share of government transfer payments received by the upper strata of US households within the bottom 99% (i.e. households in the 60th to the 99th percentile of income distribution) has increased modestly over the past three decades from 15 percent in 1979 to 20 percent in 2009. Meanwhile, households in the bottom 40% saw their share of transfer payments fall from 73 percent to 63 percent over the same period. The fall has been particularly dramatic for households that are most likely to rely on government transfers for survival, with the share of transfer payments received by households in the bottom 20% falling markedly from 54 to 40 percent from 1979 to 2009.

Invoking intra-governmental debt to downplay the distributive and redistributive dynamics of the public debt turns out to be rather misleading. It is undoubtedly true that the top 1% of households has never had much of a stake in the transfer payments that flow from the intra-governmental debt held in government trust fund accounts. And in this sense the intra-governmental portion of the public debt can be said to broadly represent the interests of the bottom 99% of households. Yet once we begin to dig deeper and break down the distribution of transfer payments within the bottom 99%, we see that

over the past three decades intra-governmental debt has, if anything, intensified social inequality and polarization.

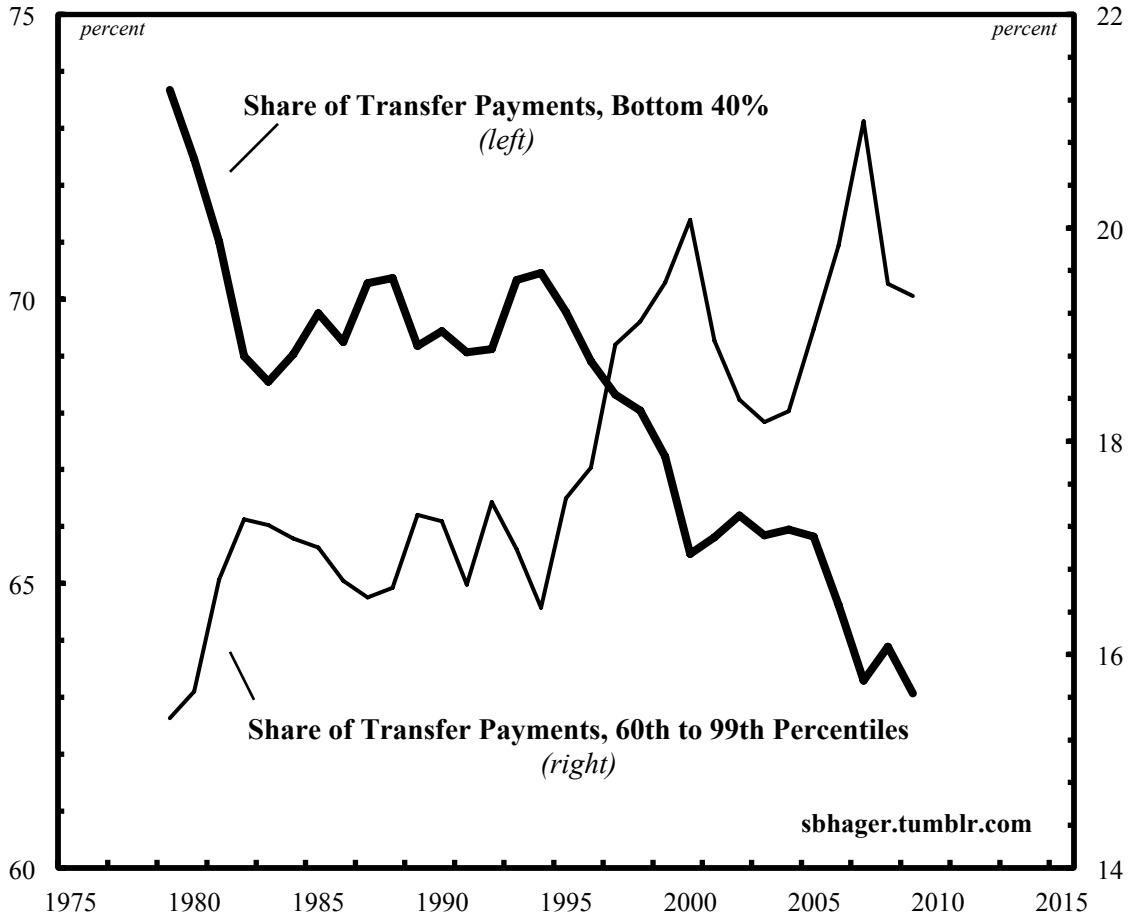


Figure 6.5 Transfer Payments and the Bottom 99%

Note: Transfers include federal, state and local government cash (e.g. social security) payments and in-kind (e.g. voucher) payments.

Source: The Congressional Budget Office (2012): http://www.cbo.gov/publication/43373

Conclusion

Expanding beyond the narrow snapshots of data offered by the existing literature, the power-centered analysis here offers a more rigorous historical analysis of the distributive and redistributive dynamics of public indebtedness for the household sector.

Over the past three decades or so, the distribution of federal bonds and interest has, much like the distribution of wealth and income more generally, become increasingly unequal. The federal income tax system and the transfer payments that flow from intra-government debt, contrary to orthodox Keynesian claims, have done little to reduce this inequality. In the current context there is simply no evidence to support their claim that the public debt serves the interests of 'John Q. Public'. Through the so-called neoliberal period, the public debt has come to serve as an institution of power working in the interests of the top 1%. And though much has changed since Adams's time, the analysis in this chapter indicates that the power of the bondholding class, at least its household component, has become resurgent over the past three decades.

The concluding chapter of this study will flesh out in greater detail the broader implications of these findings. Yet before doing so, the next chapter will expand upon the analysis here by mapping the distributive and redistributive dynamics of the public debt for the US corporate sector.

Appendix

Though the time series in Figure 6.1 spans from 1922 to 2010, it is based on observations for only 15 years. The data for the missing years are interpolated linearly, by connecting adjacent observations. Data on the top 1% share of the public debt for 1922, 1945, 1949 and 1953 are from Robert J. Lampman's (1962) pioneering study The Share of Top Wealth-Holders in National Wealth, 1922-1956, which in turn relies on federal estate tax data from the Internal Revenue Service (IRS).[58] The data for 1969 are pieced together from two sources: for the top 1% holdings of the public debt (the numerator), I rely on the 1969 IRS Personal Wealth Report, again based on IRS estate tax data, and for the total amount of public debt held by individuals (the denominator), I rely on the estimates of James D. Smith (1974: 174). The data for 1962, 1983, 1989, 1992, 1995, 1998, 2001, 2004, 2007 and 2010 are based on my own analysis of micro-data from the Federal Reserve's Survey of Consumer Finances.

Figure 6.1 thus relies on two main data sources: the IRS federal estate tax database (ETD) and the Federal Reserve's Survey of Consumer Finances (SCF). There are two important differences between these two sets of data. First, the primary unit of observation for SCF data is the household and includes all the interdependent adults living at the same residence, while the primary unit of the ETD is the individual (Johnson

[58] Lampman (1962) also includes estimates of the top 1% ownership of various types of wealth for 1929 and 1939. Yet the data observations for these years seem to radically over-estimate the share of wealth held by the top 1%. For federal bonds, Lampan's estimates suggest that the top 1% in 1929 and 1939 held 100% and 91% respectively. For state and local bonds, Lampman's estimate even suggest that the top 1% held *more than* 100% for both of these years. Lampman (ibid: 209) suggests that these irregularities may be due to a number of factors, including sampling errors and double counting of assets. I exclude the data for 1929 and 1939 from my analysis for these reasons.

and Moore 2005: 82). Second, the SCF data is survey-based, while the ETD is based on information gathered from estate tax filings with the IRS.

The SCF consists of a two-part survey design: 'a standard, geographically based random sample and a special oversample of relatively wealthy families' (Bricker et al 2012: 3). The most recent 2010 SCF is based on a sample of 6492 US households, which contains detailed questions about household income, savings and net worth, as well as the composition of their assets and liabilities (ibid: 3). Data compiled for the ETD are based on estate tax filings with the IRS. In 2010, descendants were required to file estate tax returns if the gross assets in the estate exceeded $5 million and there were just over 15000 that reached this filing threshold. In their filings, descendants are required to report in detail the components of income and the asset composition of the gross estate. Both data sources use multiplier variables for each group to 'blow up' the data sample to represent its corresponding size in the US population as a whole.

Despite the differences in the purpose and design of both data sets, Johnson and Moore (2005: 87-96) suggest that the statistics of SCF and the ETD in general, and in regards to the measurement of ownership concentration in particular, 'compare quite favorably'. Johnson and Moore (ibid: 96) go on to conclude that SCF and the ETD are 'complimentary sources of data on both wealth and income'. As such, it seems reasonable to splice together data from these two different sources in order to develop a long-term historical time series of the top 1% ownership share of the public debt.

7 Mapping the New 'Aristocracy of Finance'
Public Debt and Corporate Power

> By the aristocracy of finance must here be understood not merely the great loan promoters and speculators in public funds, in regard to whom it is immediately obvious that their interests coincide with the interests of state power. All modern finance, the whole of the banking business, is interwoven with public credit […] If in every epoch the stability of state power signified Moses and the prophets to the entire money market and to the priests of this money market, why not all the more so today, when every deluge threatens to sweep away the old states, and the old state debts with them?
>
> —Karl Marx[59]

Introduction

Though existing studies of public debt ownership and redistribution are focused almost exclusively on the household sector, this has not stopped some pundits from discussing the significance and the consequences of corporate holdings of the public debt for the US political economy.

One argument put forward by orthodox Keynesians suggests that substantial corporate holdings by commercial banks, life insurance companies, private pension funds and other investment funds are held '…largely for the benefit of middle-income depositors, policy holders, pension beneficiaries and shareholders' (Cavanaugh 1996: 63; Hansen 1941: 179). Much like the intra-governmental debt analyzed in Chapter Six, corporate holdings of the public debt are assumed to indirectly serve the interests of middle income Americans that own bank deposits, insurance plans, pensions and shares.

[59] Marx, K. 1852 [1963]. *The Eighteenth Brumaire of Louis Bonaparte*, New York: International Publishers, p. 104.

Yet this argument fails on empirical grounds.[60] The distribution of financial (non-home) wealth held by households is in fact *more* 'top heavy' than both the household distribution of net wealth and the public debt that we mapped in Chapter Six. According to Edward Wolff's empirical research, the top 1% has consistently owned between 40 and 47 percent of financial wealth in the US since 1983 (cited in Domhoff 2013). The suggestion that corporate holdings are indirectly beneficial to middle class Americans is even less defensible than the claim, debunked in Chapter Six, that household and intra-governmental shares of the public debt serve this same purpose.

Another problem with the orthodox Keynesian argument has to do with the fact that, when it comes to the distributive and redistributive dynamics of the public debt, corporations do not just serve the interests of households: they are significant power entities in their own right (Nitzan and Bichler 2009: 249–53). First, individuals exercise their power primarily through organizations and the corporation is one of the central power organizations of contemporary capitalist societies. Second, corporations are also stand-alone entities that in many respects serve not only their owners but also the broader power logic of capitalism. On both of these counts it makes sense to place corporations at the center of the analysis.

