Jurisdictional Tax Rates

How the Structure of Corporate Taxation Fuels Concentration and Inequality

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ABSTRACT

Corporate concentration in the United States has been on the rise in recent years, sparking a heated debate about its causes, consequences, and potential remedies. In this study, we examine a facet of public policy that has been largely neglected in current debates about concentration: corporate tax policy. As part of our analysis we develop the first empirical mapping of the effective tax rates (ETRs) of nonfinancial corporations disaggregated by size and broken down by jurisdiction. Our findings reveal a striking and persistent tax advantage for big business in recent decades. Since the mid-1980s, large corporations have faced lower worldwide ETRs relative to their smaller counterparts. The regressive worldwide ETR is driven by persistent regressivity in the domestic ETR and a marked drop in the progressivity of the foreign ETR over the past decade. We go on to show how persistent regressivity in the worldwide tax structure is bound up with the increasing relative power of large corporations within the corporate universe, as well as a shift in firm-level power relations. As large corporations become less disposed to investments that may indirectly benefit ordinary workers, they become more disposed to shareholder value enhancement that directly benefits the asset-rich. What this means is that the corporate tax structure is connected not only to rising corporate concentration, but also to widening household inequality.

INTRODUCTION

Over the past few decades the largest corporations in the United States have been taking greater shares of net income, revenues, assets, and market capitalization.[1] The studies that have unearthed increasing concentration have also shown that big business charges higher prices while at the same time lowering wages, providing lower quality goods and services, and restricting output.[2] In the aggregate, corporate concentration has been blamed for the slowdown in productivity growth and a sluggish economy.[3] A recent paper by Germán Gutiérrez and Thomas Philippon even argues that the US, once the posterchild of economic dynamism, has lost its competitive edge relative to Europe because of its failures to combat concentration.[4] In addition to stifling competition, concentration has also been linked to rising inequality and the increasing political clout of big business.[5] With a growing number of people feeling the system is rigged in favour of elites, the concentration of wealth and power in the hands of a few giant corporations adds more fuel to the already-seething flames of populist discontent.[6]

How did we get into a situation where a few "superstar" companies dominate? Market processes of globalization and technological change are identified as two of the main drivers.[7] The former allows multinationals to expand the scope of their operations and to lower costs, while the latter entails network effects that may encourage "winner-take-all" dynamics.[8] Digital platforms tend toward monopoly. A social media user derives no clear benefit from having their contacts spread across various sites, the whole point is to connect everyone together in one location. Yet in the US growing concentration has been pervasive within domestically-oriented, brick and mortar sectors as well as globalized, high technology ones.[9] The ubiquity of oligopolistic giants throughout the US corporate landscape suggests that something more than just market processes is at play. That something is politics, and in particular, public policy. As large corporations command ever-greater shares of resources, regulatory bodies like the Federal Trade Commission and the Department of Justice have come under fire for enabling concentration through lax antitrust policies and lenient merger enforcement.[10]

Not that long ago it was common for mainstream economists and policymakers to follow the Chicago School and downplay the consequences of corporate concentration. Growing size, they argued, is simply a reflection of the growing efficiencies of large corporations relative to their smaller

competitors.[11] Due in large part to their abilities to exploit economies of scale, corporate behemoths are credited with boosting competition and improving consumer welfare.[12] But now this view has come under fire, even within the Chicago School itself. In 2017 and 2018 the University of Chicago's Booth School of Business held two events on the threats posed by corporate concentration. As *The Economist* magazine quipped: "[u]ntil recently, convening a conference supporting antitrust concerns in the Windy City was like holding a symposium on sobriety in New Orleans."[13]

The political aspects of corporate concentration have not been lost on politicians. Still reeling from the presidential election defeat in 2016, the Democratic Party announced "A Better Deal" strategy for the 2018 midterms. A throwback to New Deal progressivism, Democrats vowed to tackle oligopolistic market structures through antitrust reforms that would empower regulators to break up monopolies and make it harder for companies to merge if it is deemed to reduce competition.[14] Even Donald Trump has been unable to resist the trust-busting fervor.[15] During his presidential campaign he lambasted Comcast's acquisition of NBC Universal in 2011 and vowed to stop a potential merger between AT&T and Time Warner. It is tempting to dismiss Trump's rhetoric as a narrow side-swipe against the "liberal media." But the fact that a Republican president (and self-styled business tycoon) would entertain these trust-busting taboos shows just how politically charged the issue has become.