As we have seen at various points throughout this study, heterodox political economists have long argued that ownership of the public debt has bolstered the power of business groups (see Gottlieb 1956). In various writings Marx made references to a

[60] Adams (1887: 47) recognized and dismissed arguments suggesting that the ownership of corporate shares would counteract the concentrated direct holdings of the bondholding class. In his own words: 'Other citizens may be interested in the public debt through their ownership of stock in corporations that hold it; but when one remembers how corporations stand related to the question of social inequality, this fact cannot alleviate the harshness of the conclusion suggested'.

powerful 'aristocracy of finance' in Western Europe and the United States that exercised power over state and society through the ownership and trading of government bonds (Marx 1852: 104; see also Marx 1867: 920; Marx and Engels 1846: 79-80). Concentrated ownership of government bonds was combined with regressive systems of taxation on 'the most necessary means of subsistence' (Marx 1867: 920). And this situation meant that the public debt served as a mode of redistribution or 'expropriation' from the masses to the tiny elite of public creditors.

In Chapters One and Two of this study we saw how researchers of the US experience, taking cues from Marx, have drawn similar linkages between the public debt and business power. Adams's (1887: 44) 'bondholding class' was comprised not only of wealthy individuals, but also large corporations. James O'Connor (1973: 189–90) argued that in the eighteenth and nineteenth century ownership of the public debt allowed a financial aristocracy of commercial and banking interests to control the US Treasury. O'Connor also claimed that the 'aristocracy of finance' was still very powerful in the post-World War II period, but that the basis of its influence had shifted from public to private debt. And most recently, E. Ray Canterbery (2000) claims that since the mid-1970s the 'bondholding class' of wealthy families and dominant Wall Street firms has used its concentrated holdings of the public debt to dominate the US political landscape.

Yet with limited empirical research the linkages that heterodox political economists draw between the public debt and business power remain largely speculative. As a result, many important questions are left unanswered. How has the pattern of public debt ownership within the corporate sector changed over time? Have corporate holdings of the

public debt become more or less concentrated? What role does the federal income tax system play in redistributing the federal interest income of dominant corporations? With the trend towards conglomeration and diversification, are corporate holdings still dominated by financial groups? What has been the effect of the rise of institutional investors on the pattern of corporate public debt ownership?

My purpose in this chapter is to address these questions by mapping the distributive and redistributive dynamics of the public debt for the US corporate sector. Analyzing data from the IRS Statistics of Income, my research indicates that corporate sector holdings of the public debt have become rapidly concentrated in favor of large corporations over the past three decades and especially in the context of the current crisis. The federal income tax system, though marginally progressive in the household context, has been neutral in the corporate context. In other words, federal income taxes have done nothing to stem the rapid concentration of federal interest income received by large corporations.

I then analyze the sectoral and sub-sectoral pattern of public debt ownership within the corporate sector. If we equate 'finance' with the Finance, Insurance and Real Estate (FIRE) sector, then the data suggests that Marx's aristocracy of powerful corporations that dominate ownership of the public debt is still very much financial. Over the past half century, FIRE has owned most of the public debt held by corporations and this ownership share has steadily increased from 84 percent in the 1950s to over 98 percent in the past decade. At the sub-sectoral level within FIRE, the position of 'traditional' bank

intermediaries as the dominant corporate owners of the public debt has been superseded over the past four decades by institutional investors.

Overall, the analysis of the corporate sector suggests that, much like with the household sector, the public debt has served as an institution of power that increasingly works in the interests of those at the very top of the hierarchy of social power. The research suggests that the 'aristocracy of finance' is not a relic confined to the nineteenth century, but a persistent, and indeed increasingly important feature of, contemporary US capitalism.

The rest of this chapter is organized as follows. First, I use the top 2,500 corporations as an indirect proxy for dominant capital and map its ownership of the corporate share of the public debt over the past half-century. This section includes a detailed discussion of the limitations of the main data source for the corporate sector, the Internal Revenue Service's (IRS) Statistics of Income. Second, I discuss the redistributive consequences of the pattern of corporate public debt ownership by examining the role of the federal income tax system in redistributing the federal interest income of large corporations. Third, I map the sectoral and sub-sectoral distribution of the public debt within the corporate sector. Fourth, I offer a critical power-centered discussion of Minsky's concept of 'money manager capitalism'. In the conclusion, I summarize the empirical results and set the task for the eighth and final chapter of this study, which will be to examine the implications of increasing public debt ownership concentration in the hands of a dominant power block of domestic owners: the top 1% of households and large corporations, primarily financial intermediaries.

The Dynamics of Distribution

Part of the reason that researchers have neglected the distributive and redistributive dynamics of the public debt for the corporate sector may have to do with the problem of finding reliable data. In Chapter Six, we saw that the primary source of data on household ownership of the public debt is not without its shortcomings. Disaggregate data on household ownership of the public debt are available only sporadically over the past century. And in some cases whole decades, such as the 1970s, are a major blind spot in our empirical picture.

Yet one advantage of the main source of household public debt ownership, the Federal Reserve's Survey of Consumer Finances, is that it gives researchers access to a raw micro-data set. These micro-data afford us considerable flexibility in mapping the pattern of public debt ownership for the household sector. Specifically the data allow us to choose the exact cut-off point, whether a fixed number or a fixed proportion of households, to measure ownership concentration. The data also allow us to choose the method to rank US households (e.g. by net income, net worth, total assets, etc.). Using this micro-data set and combining it with earlier studies based on the IRS estate tax database, we were able to develop a consistent time series that measured the share of the public debt owned by the top 1% of households over the past century.

Unfortunately the main data set that exists and that allows us to map the disaggregate ownership pattern for the corporate sector, the IRS Statistics of Income (SOI), does not offer the same conveniences. The SOI division of the IRS does not make a micro-data set available to the public. Researchers therefore have to rely on the data tabulated and

published by SOI statisticians. And the conventions that SOI statisticians follow in arranging the data are not amenable, at least in a straightforward way, to the power-centered methods for measuring concentration outlined in Chapter Four.

Cut-off Points in Flux

Recall from the discussion in Chapter Four the different methods of measuring ownership concentration. The conventional aggregate measure of concentration uses a fixed number of corporations (e.g. the top 100 or top 500, etc.) as the cut-off point in the numerator and measures the ownership share of top corporations relative to the entire corporate universe. As we saw, constant fluctuations in the number of entities in the denominator (i.e. the total number of corporations) make the aggregate measure of concentration ambivalent from the perspective of power. And to correct for the ambivalence created by a fluctuating denominator, we can use either a fixed proportion of corporations (e.g. the top 1% or the top 0.01%, etc.) as our cut-off point in the numerator or we can use differential methods that measure the *per corporation* ownership share of a top corporation (e.g. the top 100 or the top 500, etc.) relative to the average corporation.

SOI data, however, do not allow us to consistently use *any* of these measures of ownership concentration. The SOI tabulates the share of the public debt owned by corporations divided into different categories based on the size of their total assets (see data appendix). From 1954 to 2000 any corporation with assets of $250 million or more was placed into the top asset bracket. And it was not until 2001 that the IRS refined its

categories and made assets of $2.5 billion or more the cut-off point for the top asset bracket.

The nominal value of assets rises over time. As a result, keeping the cut-off point for top corporations at a given level of assets, whether $250 million or $2.5 billion or any other number, means that the overall number of top corporations and the proportion of top corporations, and therefore their asset share, increases greatly over time. These dynamics are captured in Figure 7.1. As we see the total number of corporations (counted by their tax returns) included in the asset bracket of $250 million or more has increased exponentially over the past half century.

In 1954, only 391 corporations, or 0.06 percent of the total number of corporations, were included in the top asset bracket of $250 million or more. Yet by 2000, the last year that this cut-off point was used to designate the top bracket, 10,883 corporations, or 0.2 percent of the total corporations, made the cut of $250 million or more in assets. With the refined categories introduced in 2001, 1,896 corporations, or 0.04 percent of total corporations, were included in the top bracket of $2.5 billion or more in assets, and these totals increased to 2,772 and 0.05 percent respectively by 2010.

Basing its cut-off point on the size of assets, rather than the number of corporations, the SOI data present obvious problems for our efforts to map the pattern of public debt ownership for the corporate sector. In order to map ownership concentration using the methods outlined in Chapter Four, we need a fixed cut-off point for identifying the numerator of dominant corporations. And the SOI data simply do not offer a fixed cut-off point: from a power perspective, a change in the share of public debt held by corporations

in the top asset bracket could reflect changes in the fluctuating number of corporations, rather than a change in ownership concentration.

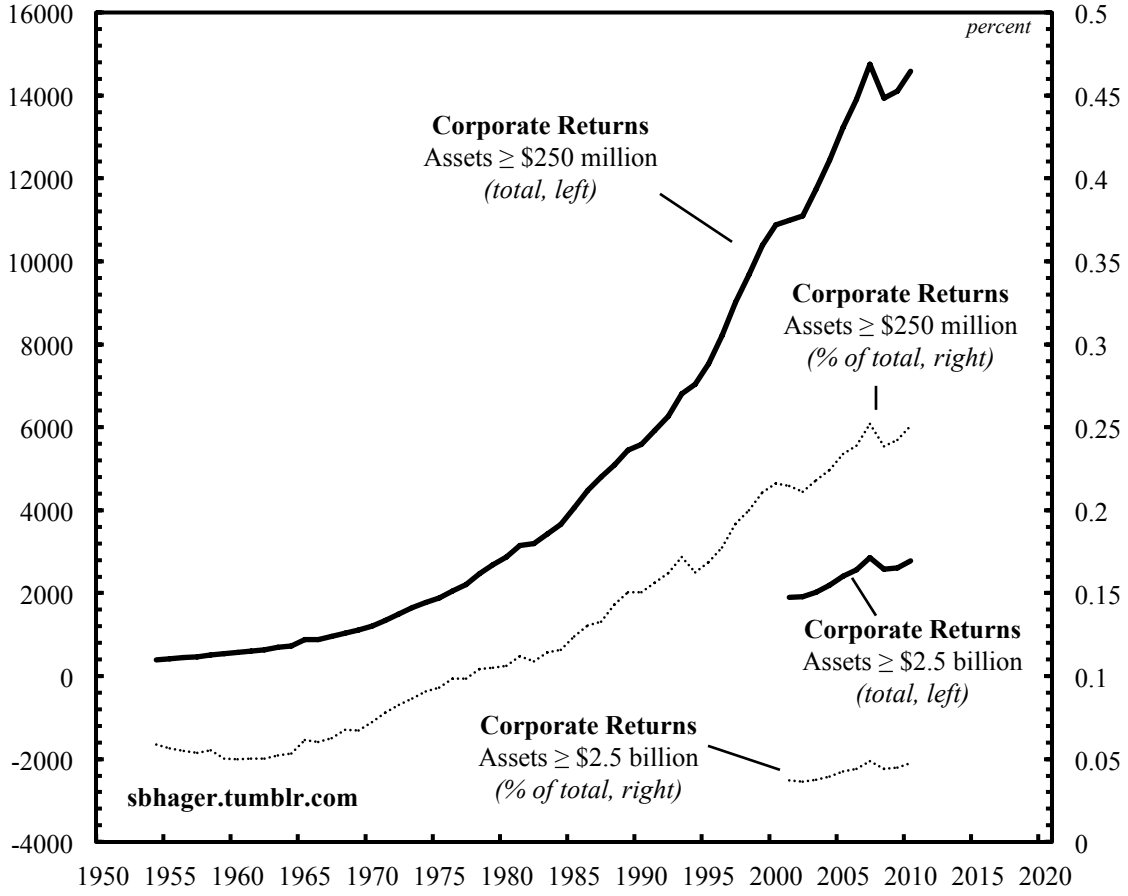


Figure 7.1 Cut-off Points in Flux

Source: IRS Statistics of Income (http://www.irs.gov/uac/Tax-Stats-2).

To illustrate the problems that arise from the fluctuating number of corporations, we can proceed by taking the SOI data at face value and map the share of the public debt owned by large corporations (e.g. those with assets of $250 million or more). Figure 7.2 employs two different measures: the conventional aggregate measure of concentration, referred to as the 'distributive' shares of the public debt held by large corporations with

$250 million or more in assets, and the differential ratio of public debt held by large corporations (i.e. the public debt ownership share of a large corporation relative to the average corporation).

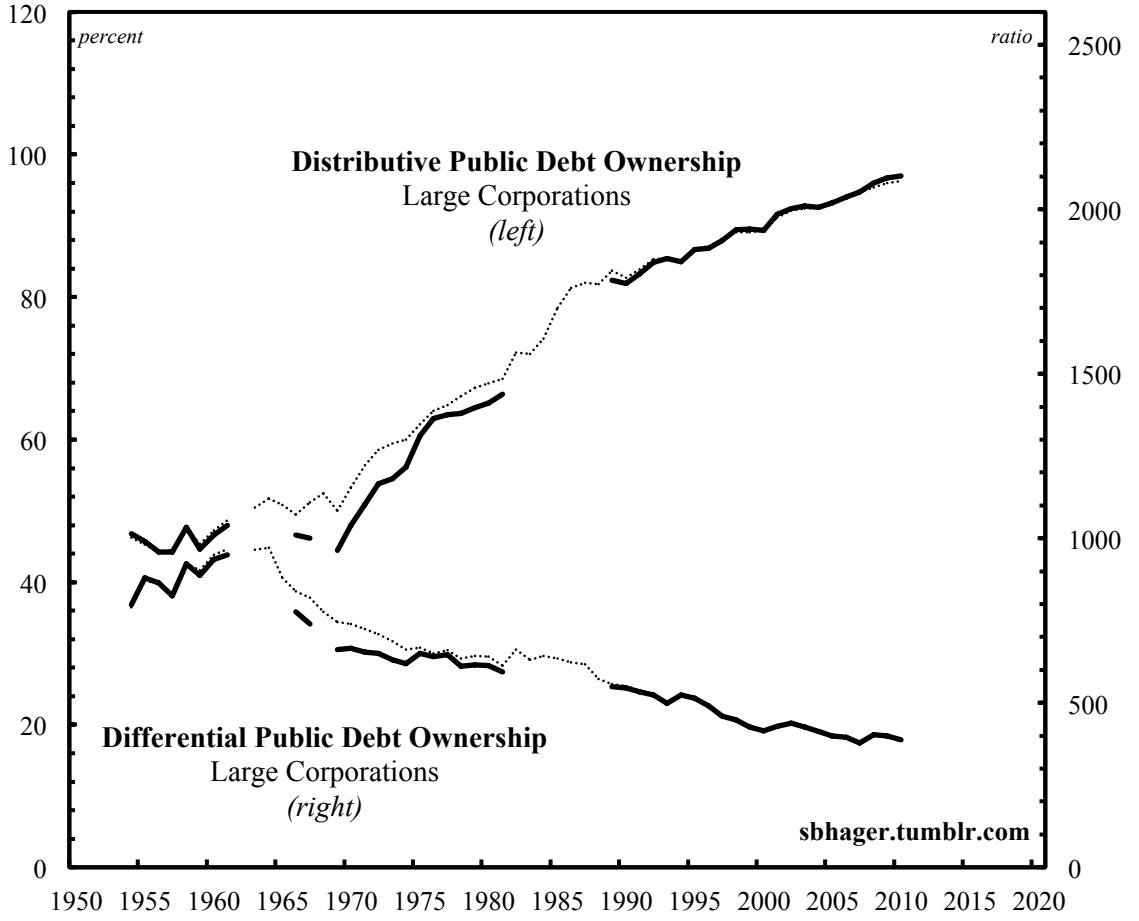


Figure 7.2 Concentration or Diffusion? Corporate Ownership of the Public Debt

Note: Large corporations are those with total assets of $250 million or more.

Source: IRS Statistics of Income (http://www.irs.gov/uac/Tax-Stats-2).

The two top series plot the distributive share of corporate holdings of the public debt held by large corporations (i.e. the share of corporate holdings of the public debt owned by large corporations). The top thick series, which maps the share of federal bonds held

by large corporations, appears 'broken' because observations are missing for several years. This thick series is supplemented by the thin dashed series, which offers a more complete data on the share of total government debt (federal, state and local) owned by large corporations. The bottom two series use the same data to plot the differential ratio of federal debt and total government debt owned by a large corporation relative to the average corporation

The two measures paint opposing pictures of the pattern of public debt ownership for the corporate sector. On the one hand, the distributive share of public debt held by large corporations has doubled from around 45 percent in the 1950s to over 90 percent in the most recent decade. Without a fixed cut-off point for isolating dominant capital, these rapid increases in the holdings of large corporations could signify concentration or they could merely be the product of an increasing number of corporations meeting the criterion for 'large' corporations with assets of $250 million or more.

On the other hand, the differential share of the public debt owned by a large corporation relative to the average corporation has more than halved over the same period. In the postwar period large corporations owned around 850 times the amount of public debt owned by the average corporation and this ratio has fallen steadily to just over 400 times in the most recent decade. As more and more corporations enter the numerator by meeting the criteria of $250 million in assets or more, the per corporation share of the public debt held by a large corporation relative to the average becomes significantly diluted.

Making Sense of SOI Data: Historical Snapshots

The nature of the SOI data hinders our efforts to map the distributive and redistributive dynamics of the public debt for the corporate sector. Is there any way to get around the problems associated with the fluctuating corporations in the numerator and the denominator and use these data to meaningfully map the pattern of public debt ownership concentration for corporations?

Luckily there is a roundabout method we can use to tease out meaningful results from the SOI data. It involves playing around with the SOI asset class categories in order to come up with a fixed number of corporations in different snapshots of time. As was already mentioned, the SOI finally refined its asset classes in 2001, increasing the top cut-off point from assets of $250 million or more to assets of $2.5 billion or more. For the most recent five years (2006-10) around 2,500 corporations were included in this top asset bracket of $2.5 billion in assets or more.

Obviously the top 2,500 corporations does not represent an ideal proxy for dominant capital, which existing studies have tended to identify with the top 100 to top 500 US corporations (Nitzan and Bichler 2009; Hager 2012). The top category is likely to contain not only the largest corporations at the center of the accumulation process, but also a significant number of medium-sized corporations. But due to the limitations built into the SOI data, the top 2,500 is the absolute minimum number of corporations that we can use as our cut-off point.

If we go back in history, we can examine the asset classes and try to isolate the top 2,500 corporations at different points in history. For the five-year period from 1977-81

there were on average just over 2,500 corporations with assets of $250 million or more. If we go back further to 1957-61, there were only around 500 corporations that meet the criterion of having assets in top bracket of $250 million or more. But if we include corporations with assets of $50 million or more, we come close to 2,500 top corporations for 1957-61.

Using these three snapshots periods (1957-61, 1977-81, 2006-10) we get a reasonably consistent, long-term view of ownership concentration for a fixed number of top corporations in the numerator. The historical snapshot data for these three periods are outlined in Table 7.1.

Table 7.1 Historical Snapshots of Corporate Ownership of the Public Debt

Period	Large Corporations (total)	Large Corporations (% total)	Distributive Ownership	Differential Ownership
1957-61	2,344	0.2%	66%	302
1977-81	2,676	0.1%	65%	616
2006-10	2,675	0.05%	82%	1,846

Note: The values in the last four columns are calculated as simple averages for the corresponding five-year period. Distributive ownership refers to the total share of corporate holdings of the public debt that are owned by large corporations. Differential ownership the ratio between the public debt owned by an average large corporation and the public debt owned by an average corporation. The cutoff point for large corporation is assets of $50 million or more for 1957-61, $250 million or more for 1977-81, $2.5 billion or more for 2006-10.

Source: IRS Statistics of Income.

Here we see that the number of corporations included in the top asset bracket is nearly constant. Skeptics will point out that the number of corporations in the first period (1957-61) in the second column of Table 7.1 is 14 percent lower than for the latter two periods.

But this discrepancy is compensated for when we take into account the third column of the table, which measures the number of top corporations as a proportion of the total number of corporations. The successive decline in the proportion of top corporations through the three periods is far more significant than the increase in the fixed number of corporations from 1957-61 to 1977-1981. Given the successive halving in the fixed proportion of top corporations, we could argue that these data may very well *understate* the level of ownership concentration.

The Aristocracy

We now move to two remaining columns in Table 7.1. The fourth column maps the distributive share of the public debt owned by large corporations. From 1957-61 to 1977-81 there was little change in the distributive pattern of ownership, with the share of large corporations falling one percentage point from 66 to 65 percent. It is from 1977-81 to 2006-10 that we see important changes, with large corporations increasing their distributive share of public debt from 65 to 82 percent.

The fifth column maps the differential ownership of the public debt, denoted by the ratio between the debt owned by an average large corporation and the debt owned by an average corporation. In differential terms, the debt ownership of a typical large corporation doubled from 302 times the average in 1957-1, to 616 times the average in 1977-81. Then from 1977-81 to 2006-10, we again see important changes, with the differential debt ownership of a large corporation more than tripling to 1,846 times the average corporation.

What do the data in Table 7.1 tell us about the concentration of public debt ownership? From the postwar period (1957-61) to the early neoliberal period (1977-81) the situation is still somewhat ambivalent. The distributive share of the public debt owned by large corporations held steady through the two periods, while the differential share more than doubled. In other words, there was little change in the power of dominant owners according to the conventional measure (approximated by ownership concentration) but a rise in their elemental power (approximated by differential ownership). With one measure constant and the other increasing, we can make the cautious assessment that there was a modest increase in public debt ownership concentration from the postwar to the early neoliberal period.

From the early neoliberal period (1977-81) to the current late neoliberal period (2006-10) the situation is much clearer. Judging by both the distributive and differential measures, there has been a rapid increase in the power of dominant corporate owners of the public debt over the past three decades. Though the top 2,500 corporations make up only 0.05 percent of total corporate returns in 2006-10, they now own 82% of the public debt. The increase in ownership concentration has been particularly stunning in the context of the current crisis: the distributive share of the public debt owned by large corporations increased from 77 percent in 2006 to 86 percent in 2010.

Our empirical picture of the disaggregate ownership of public debt for the corporate sector is more limited than for the household sector. But the data indicate clearly that the same pattern has been at play in both sectors over the past three decades: much like the

top 1% of households, since the early 1980s, large corporations have greatly increased their share of the public debt, especially through the current crisis.

In this way, much like the household component, the corporate component of H.C. Adams's bondholding class is very much a powerful feature of the contemporary US political economy. The pattern of public debt ownership concentration for the corporate sector also suggests that Marx's 'aristocracy' of powerful business interests that lie at the heart of the US public debt has contemporary relevance. While James O'Connor, perhaps rightfully, dismissed the notion of a powerful nexus between the 'aristocracy' and the public debt in the postwar period, it now appears that this nexus has been restored over the neoliberal period of the past three decades.