From its origins in the Sherman Act of 1890 and the Clayton Act of 1914, antitrust policy has been the main weapon of the US federal government in combatting the power of giant corporations. And given that concentration has increased alongside the rolling back of robust antitrust measures in recent decades, it makes sense for current debates to draw linkages between the two. Yet as important as antitrust may be, it is not the only facet of public policy that bears upon the distribution of corporate wealth, income, and power. In this paper, we examine another facet of public policy almost entirely absent from recent discussions of concentration: corporate taxation.

To be sure, the tax practices of large corporations have been subject to plenty of scrutiny. Exposés in major newspapers reveal how some business giants reap record profits while paying nothing to the US Treasury.[16] It has been acknowledged that globalization may confer a tax advantage on dominant firms, which are better equipped than their smaller counterparts to evade and avoid taxes by shifting their profits to low tax jurisdictions.[17] There is also some recognition of how large corporations draw on inordinate legal resources in order to lobby for favorable tax policies and to exploit loopholes in

the US's byzantine tax code.[18] The 2019 *World Economic Outlook* of the International Monetary Fund (IMF) mentions progressive corporate tax reform as a way to redress the rising "market power" of large corporations.[19] Massachusetts senator and presidential candidate Elizabeth Warren's proposal to impose a 7 percent levy on corporations with annual profits in excess of $100 million has finally brought tax issues into the political debates about corporate concentration.[20] What is lacking, however, is a systematic examination of the linkages between corporate concentration and taxation. We find this neglect of taxation within the current discussions of corporate concentration puzzling, especially since it has long been recognized that income tax has a direct effect on distributive outcomes.[21]

In investigating the relationship between corporate taxes and concentration, we address several key questions. Do large US corporations face higher income tax burdens than smaller corporations? How have the tax rates of US corporations of different sizes evolved over time? Do large US corporations enjoy a global tax advantage compared to their smaller counterparts? What role does the domestic tax system – both federal and state – play in shaping the distribution of income within the corporate universe? What does an inquiry into the relationship between corporate concentration and taxation reveal about the wider transformations of US capitalism over the past few decades?

To explore these questions, our research maps the effective income tax rates (ETRs) within the nonfinancial sector, using the top 10 percent as our proxy for large corporations, and the bottom 90 percent as our proxy for smaller corporations.[22] As far as we are aware, this is the first study to develop estimates of what we term "jurisdictional tax rates" for US corporations disaggregated by size. Our findings point toward a striking and persistent tax advantage for big business in recent decades. We find that in the 1970s the worldwide ETR of the top 10 percent was consistently higher than that of the bottom 90 percent. By the early 1980s, the ETR of large and smaller corporations had equalized at 29 percent. But from the mid-1980s onward, large corporations consistently face lower worldwide ETRs relative to their smaller counterparts. In recent years, the gap is particularly pronounced, with the top 10 percent registering a worldwide ETR of 28 percent, and the bottom 90 percent a worldwide ETR of 41 percent. We then break down the worldwide rate into its domestic and foreign components. From the mid-1980s, the earliest period for which jurisdictional data are available, up to the present, we find that the domestic ETR of the top 10 percent is consistently 11 to 16 percentage points lower than that of the bottom 90 percent. The foreign ETRs of both the top 10 percent and the bottom 90 percent have steadily declined since the 1980s. From the mid-1980s to the 2000s, the foreign ETR of

the top 10 percent was 1 to 7 percentage points higher than that of the bottom 90 percent. But since 2010 the situation has reversed, with large corporations now facing a foreign ETR that is 4 percentage points lower than that of their smaller counterparts. Overall, these shifts suggest that the regressive worldwide ETR is due to persistently regressive domestic ETRs and a marked drop in the progressivity of foreign ETRs in recent years.