The Dynamics of Redistribution

We can now turn to examine the role of the federal income tax system in redistributing the share of federal interest income received by large corporations. As we saw in the case of the household sector, many Keynesians claimed that federal income taxes would progressively redistribute the 'top heavy' distribution of federal interest income. Our empirical analysis in Chapter Six questioned this claim. Though marginally progressive over the course of the past half century, federal income taxes have done little to reduce the net (after-tax) share of federal interest held by the top 1% of households relative to their gross (after-tax) share.

The Demise of Corporate Taxation

Before exploring the redistributive dynamics of the public debt for the corporate sector, it is important to point out some of the far-reaching changes that have taken place in the system of corporate income tax since the 1930s. These changes are highlighted in Figure 7.3.

The thick bottom series measures corporate incomes taxes as a percentage of total federal government revenues, while the thin top series measures the effective corporate income tax rate. Both series follow the same general pattern and reflect what researchers for the Citizens for Tax Justice advocacy group already recognized in the 1980s as the 'demise of the corporate income tax' (McIntyre et al. 1984: 1).

From a high of 40 percent in 1943, federal revenues from corporate income taxes have fallen consistently over the past half century and stood at a mere 8 percent in 2011. Meanwhile during the postwar period the effective corporate income tax rate was consistently above 40 percent, but has fallen since the 1970s. In 2012, the effective corporate income tax rate was 18 percent.

In the aggregate, the federal tax system has played a decreasingly significant role in the corporate sector. The significant decline in corporate taxation makes it unlikely that the federal tax system will play a meaningful role in redistributing the highly concentrated federal interest income of large corporations. What is interesting from our disaggregate power perspective is whether or not large corporations bear most of the relative burden of (decreasing) corporate taxation. If this were the case, then it would still

be possible that the federal income tax system plays a role in redistributing the federal interest income received by large corporations.

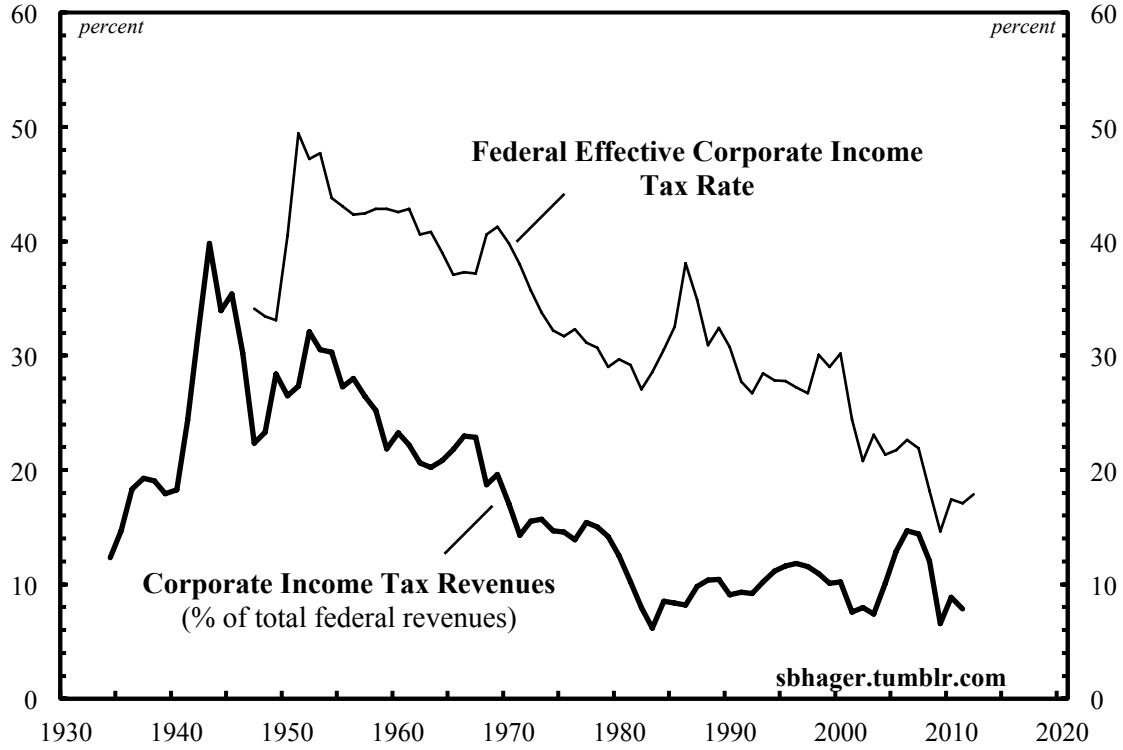


Figure 7.3 The Demise of Corporate Taxation

Note: The effective corporate income tax rate is calculated by dividing federal revenues from corporate income tax by corporate gross (before-tax) profits.

Source: For the bottom (thick) series, corporate income tax revenues and total federal revenues, the Office of Management and Budget, Table 2.1, (http://www.whitehouse.gov/omb/budget/Historicals); for the top (thin) series, tax receipts on corporate income and corporate profits before taxes, Federal Reserve Economic Data (http://research.stlouisfed.org/fred2/)

Table 7.2 adapts the empirical techniques for gauging the effects of the federal income tax system on the distribution of federal interest payments as outlined in Chapter Four and as first explored for the household sector in Chapter Six. In the first column we retain our three historical snapshot periods from Table 7.1. The second and third columns show

the gross (before-tax) and net (after-tax) share of federal interest income received by large corporations respectively.[61] The fourth column shows the ration between the gross and net shares of federal interest income received by large corporations.

Table 7.2 Federal Income Tax Neutrality and the Corporate Sector

Period	Large Corporations Gross Interest Share	Large Corporations Net Interest Share	Ratio Gross/Net
1957-61	66.3	66.1	1
1977-81	64.6	61.6	1.05
2006-10	81.7	81.3	1

Note: The gross share of federal interest received by large corporations is assumed to be equal to their share of the public debt. The net share of interest is calculated by multiplying large corporations' total gross share of interest by the differential components of the income tax rate (see footnote 62).

Source: IRS Statistics of Income (http://www.irs.gov/uac/Tax-Stats-2).

Recall from our discussion in Chapter Six that a progressive federal income tax system will make the net federal interest share of dominant owners, in this case the top 2500 corporations, smaller than their gross interest share (the different between the gross and net shares will be positive).[62] A regressive federal income tax system will make the net federal interest share of dominant owners larger than their gross interest share (the difference between the gross and net shares will be negative). And a neutral federal

[61] SOI data does not provide reliable data on the distribution of federal interest income, nor does it provide a breakdown of the different types of federal securities (e.g. Treasury bonds, bills, etc.) owned by corporations in the different asset classes, which would allow us to impute federal interest income by multiplying the dollar value of different types of federal securities by their corresponding interest rate (see Figure 6.3). As a result, we are unable to measure with precision the distribution of federal interest income. The data in Table 7.2 merely assumes that the distribution of federal interest income is equal to the distribution of federal bonds.

[62] The net share of the top 1% in federal interest is calculated as follows:

$$\frac{\text{large corporations federal gross interest received}}{\text{total federal gross interest received}} \times \frac{1-\text{large corporations effective federal income tax rate}}{1-\text{average effective federal income tax rate}}$$

income tax system will keep the net and gross federal interest share of dominant owners the same.

Tax Neutrality

The data in the fourth column of Table 7.2 indicate that the ratio of the gross and net share of federal interest received by large corporations has remained remarkably constant over the past half century. Though the share of federal interest received by large corporations has become more concentrated, the federal income tax system has remained consistently neutral: the gross and net shares of federal interest are the same for all three periods.

Marx and other radical political economists have speculated that the public debt redistributes income upwards from the mass of taxpayers to the tiny elite or 'aristocracy' of public creditors. As should be clear by this point in the study, there is no way to empirically gauge whose interest payments are funded by whose taxes. Working within the empirical limits of government budget accounting, it is nevertheless evident that the federal income tax system has no effects, neither regressive nor progressive, on the distribution of federal interest income within the corporate sector.

In short, the redistributive dynamics of the federal income tax system are a non-factor within corporate sector. Large corporations have greatly increased their share of federal bonds and federal interest income over the past three decades, while the federal income tax system has remained neutral. In Chapter Six we saw that since the early 1980s what the top 1% of households gives in federal income taxes is marginally progressive but has

failed to keep pace with what it receives in federal interest payments. For the corporate sector, this dynamic is even more pronounced: what the aristocracy of large corporations give in federal income taxes is neutral and has certainly not kept pace with what it receives in federal interest payments.

Is the Aristocracy Still Financial?

Of course the 'aristocracy' that Marx identified was specifically an aristocracy *of finance*, a group that comprised not only the 'loan promoters and speculators' (the modern day equivalent of investment banks) but 'all modern finance' and 'the whole of the banking business' that dominated the ownership and trading of government securities. It still remains to be seen whether 'finance', meaning institutions classified as financial intermediaries, still dominates the ownership of the public debt within the contemporary US corporate sector. In this section, we unpack corporate ownership of the public debt by sector, with the aim of determining whether the aristocracy of dominant owners mapped above still falls under the classification of financial intermediaries.

FIRE Power

Figure 7.4 traces the share of corporate holdings of the public debt owned by corporations within the Finance, Insurance and Real Estate (FIRE) sector. Once again the thick 'broken' series measures the share of federal bonds owned by the FIRE sector, while the thin dotted series measures its share of total (federal, state and local) government bonds. By both measures we can see that the share of the public debt owned

by FIRE has increased greatly since the 1950s. Even at its lowest point of 81 percent in 1959, the FIRE sector was by far the most dominant corporate owner of the public debt, and over the past five decades its share has steadily increased. From 2000 to 2010 the FIRE sector owned on average 98 percent of the corporate share of the public debt.

Figure 7.4 FIRE's Ownership of the Public Debt Held by Corporations

Note: Total government debt includes the local, state and federal levels.

Source: IRS Statistics of Income (http://www.irs.gov/uac/Tax-Stats-2).

Expanding our empirical picture, we see that it is not just large corporations, but large FIRE corporations that are the dominant corporate owners of the public debt. And if we

equate ‘finance’ narrowly with FIRE sector corporations, then it is difficult to deny the relevancy of Marx’s notion of an ‘aristocracy of finance’ that owns an increasingly concentrated share of the public debt.

The Rise of Institutional Investors

We can deepen our analysis by mapping the distribution of the public debt within the FIRE sector. Once again, the SOI data present a number of stumbling blocks in our efforts to develop a consistent time series of public debt ownership, this time for the distribution of the public debt within the FIRE sub-sector. From 1954 to 1997, the SOI data offered a sub-sectoral breakdown of the distribution of the public debt based on the Standard Industrial Classification (SIC). But since 1998, the IRS has used the North American Industrial Classification System (NAICS) to breakdown the sub-sectoral distribution of the public debt.

Unfortunately these two classification systems are not compatible and the FIRE sector in particular underwent major changes with the shift from the SIC to the NAICS (see Ambler and Kristoff 1997; Krishnan and Press 2003). Some significant sub-sectors, such as bank holding companies, that were included in one category under SIC (depository institutions) were shifted to a completely different sub-sector in NAICS (the management of companies and enterprises). In other cases, entirely new sub-sectors were introduced in NAICS (e.g. funds trusts and other financial vehicles), which were spread across many different sub-sectors in SIC.

These drastic changes that took place in the transition from SIC to NAICS make it impossible to construct a long-term time series of the sub-sectoral distribution of the public debt within FIRE. More reliable and consistent data can, however, be found in the Federal Reserve's Flow of Funds Accounts. While the IRS SOI is focused specifically on financial corporations, the Federal Reserve's Flow of Funds includes both incorporated and unincorporated financial businesses. Recall, though, from our discussion in Chapter Four the dominant position that the corporate sector has within the US system of business enterprise. Given the corporate sector's domination of business sales and net income, we can use Flow of Funds data to compliment SOI data in order to analyze the distribution of public debt within the FIRE sector.[63] Using flow of funds data, Figure 7.5 maps the distribution of the public debt by three main sub-sectors within FIRE: banking, insurance and money managers.

In the post-World War II period banking institutions were clearly the dominant entities. From 1945 to the early 1970s the share of FIRE sector holdings of the public debt owned by banks oscillated between 73 and 80 percent. From the early 1970s onwards, the banks' share has declined precipitously and stood at 12 percent at the end of 2012. The declining share of the banks has been met by a rapid increase in the share of FIRE sector holdings of the public debt by money managers. In the postwar period money managers held on average only 8 percent of the FIRE sector holdings of the public debt. But this share started to skyrocket in the 1970s and by the end of 2012 stood at 79

[63] According to IRS Integrated Business Data, in 2008 corporations made up 20 percent of total business tax returns, 58 percent of total business net income and 87 percent of total business sales within the FIRE sector.

percent. Insurance companies, meanwhile, have held a fairly steady share of the FIRE sector's holdings of the public debt. The share held by insurance companies has ranged from its peak of around 20 percent in the late 1940s, the early 1990s and the mid-2000s to a low of 7 percent in the mid-1970s.

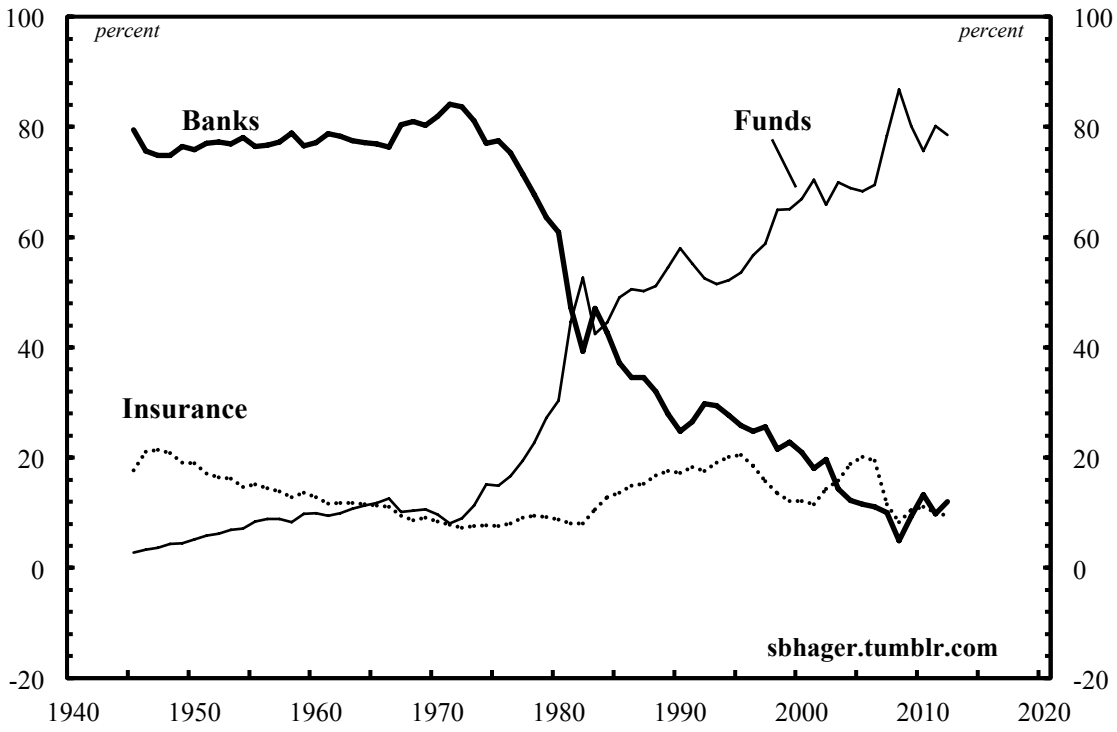


Figure 7.5 The Sub-sectoral Distribution of the Public Debt within FIRE

Note: 'Banks' includes depository institutions, foreign banking offices in the US and credit unions; 'Insurance' includes property-casualty and life insurance companies; 'Funds' includes private pension funds, state and local employee retirement funds, federal government retirement funds, money market mutual funds, mutual funds, closed-end funds and exchange-traded funds.

Source: Federal Reserve's Flow of Funds Accounts (table L.209).

Our analysis of the sub-sectoral distribution of the public debt highlights changes that have taken place within the 'aristocracy of finance'. While 'traditional' bank

intermediaries were the dominant corporate owners of the public debt in the postwar period, their position has been usurped over the past four decades by institutional investors.[64]

Conclusion

The analysis in this chapter suggests that Marx's 'aristocracy of finance' is still a very real feature of contemporary US capitalism. Though the data may be limited, the empirical analysis indicates that the pattern of corporate ownership of the public debt has become rapidly concentrated since the early 1980s, and especially in the context of the current crisis. The increasing concentration of the public debt in the hands of large corporations over the past three decades mirrors the 'top heavy' pattern of public debt ownership for the US household sector. H.C. Adams suggested that the bondholding class was comprised of wealthy individuals and large corporations. Given the fact that the ownership of the public debt by households and corporations at the top of the social hierarchy still move in tandem, and given the fact that the top 1% of households are the dominant ownership of corporate debt and equity, it is no stretch to say that these two entities are still two main components of the bondholding class.

[64] The late Keynesian economist Hyman Minsky (1996) and his followers have labeled the phase of capitalist development in the US since the 1970s as 'money manager capitalism' (see Nersisyan 2012). One of the main features of this new phase of capitalism is that highly leveraged institutional investors, especially pension and mutual funds, have replaced traditional banking intermediaries as the '…proximate owners of a vast proportion of financial instruments' (Minsky 1996: 358). In a general sense, the Minskian notion of 'money manager capitalism' adequately describes the sub-sectoral pattern of public debt ownership outlined in Figure 7.5.

While the federal income tax system was shown to be marginally progressive in the case of households, reducing very slightly the share of federal interest received by the top 1%, it has been inconsequential in the case of the corporate sector. For the three historical periods analyzed, the effects of the federal income tax system have been completely neutral, even though the distribution of federal interest within the corporate sector has become more and more concentrated in favor of large corporations.

Finally, our sectoral and sub-sectoral analysis of the pattern of public debt ownership for the corporate sector indicates that the FIRE sector has greatly increased its already significant share of the public debt over the past half century. If we equate finance narrowly with the FIRE sector, then the 'aristocracy' of powerful business groups that dominates ownership of the public debt is still very much 'financial'. Digging deeper into sub-sectoral level, we see that institutional investors have replaced banks as the major owners of the public debt.

Taken together, the empirical analysis in Chapters Six and Seven points toward a powerful block of dominant owners of the public debt. Having mapped the distributive and redistributive dynamics of the public debt, we are now ready to conclude the study by considering some of the implications of these findings.

Appendix

The only source for disaggregate data on corporate ownership of the public debt is the IRS Statistics of Income. These data are not available through an organized database: the research has to hand pluck data from the yearly releases of corporate tax reports from the IRS Tax Statistics webpage and that are available in PDF (from 1954 to 1993) and spreadsheet (from 1994 to 2010) formats.[65]

To give a sense of the procedures involved in collecting the data, Figure 7.6 reproduces the relevant balance sheet from Table 2 of the 1993 IRS Corporate Income Tax Returns report. The table ranks corporations according to the size of their total assets, with 6,798 corporations meeting the criterion of $250 million in assets or more for 1993 (column 13). The breakdown of the ownership of the public debt by the various asset classes is given in the rows "Investments in Government Obligations" (federal government securities) and "Tax Exempt Securities" (state and local government securities).

We can use the data on "Investments in Government Obligations" to calculate public debt ownership concentration for the corporate sector. As we see from the balance sheet tables in Figure 7.6, large corporations (those with total assets of $250 million or more) held approximately $1.1 trillion in federal securities in 1993. In distributive terms, this amount is equal to about 85 percent of the $1.3 trillion in federal securities held by the corporate sector as whole. In differential terms, the average large corporation owned

[65] The IRS Tax Statistics homepage can be reached through by the following url: http://www.irs.gov/uac/Tax-Stats-2 [accessed 9 April 2013].

$162 million in federal securities ($1.1 trillion / 6,798 large corporations), while the average corporation owned $325 000 in federal securities ($1.3 trillion / 3,964,629 corporations). Thus, in 1993 the differential amount of public debt owned by the average large corporation was about 500 times larger than the amount of public debt owned by the average corporation (see Figure 7.2).

Figure 7.6 The IRS Statistics of Income Data: A Sample

Corporation Returns/1993

RETURNS OF ACTIVE CORPORATIONS

Table 2.--Balance Sheet, Income Statement, and Selected Other Items, by Size of Total Assets

[All figures are estimates based on samples--money amounts are in thousands of dollars and size of total assets is in whole dollars]

Item	Total returns of active corporations	Size of total assets: Zero assets	$1 under $100,000	$100,000 under $250,000	$250,000 under $500,000	$500,000 under $1,000,000
	(1)	(2)	(3)	(4)	(5)	(6)
Number of returns, total	3,964,629	239,331	2,048,646	635,265	394,244	269,277
Total assets	21,815,869,373	-	63,188,749	102,662,775	139,592,757	189,985,446
Cash	812,077,106	-	14,685,705	18,334,855	19,797,773	23,861,869
Notes and accounts receivable	4,532,360,299	-	7,094,258	14,673,541	23,950,966	36,381,615
Less: Allowance for bad debts	117,104,017	-	253,040	146,199	284,969	463,206
Inventories	947,287,758	-	7,754,069	15,870,809	23,374,316	31,363,274
Investments in Government obligations	1,290,041,298	-	51,614	134,052	306,010	545,719
Tax-exempt securities	701,101,044	-	50,727	206,136	250,775	497,159
Other current assets	1,537,521,042	-	2,867,757	4,355,975	6,656,453	9,449,622
Loans to stockholders	83,900,670	-	4,377,099	5,314,679	4,873,288	4,360,565
Mortgage and real estate loans	1,626,813,106	-	500,571	1,192,042	1,931,976	2,347,751
Other investments	5,700,750,483	-	1,674,163	4,869,178	7,881,345	11,663,943
Depreciable assets	4,968,959,443	-	66,925,255	75,341,794	94,470,145	113,559,015
Less: Accumulated depreciation	2,265,345,826	-	47,475,714	47,803,297	58,630,875	66,009,366
Depletable assets	136,837,315	-	325,409	490,119	575,197	842,491
Less: Accumulated depletion	64,129,960	-	200,242	195,795	260,702	345,365
Land	230,380,089	-	1,824,899	4,554,493	8,860,160	14,212,245
Intangible assets (amortizable)	559,011,523	-	2,888,843	3,700,136	4,305,117	4,853,540
Less: Accumulated amortization	138,208,765	-	1,709,638	1,934,849	1,937,542	2,114,544
Other assets	1,273,616,767	-	1,807,013	3,705,105	3,473,324	4,979,120