We then go on to explore some of the implications of the findings that emerge from our mapping of jurisdictional ETRs. Building on the "capital as power" approach, we demonstrate how a sustained reduction in the relative tax burden of large corporations since the mid-1980s coincides with a sustained increase in the concentration of power as measured by relative net profit margins.[23] We also show that a reduction in the relative tax burden of large corporations since the mid-1980s has also coincided with a reconfiguration of power relations within and beyond the firm. As large corporations become less disposed to investments that may indirectly benefit ordinary workers, they become more disposed to shareholder value enhancement that directly benefits the asset-rich. What this means is that the corporate tax structure is bound up not only with rising corporate concentration, but also widening household inequality.

The remainder of our paper is organized into six sections. In the first section, we provide some of the historical context for our subsequent analysis, exploring how changes in patterns of corporate taxation relate to broader shifts in the public finances of advanced capitalist countries. In the second section, we review the substantial body of literature that has emerged over the past half century on the relationship between corporate size and ETRs. Alongside this review, we develop a capital as power alternative to the theories employed in the existing literature, which analyse the nexus of size and ETRs in terms of political costs or political power. In the third section we outline our data and methods, and in the fourth section we present our empirical mapping of jurisdictional ETRs. We then shift focus in the fifth section with a discussion of recent debates about the consequences of corporate tax reform. These debates provide a foundation for thinking about the implications of our findings, a task we undertake in section six. In systematically linking our map of jurisdictional tax rates to the changes of profit margins, capital expenditures, as well as dividend payments and stock buybacks, our aim in the sixth section is to empirically substantiate the theoretical claims set forth in section two. Finally, we conclude by summarizing our main findings and underlining why we think that issues of taxation deserve much more attention within debates about corporate concentration.

FROM TAX STATE TO DEBT STATE

Our analysis begins by providing some historical context. Specifically, we draw on some of the recent work of Wolfgang Streeck, which provides what we consider to be a useful, if stylized, account of profound transformations that have taken place in the public finances over the past half century.[24] In the post-World War II period, Streeck argues that advanced capitalist countries were "tax states," characterized by gradually increasing government expenditures, increasing government revenues garnered through progressive taxation, and low levels of public indebtedness. But around 1980, the tax state gave way to a "debt state," under which gradually increasing government expenditures have combined with stagnating government revenues, declining tax progressivity, and increasing levels of public indebtedness.[25]

How did this shift in the public finances occur? According to Streeck, gradually increasing government spending is a functional corollary of capitalist development and the expansion of markets. There is, in Streeck's own words, "a growing need for public investment and curative measures" to repair "the damage caused by capital accumulation, as well as creating the conditions for further growth".[26] Yet stagnating tax receipts are more overtly political in the sense that they are a product of organized tax resistance from the top end of the income distribution.[27] In the 1990s, the pressure on tax receipts from the organized resistance of higher-income households was intensified by globalization, which made it easier for large corporations to shift income to low-tax jurisdictions. Increased capital mobility impelled governments to engage in fiscal competition by lowering their top statutory corporate tax rates.[28] In this way, stagnating tax receipts are bound up with the declining progressivity of the tax structure, as wealthy households and large corporations pay less in tax as a percentage of their total income.[29]

The logical sequence of the debt state is illustrated in Figure 1. Here we see that the trio of gradually increasing government spending, stagnating tax receipts, and declining tax progressivity leads to increasing inequality and increased savings for wealthy households and large corporations, on the one hand, and increasing public debt, on the other hand. Completing the loop, the increased savings of wealthy households and large corporations are funnelled into a growing supply of government bonds. Ultimately what this means is that the public finances have partly shifted from imposing tax liabilities on large corporations and wealthy households to issuing financial assets (i.e. government

bonds) to them. The distributional implications of this dynamic are clear as the debt state fuels asset concentration in the household and corporate sectors.[30]

[Figure 1 here]