Corporation Returns/1993

RETURNS OF ACTIVE CORPORATIONS

Table 2.--Balance Sheet, Income Statement, and Selected Other Items, by Size of Total Assets--Continued

[All figures are estimates based on samples--money amounts are in thousands of dollars and size of total assets is in whole dollars]

Item	Size of total assets: $1,000,000 under $5,000,000	$5,000,000 under $10,000,000	$10,000,000 under $25,000,000	$25,000,000 under $50,000,000	$50,000,000 under $100,000,000	$100,000,000 under $250,000,000	$250,000,000 or more
	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Number of returns, total	279,146	40,077	25,906	11,371	7,968	6,599	6,798
Total assets	585,115,423	277,364,662	401,660,986	402,041,584	564,528,095	1,038,795,154	18,050,933,743
Cash	55,387,742	24,447,531	30,517,056	25,997,905	31,690,320	46,600,575	520,555,775
Notes and accounts receivable	124,962,171	61,876,447	93,847,308	101,606,534	147,504,593	226,519,406	3,693,943,459
Less: Allowance for bad debts	1,796,834	1,291,496	2,403,403	2,685,265	4,214,404	7,374,438	96,190,762
Inventories	117,619,093	56,093,344	64,804,627	43,398,361	41,659,224	58,936,426	486,414,215
Investments in Government obligations	2,985,682	3,294,188	12,100,847	28,094,582	51,386,551	89,873,244	1,101,268,808
Tax-exempt securities	2,051,659	1,404,865	5,017,317	10,405,779	24,760,552	57,948,265	598,507,809
Other current assets	30,518,114	15,642,935	21,808,963	21,937,895	27,595,785	51,644,725	1,345,042,819
Loans to stockholders	8,869,517	2,832,049	2,804,201	2,020,304	1,914,361	2,790,342	43,744,266
Mortgage and real estate loans	6,067,860	2,587,728	6,403,872	14,344,001	33,537,945	76,926,217	1,480,973,143
Other investments	40,183,255	23,585,582	43,362,310	56,453,407	95,499,973	239,628,259	5,175,949,066
Depreciable assets	308,778,598	130,312,911	172,402,503	127,956,698	134,005,731	209,375,915	3,535,830,877
Less: Accumulated depreciation	166,729,890	66,793,410	84,704,265	59,797,965	60,319,428	91,170,880	1,515,910,737
Depletable assets	1,914,490	1,805,357	2,862,531	2,907,003	3,700,123	7,991,506	113,423,089
Less: Accumulated depletion	712,790	773,879	1,385,573	1,339,922	1,717,841	3,080,508	54,117,342
Land	35,214,472	12,789,305	15,212,830	10,790,536	10,269,111	14,042,743	102,609,296
Intangible assets (amortizable)	12,081,712	7,994,385	11,767,045	12,892,136	19,156,632	36,684,200	442,687,777
Less: Accumulated amortization	4,891,325	4,113,635	4,232,373	4,233,185	6,107,250	9,274,558	97,659,867
Other assets	12,611,899	5,670,454	11,475,188	11,292,779	14,206,117	30,533,715	1,173,862,053

Source: IRS Statistics of Income (1993: 37-8).

8 Conclusion
America's Real 'Debt Dilemma'

> …the exercise of power is the most intoxicating of narcotics. Sexual power, the power of wealth, the power which can grind to a stop the wheels of industry at a mere lifting of a finger, that can hold a whole nation dithering in fear, the power of the blackmailer – what does it matter what kind of power it is? It's always the same potent drug, desirable for its own sake
>
> —Anthony Burgess[66]

Introduction

The purpose of this concluding chapter is four-fold. First, I outline some of the limitations of this exploratory study and suggest some avenues for future research. In particular, I suggest that future research efforts be concentrated on incorporating other major sectoral entities (e.g. the Federal Reserve and the foreign sector) into the quantitative map of US public debt ownership, on expanding the research into countries other than the US, and on analyzing in greater detail the consequences of the historical changes in the distributive and redistributive dynamics of the US public debt examined in this study.

Second, I summarize the research findings in order to recap what we have learned from the analysis and how it relates to the existing literature that was surveyed in Chapter Two. Dividing the research results into five historical phases, I show how the power-centered analysis developed in this study offers a nuanced understanding of the

[66] Burgess, A. 1978. *1985*, 1st Edition, Boston: Little, Brown and Company, p. 185.

distributive and redistributive dynamics of the public debt, one that allows us to overcome the lack of consensus that plagues the existing literature.

Third, I discuss some of the implications of this research for current debates about the explosive rise in the US public debt that has taken place in the wake of the current financial crisis. Current debates suggest that the US faces a 'debt dilemma' over whether to bring its fiscal house into order through tax hikes on the super-rich or spending cuts to America's supposedly 'bloated' social programs (Harding 2013). Though the debates recognize that relations of power are at the heart of debt repayment and fiscal re-adjustment, they do not go one step further and examine, as this study has, the power relations that underpin the very existence of the public debt. I argue that once we take seriously the distributive and redistributive dynamics of the public debt analyzed in this study we come to a completely different understanding of the 'debt dilemma' currently faced by the US. In short, the real debt dilemma is that, in the absence of progressive spending or taxation, policy actions to both increase *and* decrease the public debt cannot be instituted without causing major social upheaval.

Fourth, I address one potential counter-argument that is likely to arise in light of the conclusions of this study. For some observers, the conclusions reached here may seem somewhat counter-intuitive if not completely contradictory. After all, during the neoliberal era we have been taught to believe that the ruling class is adverse to big government and to large public debts. And if that is the case, can the public debt serve as an institution of power when the most powerful seem so opposed to it?

I argue that ruling class opposition to the public debt is more apparent than real for two reasons. On the one hand, if we look closely at ruling class initiatives for public debt reduction, they focus almost solely on cuts to social entitlement programs and advocate a 'pro-growth' tax regime to enable tax reduction. What the ruling class therefore seeks, I argue, is not debt reduction per se, but austerity. Fear mongering about the public debt is a ploy to broaden support for this austerity agenda. On the other hand, I argue that if we want to understand how the ruling class really feels about the public debt, we can look back to their response to Clinton-era budget surpluses, which many projected would set the federal government on the path towards eliminating its debt entirely. The prospect of debt elimination received a lukewarm response at best from powerful financial corporations, who feared the consequences of the outright disappearance of 'risk free' federal assets from their balance sheets. This raises an important question: if the ruling class offers a lukewarm reaction to substantial public debt in times of prosperity, how seriously are we to take similar claims in a period of systemic global crisis?

In the remainder of this chapter, I address all four of these points in turn.

Future Directions: Navigating the Map

As with any exploratory research project, the analysis here is likely to raise as many questions as it answers. Our quantitative mapping of the distributive and redistributive dynamics of the public debt, as I will argue later in this concluding chapter, provides new insights that help to overcome the lack of consensus within the existing literature. But

there are still many different avenues of research that remain to be explored. In this section, I discuss some priority areas for future research in this area.

One of the most obvious priorities for future research involves expanding the quantitative map. As Chapter Five made clear, the foreign sector and the Federal Reserve are two entities that own significant portions of the US public debt. And the share of the public debt owned by these entities needs to be carefully analyzed and assessed alongside the disaggregate analysis developed in Chapters Six and Seven.

Another priority has to do with extending the research to analyze the distributive and redistributive dynamics of the public debt for countries other than the US. A comparative analysis of these dynamics that places the US experience alongside different types or 'varieties' of capitalist states would help to deepen our understanding of the power relations of public indebtedness. How does, for example, the pattern of public debt ownership in similar political economies such as the United Kingdom and Canada, compare to the US experience? What role does the income tax system in these countries play in redistributing federal interest income? How does the pattern of public debt ownership and the role of the federal income tax system in other advanced capitalist countries with quite different political economies, such as Sweden, Germany and Japan, compare to the US experience? Are the bondholding classes of these countries more or less powerful domestically than the US bondholding class? And how do the dynamics in all of these national contexts change over time?

Any attempt to tackle these important comparative questions is likely to encounter major stumbling blocks. As we have seen in this study of the US experience, the

disaggregate data that allow us to map the distributive and redistributive dynamics of the public debt is frustratingly patchy. And yet the US generally offers the most reliable and extensive statistics, both aggregate and disaggregate. The challenges we have encountered in this study of the US experience are likely to be amplified when studying other national contexts.

Perhaps the most important area of future research will involve examining in much greater detail the consequences of the research findings in this study. We now have, for the first time, a reasonable quantitative map of the historical pattern of public debt ownership and the redistributive consequences associated with that ownership pattern. And according to the alternative 'capital as power' framework sketched in Chapter Four, the dynamics of distribution and redistribution represent the quantitative architecture or manifestation of the power of dominant owners of the public debt. But in order to further substantiate this theoretical claim, we need to look more closely at the effects of these dynamics on both government behavior and policy-making and on society more broadly. Part of the task of deepening the analysis of the effects of power will involve further quantitative work that correlates the distributive and redistributive dynamics of the public debt with other quantitative indicators.

For example, we could correlate the pattern of public debt ownership with other public finance data in order to gauge how, if at all, changes in ownership (read power) affect government spending patterns, tax policies, monetary policies, etc. Of course the robustness of any correlation between these two quantitative realms will depend on our abilities to weave in a qualitative account that speculatively links the two together. Does

the qualitative evidence suggest that government officials fear reprisals from bondholders when the public debt becomes more heavily concentrated in the hand of dominant bondholders? What do dominant bondholders themselves claim to want from government policy? In-depth interviews with government officials and dominant bondholders, as well as more extensive archival research of official government documents and the publications of dominant bondholders, would provide starting points for this qualitative analysis.

Another example of how to deepen this study would be to examine the effects of the rise of institutional investors or 'money managers' as dominant corporate owners of the public debt. As we saw in Chapter Seven, money managers have replaced bank intermediaries as the major corporate bondholders over the past three decades. Yet it is unclear what the consequences of this shift are. When it comes to the US overall political economy, Hyman Minsky (1996: 358) claims that the rise of money managers as the '…proximate owners of a vast proportion of financial instruments' has had a destabilizing influence. According to this line of argument, money managers are distinguished from other capitalist investors in seeking to maximize the short-term total return on their investments (ibid: 358–9). And this short-term maximizing behavior leads to heightened uncertainty and predatory business practices, as companies are pressured to downsize and cut costs in order to boost short-term profits and share prices. Minksy's followers now claim that the rise of money manager capitalism is an important factor lying at the root of the current global financial crisis (Wray 2009, 2011; Whalen 2008).

When it comes to the public debt, though, neither Minsky nor his followers have offered an examination of the effects of the rise of money managers as the dominant owners of the public debt. An important avenue for future research would be to explore the 'money manager capitalism' thesis specifically as it relates to the distributive and redistributive dynamics of the public debt. What are the investment strategies of money managers that dominate the federal bond market? Do these money managers seek to 'maximize' short-term returns by investing in the public debt, or maybe their concerns are longer term in nature and/or differential in character? What are the broader effects of money managers' investment strategies in the federal bond market? Does the shift from banks to money managers as the dominant corporate owners of the public debt lead to increased uncertainty/volatility and 'predatory' behavior by the federal government? Once again, an analysis exploring these questions would involve extensive quantitative research that examines federal bond market volatility and data on public finance. Such an analysis would also involve qualitative research, such as in-depth interviews with, and archival analysis of the documents of, government officials and money managers.

These are all big questions that fall outside of the scope of this exploratory study. With this basic research now having been conducted and a more extensive quantitative map now in place, we have a better sense of the future course we need to navigate in order to deepen our understanding of the distributive and redistributive dynamics of the public debt.

Beyond Dissensus: The Nuances of Power

Now that we have discussed the limits of this study and the priority areas of future research, we can turn to summarize and assess this study's findings. In Chapter Four, I argued that the alternative capital as power framework developed in this study will ultimately be judged on two grounds: (1) the empirical insights that it generates; (2) whether these empirical insights help us to overcome the protracted lack of consensus that plagues the existing literature on the distributive and redistributive dynamics of the public debt. With the general contours of these dynamics mapped in Chapters Six and Seven, we are now ready to assess, however tentatively, the empirical contribution of this theoretical framework.

As we saw in Chapters Two and Three, the existing literature has based its claims about the distributive and redistributive dynamics of the public debt on weak and sometimes no empirical foundations. The handful of empirical studies that do exist use limited data, often based on snapshots for single years, in order to make trans-historic claims about distribution of the public debt and its redistributive consequences. Anchored in thin empirics, the public debt is either proclaimed to be widely held and to redistribute income progressively or to be heavily concentrated and to redistribute income regressively. Within the existing literature there is no attempt to deepen these claims by subjecting them to *historical* scrutiny. As a result, we are left with gaping holes in our knowledge of how the distributive and redistributive dynamics of the public debt evolve over time.

The historical research in Chapters Six and Seven offers a more extensive analysis and leads to a different assessment of these dynamics. Above all, what this research indicates is that neither position within the existing literature – whether claiming that the public debt is widely held and progressive or that it is heavily concentrated and regressive – stands as a trans-historic reality. Over the past century, the distributive and redistributive dynamics of the public debt have been transformed alongside deeper changes in the US political economy. These transformations uncovered through empirical research bring into question the trans-historic claims of the existing literature and allow us to formulate a more nuanced assessment of the power relations of public indebtedness as they have unfolded over time. For the sake of brevity, the empirical results of this study can be roughly divided into five historical phases: (1) Phase I, the 'Roaring Twenties' (1920-1929); (2) Phase II, the Great Depression and World War II (ca. 1930–1945); (2) Phase III, the postwar 'Golden Age' (ca. 1946-1970); and Phase IV, the neoliberal period (ca. 1971–2007); and Phase V, the current global financial crisis (ca. 2007–present).

Phase I: The 'Roaring Twenties' (1920-1929)

In Chapter Six we saw that, in the 1920s, the earliest period for which reliable data are available, the share of federal bonds held by the top 1% of US households was at its high point. In 1922 the top 1% owned 45 percent of the household share of the public debt, and this 'top heavy' distribution mirrored the top 1% concentration in the ownership of net wealth more generally, which reached its own high point of 44 percent in 1929. Thus in the 1920s, over three decades after Adams (1887) produced his pioneering analysis, it

appears that the bondholding class, at least its household component, was still a very powerful feature of the US political economy.

Despite record levels of ownership concentration in the 1920s, the historical record does not show much in the way of an academic or a public debate over the distributive and redistributive dynamics of the public debt during this phase. There are at least two plausible, if speculative, reasons for this lack of debate.

First, we do not have much in the way of consistent historical data on the pattern of public debt ownership before 1922. In the case of households, the concentration of the public debt in the hands of the top 1% may have been much higher, or at least may have been perceived to be much higher, in the years prior to 1922. A downward trajectory in the rate of ownership concentration would make the issue seem less immediate and explain the lack of debate about what appears to be an extremely 'top heavy' pattern of ownership concentration.

Second, we know that the level of US public debt as a percentage of GDP declined significantly during this phase (see Figure 2.1). In 1921 the US public debt stood at 41 percent of GDP and fell to 16 percent by 1929. The sharp decline in the level of US public debt may also help to explain the absence of debate over the distributive and redistributive dynamics of the public debt in the 1920s.

Phase II: The Great Depression and World War II (1930-1945)

In the context of the Great Depression and World War II the situation changed dramatically. From 18 percent of GDP in 1930 the US public debt escalated to 122

percent of GDP in 1945. And as we saw in Chapter Two, this explosive rise in public debt sparked a widespread debate about the distributive and redistributive dynamics of public debt.

As part of their macro-economic strategy to boost effective aggregate demand through active government intervention, the Keynesians tried to show how a rapidly growing public debt could be used to achieve non-inflationary full employment. In supplanting the traditional doctrine of 'sound' finance, the early Keynesian theorists had to come up with new explanations of the functions and limits of government borrowing in capitalist societies. The one major objection Keynesians conceded might be raised against a rapidly growing public debt had to do with the negative effects it would have on the distribution of wealth and income.

Perhaps with the extremes of inequality experienced in earlier US capitalism still fresh in their memories, Keynesians warned that in the event of large and rapid increases in the public debt, the rich would disproportionately purchase government bonds. This would eventually aggravate the deficiency of effective demand and undermine the government's ability to engage in counter-cyclical deficit spending. During this period, concerns over the potentially negative effects of a growing public debt on the distribution of income and wealth were not confined to academic circles. As we saw in throughout this study, high-ranking politicians such as former Treasury Secretary Henry Morgenthau Jr., and even powerful business figures, expressed concerns about the distributive and redistributive dynamics of the public debt.

In the end, however, early Keynesians were confident that the growing levels of public debt in the 1930s and 1940s would not have any serious negative effects on the distribution of wealth and income. Though they had no data to back up their claim, Hansen and Greer (1942: 497) confidently declared that government bonds were more widely distributed in the 1940s than they had been at any other point in US history. The limited disaggregate data for US households during this period corroborate this claim. As we saw in Chapter Six, the top 1% owned 33 percent of the household share of the public debt in 1945, a significant drop from its historically high share of 45 percent in 1922. Again the distribution of the public debt mirrored the general pattern of wealth inequality: in 1945 the top 1% owned 30 percent of net wealth, also a significant drop from its high of 44 percent in 1929.

Phase III: The Postwar 'Golden Age' (1946-1970)

If concerns about the distributive and redistributive dynamics of the public debt were alleviated somewhat by the circumstances of Phase II, they were altogether nullified by the circumstances of Phase III, the postwar 'Golden Age'. During this phase, referred to by Bob Jessop (2002) as the era of the 'Keynesian Welfare National State', the US public debt plummeted from its WWII highs, falling steadily from 122 percent of GDP in 1945 to 39 percent in 1970. This is also the period in which reliable and extensive disaggregate data first becomes available. The empirical research in Chapters Six and Seven helps us to explain at least in part why researchers abandoned concern for the disaggregate ownership of the public debt and its redistributive consequences.

As we saw in Chapter Six, the share of the public debt owned by the top 1% fell in the postwar period, reaching its nadir of 17 percent in 1969. Also during this period, we estimated that the impact of the federal income tax system on the distribution of federal interest income within the household sector was neutral (i.e. the ratio between the gross and net share of federal interest received by the top 1% was close to 1).

This is also the period in which we find the first reliable data on the disaggregate ownership of the public debt for the corporate sector. By both *distributive* and *differential* measures, the share of corporate holdings of the public debt owned by large corporations during the postwar period, represented by the historical snapshot data for 1957-61, was very low relative to subsequent periods. Much like the US household sector, the federal income tax system had no impact on the distribution of federal interest income within the corporate sector during this period.

In the 1950s and 1960s the public debt had become more widely held than at any other point in history for which data is available. And this was also a period in which wealth and income were more equitably distributed than at any other point in history for which data is available. This period coincides with the disappearance of the class distributive and redistributive dynamics of the public debt from the political economic literature. The image of a powerful bondholding class seemed to be a relic confined to an earlier phase of capitalist development.

Phase IV: Neoliberalism (1971-2007)

The shift from the postwar 'Golden Age' of the Keynesian Welfare National State to neoliberalism, which began in the early 1970s, was bound up with the transformation of the power relations of public indebtedness. Save for a brief period of decline associated with the Clinton-era budget surpluses, the public debt steadily climbed over this period from 38 percent of GDP in 1971 to 70 percent of GDP in 2007. And with these steady increases came a renewed debate about the distributive and redistributive dynamics of the public debt.

As we saw in Chapter Two, a small handful of political economists has rejected the mainstream fixation with 'inter-generational redistribution' and focused their attention on the disaggregate power relations that underpin the public debt. On the one hand, a group of heterodox political economists argue that during this period ownership of the public debt was highly concentrated and that interest payments on government bonds redistributed income regressively. On the other hand, orthodox Keynesians follow Hansen and Lerner and insist that, even with the onset of neoliberalism, the public debt was still widely held and had no regressive effects on the distribution of wealth and income.

The empirical evidence presented in Chapters Six and Seven helps us to assess these competing claims. For the US household sector, the 1970s, as we saw in Chapter Six, present an empirical blind spot. Since at least the early 1980s, however, the distribution of federal bonds and interest has, much like the distribution of wealth and income more generally, become increasingly unequal. The top 1% share of the public debt stood at 33

percent in 1983, nearly doubling the share that it held in 1969. And by 2007, the top 1% share increased further to 38 percent. As a result, the ownership of federal bonds and federal interest mirrors the U-shaped pattern of general wealth and income distribution since the early 1900s. Furthermore, over the neoliberal period, the federal income tax system and the transfer payments that flow from intra-government debt have done little to counteract this widening inequality.

Chapter Seven also indicated fundamental transformations during the neoliberal period in relation to the corporate ownership of the public debt. From the postwar (1957–61) to the early neoliberal period (1977–81) the conventional distributive measure of ownership concentration experienced very little change, as the corporate share of the public debt owned by large corporations fell from 66 percent to 65 percent. Yet according to the differential measure, the ratio between the public debt ownership of a large corporation and the average corporation more than doubled over this same period from 302 in 1957–61 to 616 in 1977–81.

However, the most profound changes in the corporate pattern of public debt ownership took place from the early neoliberal period (1977–81) to the late neoliberal period (2006–2010). The latter years of this late neoliberal period (since 2008) will be discussed as part of Phase V below. Yet before the onset of the current crisis, there were still obvious changes that had taken place within the corporate sector. From 65 percent in the 1977–81 period the distributive share of the public debt owned by large corporations increased to 79 percent in 2007. Meanwhile the differential ratio between the public debt ownership of a large corporation and the average corporation increased from 616 in 1977–81 to 1619 in

2007. Much like for the US household sector, the federal income tax system had no effect on the distribution of federal interest income. According to our estimates in Chapter Seven, large corporations greatly increased their share of federal bonds and federal interest income over the course of the neoliberal period, while the federal income tax system remained neutral.

As a result, the empirical research presented in this study supports the claims made by the small handful of heterodox political economists about the regressive dynamics of public indebtedness over the neoliberal period. On the flipside, the evidence flies in the face of claims made by orthodox Keynesians: there is simply no evidence to support their claim that the public debt serves the interests of 'John Q. Public'. Over the neoliberal period, the public debt has come to serve as an institution of power working in the interests of the dominant owners: the top 1% of households and large corporations. Though much has changed since Adams's time, the analysis in Chapters Six and Seven indicates that the power of the bondholding class has become resurgent during the neoliberal phase of US capitalism.