Empirical support for some of the main facets of Streeck's account of the transformations in public finances can be found in Figure 2. The graph in the top left-hand corner of the figure shows government expenditures and tax receipts as percentages of GDP for the US and the G7 as a whole. As we see, the gap between expenditures and tax receipts widens considerably from the 1970s onwards, as the former gradually increases and the latter stagnates. In the graph in the top right-hand corner of Figure 2, we see how the widening gap between government expenditures and receipts has translated into ever-increasing levels of public indebtedness as a percentage of GDP. Most relevant for the purposes of our analysis are the changes to the corporate tax structure shown in the bottom two graphs of the figure. In bottom left-hand graph, we find evidence to suggest that stagnating tax revenues are being driven in large part by the dramatic fall in corporate income tax receipts. The decline in US corporate income tax receipts as a percentage of total tax revenue begins already after World War II but experiences a major collapse from the late-1970s to the early 1980s. If we follow Streeck's rough periodization, corporate tax receipts made up an average of 22 percent of annual government tax revenues under the tax state (1946-79), and only 10 percent under the debt state (1980-2017). Finally, in the bottom right-hand graph, we see, unsurprisingly perhaps, that the era of low corporate tax receipts was also an era of declining statutory corporate income tax rates. From the mid-1980s to the mid-1990s the US statutory rate is lower than the G7 average. Then from the late-1990s to 2017 the G7 average rate is lower than the US. With the passing of the Tax Cuts and Jobs Act at the end of 2017, the US statutory rate dips below that of the G7 average. What we see here is evidence of a downward spiral of fiscal competition in corporate tax policy alluded to in Streeck's work.

[Figure 2 here]

The decline in corporate tax receipts and statutory corporate tax rates has contributed significantly to the stagnation of tax revenues over the past few decades. This suggests that a large part of the shift from the tax state to the debt state can be attributed to transformations in the structure of corporate taxation. For our purposes, the main questions we are left with concern the relationship of these

transformations in the corporate tax structure to tax progressivity. How has the distribution of tax liabilities changed within the US corporate sector since the rise of the debt state? Are large corporations the main winners of the long-term decline in corporate tax receipts and statutory tax rates? Do these changes in the corporate tax structure fuel concentration and inequality? As we will see in the next section, the existing literature is severely limited in helping us to address these questions.

THE STATE OF THE ART: POLITICAL COSTS, POLITICAL POWER, AND THE DEGREE OF MONOPOLY

In the introduction we noted how recent discussions of corporate concentration in the US tend to ignore issues of taxation. This neglect is puzzling not only because tax is one area of public policy that has a direct effect on distributive outcomes, but also because a significant body of research investigating the relationship between corporate size and ETRs has emerged over the past half century.[31] In diverse fields, ranging from accounting, economics, and finance, to law and political science, researchers have been developing statistical models to explore whether the tax structure is biased in favour of large corporations. Why, then, have the findings of these studies been absent from recent discussions of corporate concentration? Part of the reason may have to do with the fact that the research efforts have produced nothing in the way of consensus on the relationship between corporate size and ETRs.[32]

Existing studies are usually based on a linear regression model, either univariate or multivariate. Corporate size is specified as the independent variable, while the ETR is the dependent variable. In theoretical terms, the literature conceptualizes the size-ETR relation in terms of political costs or political power. According to political cost theory, large corporations are subject to greater public scrutiny, making them more susceptible to government meddling in the form of regulation and taxation. [33] Political cost theory predicts a positive relationship between size and ETR, resulting in a progressive corporate tax structure. According to political power theory, the inordinate resources of large corporations enable them to shape government regulations and policies in their favour.[34] As such, the key prediction of political power theory is the obverse of the one made by political cost theory: there should be a negative relationship between size and ETR, resulting in a regressive corporate tax structure

The two theories provide us with straightforward predictions on the causal connection between corporate size and the ETR. And yet despite their simplicity, the studies operationalizing these theories have not come close to any consensus. A review of 56 existing studies on the size-ETR relation uncovers wildly varying results: 20 of the studies they review provide evidence for the political cost theory, 11 for the political power theory, 14 no clear evidence for either theory, and 11 evidence for both theories.[35] Why are there such diverging assessments? One problem lies in research design. The findings of the regression analyses appear to be extremely sensitive to the specifications of each model.[36] Slight variations in assumptions about parameters, in the definition of variables (e.g. firm size, ETR), in the scope of the sample, and in the time-period analyzed, lead to conflicting results. This makes it difficult to use the body of empirical evidence that has been amassed thus far to come to any firm conclusions regarding the size-ETR relation.