Phase V: The Global Financial Crisis (2007-present)

Perhaps the most striking thing revealed in the empirical analysis of this study is the dramatic changes that have unfolded with the onset of the current global financial crisis since 2008. In the wake of the current financial crisis the debt of the US federal government has increased from 64 percent of GDP in 2007 to 103 percent in 2012 (see Figure 2.1). This is the first time that the US public debt has breached the 100 percent of

GDP mark outside of World War II. And due to soaring costs associated with an ageing population, some expect the federal debt to balloon further without drastic changes to existing budget policies.

With this explosive rise in public indebtedness has come a rapid increase in public debt ownership concentration for both the household and corporation sectors. In Chapter Six, we saw that the top 1% increased its share of household holdings of the public debt from 38 percent in 2007 to 42 percent in 2010. In Chapter Seven, we saw that large corporations increased their share of corporate holdings of the public debt from 79 percent in 2007 to 86 percent in 2010. And in differential terms, the ratio between the public debt ownership of a large corporation and the average corporation increased from 1619 in 2007 to 2097 in 2010. Once again for both sectors the federal income tax system has done little to offset the increasingly 'top heavy' distribution of federal interest income during the crisis.

What makes the crisis-era distributive and redistributive dynamics of the public debt all the more interesting is that they have been completely ignored in current academic and public debates. Of course the recent explosive rise in the US public debt has generated a lot of controversy and heated discussion. But the attention of academics, politicians and various other pundits has been focused on debating who should bear the burden of repaying the enormous sums of public debt that have been contracted in the wake of the current crisis.

On the one side, there are those, including the corporate-led 'Fix the Debt' campaign, which argue that the US should reduce its public debt immediately, otherwise it will face

Greek-style bankruptcy and leave a crippling burden for 'future generations' (Cote 2012; Ferguson 2009, 2010). The preferred method for reducing the debt is austerity that will cut spending to America's 'bloated' social programs (Kotlikoff 2010). On the other side, there are those, including the 'Flip the Debt' campaign associated with the Occupy movement, which urge caution and argue that the public debt has been a necessary component of the federal government's crisis-management policies (Krugman 2012b; Wolf 2013; Summers 2013). With stubbornly high unemployment and increasing income and wealth inequality, the preferred method of gradually reducing the debt is tax hikes on the 'super-rich' that have gained the most from the political economic regime in place since the early 1980s (Buffett 2011, 2012; Sachs 2012).

The Crisis and the 'Debt Dilemma'

A recent series in the *Financial Times* has dubbed these debates over whether the public debt should be repaid primarily through tax hikes or through spending cuts as 'America's debt dilemma' (Harding 2013). Thanks to the efforts of the 'Flip the Debt' and other progressive movements issues of power and inequality have been forced into the current debate over the 'debt dilemma'. Their slogan – 'Hey 1%! Pay your damn taxes!' – places the responsibility for debt reduction should fall squarely on the shoulders of the large corporations and the top 1% that have 'stolen' an estimated $2.3 trillion using tax loopholes, offshore tax havens and tax cuts. 'Flip the Debt' sees the explosive increase in the public debt as an outcome of growing inequality and calls on those at the top of this increasingly unequal society to pay their 'fair share' to help reduce it.

Yet what is most interesting about this often-vicious debate is not the questions that get answered, but the ones that are overlooked. One such question is why *must* the public debt be repaid? Whether mainstream or critical, all participants in this debate assume that, sooner or later, either through spending cuts or tax hikes, the public debt will have to be reduced from its current levels. The refusal even to contemplate alternatives to debt reduction points to the unquestioned sanctity of creditworthiness and 'sound finance' within contemporary capitalist society (Graeber 2011, p. 3).[67]

Most importantly, the current debate also overlooks the question of whose interests are served by the public debt. As the research in this study suggests, the question of power is not only central to the issue of public debt repayment, but to the very existence of the public in the first place. Using power-centered accounting techniques and methods, the empirical analysis presented in this study suggests that the current debate is missing a big part of the overall picture.

The public debt is not, as the current debate would have us believe, simply related to the issue of inequality through the issue of debt repayment. Rather the public debt, through the power dynamics of ownership distribution and redistribution, directly contributes to income and wealth inequality in America. The top 1% of households and the large corporations have greatly increased their share of federal bonds and federal interest over the past three decades or so. Over this period, and especially in the context

[67] By accepting the 'sound finance' doctrine, even progressive voices often fall into the trap of thinking about the government budget as if it were the budget of a household or a corporation. Yet as we saw in Chapter Five, and as proponents of Post Keynesian Modern Monetary Theory (MMT) explain, a monetarily sovereign (i.e. fiat currency-issuing) entity like the US federal government is never revenue constrained like a household or corporation and technically can never go bankrupt (see Wray 2012). This simple observation suggests that there are no inherent limits on government borrowing. These limits must necessarily be *political*.

of the current crisis, the public debt has served more and more to augment and reinforce the power of the 'bondholding class' at the very top of the social hierarchy.

Of course talk of the power of the bond market and the almighty 'bond market vigilantes' has increased in the context of the current crisis. The 'bond market', however, is treated within these discussions as an impersonal, even mystical, force, rather than an identifiable class or social group. By remaining anonymous, talk of the almighty 'bond market', much like the debate over 'inter-generational redistribution' outlined in Chapter Two, only serves to strengthen the power of dominant owners of the public debt.

The Real Debt Dilemma

What if, as this study claims, questions of power are not only central to the issue of public debt repayment, but also to the very existence of the public debt in the first place? What if the public debt is not simply related to inequality but also part of its *cause*? How would our understanding of the 'debt dilemma' change if we started to ask these questions? Once these power relations underpinning public indebtedness are brought to the fore, we gain a totally different understanding of America's 'debt dilemma'.

On the one hand, the results of this study suggest that the federal government faces a dilemma in trying to *reduce* the public debt. Attempts to reduce the privately held portion of the public debt are likely to encounter resistance from the 'bondholding class' of dominant household and corporate owners. During the current crisis, federal bonds have served as a 'safe haven' for investors, and as we saw in Chapters Six and Seven, the top 1% and the large corporations have greatly increased their ownership share in the past

few years. Without any signs of recovery, dominant owners are unlikely to want to relinquish these 'risk-free' assets. Efforts to reduce the debt are therefore likely to target the intra-governmental debt, which, although increasingly regressive, still works broadly in the interests of the bottom 99%. Reducing intra-governmental debt held in government trust fund accounts is tantamount to gutting social programs. Given the state of wealth and income inequality in America, it is worth questioning whether an austerity drive of this type can occur without causing major social upheaval.

On the other hand, the results of this study also suggest that the federal government faces a dilemma in trying to *increase* the public debt. Again taking into consideration the current state of wealth and income inequality, any further increases to the privately held portion of the public debt are likely to be purchased by dominant owners. Adding to the outstanding public debt is therefore likely to further skew the concentration of federal bonds and federal interest and contribute directly to growing income and wealth inequality. And this potential dynamic brings with it its own questions about whether any policy actions that further increase wealth and income inequality can be implemented without encountering further resistance from the bottom 99%.

Without progressive redistributive spending and/or tax policies, actions to decrease and increase the public debt are *both* liable to aggravate an already explosive situation characterized by deepening social inequality. This is America's *real* debt dilemma. And this dilemma only makes sense once we investigate the power dynamics of distribution and redistribution that underpin the public debt.

The Ruling Class and Debt Reduction

For some, these conclusions may seem somewhat counter-intuitive if not completely contradictory: isn't the ruling class adverse to big government and public debt? How can the public debt serve as an institution of power when the most powerful seem so opposed to it? Consider the high profile 'Fix the Debt' campaign that is led by billionaire fiscal conservative Pete Peterson and supported by CEOs from dominant corporations such as Bank of America, Boeing, Citigroup, General Electric, Goldman Sachs, Honeywell, Microsoft, Time Warner and Verizon (see Confessore 2013).[68]

'Fix the Debt' does indeed advocate debt reduction. But the 'fix' that the campaign prescribes is focused almost solely on cuts to social security, Medicare and Medicaid programs, along with promoting a 'pro-growth' tax regime that would introduce unspecified measures to broaden the tax revenue base and at the same time *reduce* tax rates (Krugman 2012c). Fear mongering about the public debt and budget deficits is just a means for 'Fix the Debt' to push through an austerity agenda, one that, in the words of a recent editorial in *The Nation* (2013), is bent on '…making the 99% pay to make the wealthiest 1% a whole lot wealthier'.

To understand how the ruling class really views debt reduction, we can look back at a rare but recent instance in US history when there was a serious prospect for public debt

[68] A recent study by Page, Bartels and Seawright (2013: 55–6) appears to lend credence to this view. In their survey, these researchers surveyed a sample of wealthy individuals within the top 1% and asked them to identify 'very important problems' currently faced by the US. 87 percent of the individuals sampled identified 'budget deficits' as one of these problems. In fact, the top 1% cited budget as a 'very important problem' more than any other issue, including unemployment (84 percent), education (79 percent) and international terrorism (74 percent). In contrast, a survey of general public opinion by CBS found that only 7 percent of people identified budget deficits and public debt as the *most* important problem facing the country.

elimination. During the second administration of Bill Clinton the federal government ran budget surpluses and began to significantly reduce the public debt. And by the turn of the millennium, many were forecasting that the public debt would soon be eliminated altogether.

Of course these forecasts now appear farcical with the public debt nearing 100 percent of GDP. But what is interesting is the lukewarm response to the prospect of debt elimination from powerful financial interests. Rather than celebrate the Clinton-era surpluses, financial groups started to worry about the implications of the rapid disappearance of federal bonds, which provide not only a massive and liquid financial market, but which are also the benchmark asset used to price all other types of assets (Reiner 2001). And in a telling 2001 speech to the Bond Market Association, Federal Reserve Chairman Alan Greenspan spent a great deal of effort trying to justify budget surpluses by placating fears about the negative effects of debt retirement on financial markets.[69] If the ruling class response to debt reduction in periods of confidence is lukewarm, then how seriously should we take its calls for debt reduction in a period of global crisis? How can we treat the current calls for debt reduction as anything but fear mongering that serves some ulterior motive?

[69] Economist Bill Mitchell (2010) notes how in 2002 the Australian experience may have 'given the game away' in regards to ruling class sentiments about the public debt. That year the Australian government was running massive and growing budget surpluses yet continued to issue significant sums of government bonds. The reason? Powerful financial institutions started to protest against the 'thinning' of the bond market.

Conclusion: The Dilemmas of Power

Of course there is nothing particularly novel in suggesting that the 'Fix the Debt' campaign is mostly a ploy to broaden support for an austerity agenda. This argument has been made not only by the Occupy-inspired 'Flip the Debt' movement but also by mainstream economists such as Paul Krugman (2012c, 2013).

What is novel about the approach taken here is that it allows us to move beyond the narrow debate over the 'debt dilemma' and look at power underpinnings of the public debt. By mapping the distributive and redistributive dynamics of the public debt we come to a more nuanced understanding of the complex ways in which the ruling class wields power through the institution of public borrowing.

Rather than debate the ruling class on its own terms, those who oppose the austerity agenda and growing socio-economic inequality might do well to think seriously about the power relations examined in this study and articulate an alternative view of America's 'debt dilemma'. After all, the power of dominant owners of the public debt exists only to the extent that other elements of the population accept it. By mapping the dynamics of distribution and redistribution that underpin the public debt we gain a better understanding of the possibilities for, and also the barriers to, more progressive alternatives to a political economic regime that a growing number of people now believe works in the interest of the those at the very top of the social hierarchy.

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