Our own research departs from existing studies in three important ways. First, we explore the diachronic relationship between concentration and ETRs. The results of existing studies are reported in static regression tables and give us no indication of how the size-ETR relationship unfolds over time.[37] For our purposes, this static approach is of limited use. We are interested, where possible, in mapping the long-term transformation of the corporate tax structure in order to assess its degree of progressivity from the tax state to the debt state.

The second departure is theoretical. In existing studies, if the sign in the regression analysis is positive/negative and significant then this is taken as satisfactory evidence for the claim that political costs/political power explain or cause the progressive/regressive tax structure. Rarely are efforts made to specify, let alone explore empirically, the causal mechanism by which size as cost/power translates into higher/lower ETRs. A higher/lower ETR is simply taken as evidence of the greater political costs/political power of large firms. How do we know that large firms have greater political costs/political power? Because they face a higher/lower ETR. Rather than demonstrating the causal connection between costs/power and the ETR, both theories descend into intractable circularity.

One potential way around this circularity would be to develop a proxy for costs/power independent of size. Yet as far as we are aware, no one has attempted to quantify political costs independent of size and we know of only one study that has developed an independent proxy for political power by

equating it with lobbying. Examining firm-level data on corporate lobbying expenses matched with firm-level data on ETRs, Richter *et al.* find that firms spending more on lobbying face a lower worldwide ETR in the following year.[38] The size variable in their preferred model specification was, however, insignificant, leading them to speculate that the benefits of lobbying for large corporations may be offset by the political costs they incur from higher public scrutiny. In our view, the findings of the Richter *et al.* study are not all that surprising given that they rely on an overly circumscribed definition of power. As the literature on business power suggests, lobbying is but one facet of "instrumental power," understood as direct and purposeful influence over government.[39] Furthermore, alongside instrumental power there is a second form of power that is "structural." The notion of structural power refers to an inherent bias in capitalist economies, one that favours private businesses as the main controllers of investment.[40] The ever-looming threat of an "investment strike" disciplines governments into adopting policies that work in the interests of private business without private business needing to actively enforce that discipline.[41]

How, then, do we move beyond the limitations of existing theories? We argue that the "capital as power" approach propounded by Jonathan Nitzan and Shimshon Bichler offers a promising alternative for analyzing the size-ETR relationship.[42] Taking cues from the work of Michal Kalecki, Nitzan and Bichler identify the "degree of monopoly" (i.e. net profit margins), as a quantitative proxy for the concentration of power within the corporate universe.[43] In this approach, power is inherently relative or differential. Put simply, the relative power of large corporations is registered in the degree to which they can raise their net profit to sales ratio over and above that of other corporations. Our own adaptation of the approach can be summarized with the following proposition: The higher the relative degree of monopoly enjoyed by large corporations, the greater the implied relative power of large corporations, and the lower the relative ETR of large corporations. Note that, in contrast to political power theory, we make no hard claims about the line of causality running from power to the ETR. Even if the degree of monopoly is a reasonable proxy for the concentration of power, we argue that it is difficult, perhaps even futile, to try to disentangle its relationship with ETRs in terms of cause and effect. After all, power may enable large corporations to lower their relative tax burden, and at the same time, a lower relative tax burden may augment the power of large corporations. Therefore, in our view, it is more fruitful to conceptualize the relationship between power and ETRs as co-constitutive.

It might not be entirely evident how our alternative framework overcomes the charge of circularity that we have levelled at existing theories. To clarify, circularity is a problem for existing theories only insofar as they posit a clear causal relationship between the two variables (i.e. in the case of political power theory, from size as power to ETRs). In abandoning this rigid causal schema, we argue that the issue is not circularity per se, but whether our framework reveals something new about the wider consequences of the size-ETR relationship. Existing theories, whether cast in terms of political costs or political power, say little about consequences beyond the simple claim that the ETR is an effect of corporate size. We draw on the capital as power approach because it endeavors to illuminate the workings of "dominant capital," the corporate giants at the center of accumulation.[44] Drawing on Thorstein Veblen's concept of "business sabotage," Nitzan and Bichler contend that these firms are more disposed and better able than smaller companies to impose limits on productivity and innovation to maintain profit levels, to the detriment of society at large.[45] Developing this mode of analysis, we examine how changes in the relative ETR are intertwined with the relative power of the top decile of corporations, and how it in turn impacts power relations within the firm.

The expansive literature on financialization seems to be instructive insofar as it highlights how the shifts in corporate strategy towards shareholder value have contributed to growing household inequality through raising shareholder payouts while reducing investment in operations that may generate gainful job opportunities.[46] Until very recently, this literature has had little to say about the relative susceptibility of large firms versus small firms to this shareholder value model.[47] By disaggregating not only ETRs, but also firm-level investment and shareholder payouts, we illuminate how changes in the architecture of taxation and corporate governance affect distributional shifts across households. To the extent that large corporations augment their relative power within the corporate universe, they also increase their relative capacities to alter power relations within the firm by diverting resources from workers to shareholders and managers. This is the case because an increase in the oligopolistic power of large corporations means that they feel less pressure to plough their tax savings back into the expansion of productive capacity. To explore firm-level power relations, we use capital expenditure data to gage the relative commitment of large firms to advance productivity, innovation and job-creation through long-term investment, and we use dividends and share repurchase data to determine the degree to which this commitment is subordinated to the drive to increase short-term shareholder returns that directly and disproportionately benefit the asset-rich.

The third and final way that our research departs from existing studies of the size-ETR relation is in examining jurisdictional ETRs. The common strategy is to regress size variables against the worldwide ETR, giving us no indication of the role that domestic and foreign tax structures play in shaping the ETRs of corporations disaggregated by size. On the flipside, the scant literature on jurisdictional ETRs focuses almost exclusively on large corporations.[48] This narrow emphasis on large corporations does not give us any sense of where they stand relative to small and medium-sized ones. In other words, these studies tell us nothing about the relationship between jurisdictional ETRs and corporate concentration. As far as we are aware, ours is the first study to systematically analyse jurisdictional ETRs disaggregated by size. Examining jurisdictional ETRs is especially important in the context of globalization. It is often implied in the literature that the type of corporation that enjoys a foreign tax advantage is a multinational one, specifically a large multinational one.[49] Mapping jurisdictional ETRs by size will allow us to assess whether large corporations do in fact enjoy a foreign tax advantage and how this advantage has changed over time.

DATA AND METHODS

Our study utilises the Compustat database of corporate financial statements. In the Compustat database, current income taxes can be broken down into three categories: federal income taxes, state income taxes, and foreign income taxes.[50] Compustat also offers data on pretax income, which can be further broken down into pretax domestic income and pretax foreign income. These items allow us to create four jurisdictional measures: the worldwide ETR (federal, state, and foreign income taxes as a percentage of pretax domestic and pretax foreign income), the foreign ETR (foreign income taxes as a percentage of pretax foreign income), the federal ETR (federal income taxes as a percentage of pretax domestic income), and the state ETR (state income taxes as a percentage of pretax domestic income).

Though Compustat is one of the best sources for detailed historical, firm-level data on ETRs, it has drawbacks. Compustat has data extending back to 1950, but specific data on current tax worldwide ETRs only go back to 1970. Coverage for jurisdictional ETRs (federal, state, and foreign) is even more limited, stretching back to 1984. The data allows us to examine worldwide ETRs for the entirety of the debt state, but only for the tail-end of the tax state. For jurisdictional ETRs we can only assess their transformations under the debt state. Compustat includes data on listed firms. According to the

World Federation of Exchanges data available from the World Bank, on an annual basis the average number of domestic (i.e. US-headquartered) listed companies from 1980 to 2018 is 5,796.[51] This means that for the worldwide ETR our coverage is fairly comprehensive, with a yearly average of 5,020 nonfinancial US corporations reporting the relevant data from 1980-2018. For jurisdictional ETRs, however, the size of our sample decreases significantly, with a yearly average of 1,393 nonfinancial US corporations reporting these data items from 1984-2018.

The focus on listed companies has important implications for the study of concentration. Going public is usually associated with big business, and so our sample does not encompass the thousands of much smaller companies, including so-called "mom and pop" businesses, that may have incorporated but have not listed on the stock market. The exclusion of these unlisted firms from our sample means that we cannot assess the extent of concentration for the US corporate universe as a whole. Yet for a number of reasons we nevertheless think that Compustat is useful in exploring issues related to corporate concentration. First, despite the limited sample, there is still a wide variation in the size of listed corporations in our analysis. For example, the 2018 sample for the bottom 90 percent includes big players such as Keurig Dr Pepper, with assets of $49 billion, all the way down to lesser known entities like Plastic2Oil, with assets of $796,000. Thus, it should be stressed that our analysis is not just a comparison of giant and very large. Second, the significance of concentration partly relates to its bearing on competition. Large corporations are more likely to regard medium-sized listed companies as a threat to their competitive position than the thousands of small unlisted companies. Part of the rationale for medium-sized companies to go public in the first place is to raise finances in a bid to move into the upper echelons of dominant capital. The gap between large and smaller listed companies arguably tells us more about competitive dynamics than the gap between large firms and the corporate universe as a whole. Finally, the fact that we focus solely on listed companies means that our findings are probably conservative. Whether we find evidence of a progressive or regressive corporate tax structure, the magnitudes would likely be amplified with a larger sample of smaller companies.

The first step in our empirical analysis was to gather together all of the US nonfinancial corporations that report the relevant data on ETRs and rank them annually from largest to smallest based on their total revenues. Next, we determined a cut-off point that would allow us to compare the ETRs of large and smaller corporations. In the literature on corporate concentration, there are two main options for

determining this cut-off point. We can follow the standard aggregate measure of concentration and focus on a fixed number of corporations (e.g. top 50 or top 100), or we can focus on a fixed proportion of corporations (e.g. top 1 percent or top 10 percent).[52] One problem with the standard aggregate measure of concentration has to do with the fact that the numerator (top corporations) is fixed, while the denominator (total corporations) is constantly changing. As a result, a change in the ETR of smaller corporations might be due to a change in the total number of corporations in the denominator rather than a meaningful change in the rate at which they are taxed. Given the ambiguities associated with the standard aggregate method, we follow the latter method and use the top decile as our proxy for dominant capital.

In our sample we include both profitable and unprofitable corporations. In this way, our selection method differs from the standard procedure, which is to exclude loss-making companies.[53] Our decision to include both profitable and unprofitable corporations is informed by our specific interest in how corporate taxation relates to concentration. In his landmark study *Competition in a Dual Economy*, Joseph Bowring notes that the decision on whether to include unprofitable corporations can dramatically alter the outcomes of an empirical investigation.[54] We follow Bowring in arguing that unprofitable corporations should be included in the sample precisely because these data give us important information about the competitive position of large versus small firms. Excluding unprofitable corporations can lead to overly-optimistic (and ultimately misleading) assessments of the competitive position of small corporations precisely because small loss-making corporations tend to report negative profits more often than large ones.

One final methodological aspect of our study worth noting concerns the calculation of the ETR. Anyone who has worked with firm-level tax data knows the frustrations involved in developing historical measures. For individual companies, the ETR can swing wildly from year-to-year, and during major crises, many companies report negative pretax income, which makes the tax rate impossible to interpret (on the surface of things, a negative tax rate may seem like a good thing for a company, but not if it is the product of a negative denominator and a positive numerator). A way around these problems is to follow a technique developed by Reuven Avi-Yonah and Yaron Lahav and calculate the aggregate ETR.[55] Instead of calculating the ETR for each individual company and then averaging those individual rates, an aggregate ETR sums together all companies' income taxes during a certain time period and divides them by all companies' pre-tax income during that same period. To smooth

out the business cycle, we can sum together the data in the numerator and the denominator over three, five, or even ten-year periods.

But even the use of a long-term aggregate ETR is often not enough to smooth out the effects of major financial crises. Heavy losses were incurred during the dot com collapse and the global financial crisis, and these losses were particularly pronounced for smaller corporations, whose domestic pretax income turned sharply negative. Even when using ETRs aggregated across ten years, the inclusion of these crisis years still leads to a massive increase in the ETRs of smaller corporations. It would be easy for sceptics of concentration to dismiss the results of the disaggregate analysis, claiming they have been distorted by these crises. Erring on the side of caution, and ensuring consistency across the sample, we exclude data for years in which the annual profits for the top 10 percent or the bottom 90 percent as a whole are negative.

MAPPING JURISDICTIONAL TAX RATES

With some of the main methodological issues outlined, we now turn to our main findings. Figure 3 shows the worldwide ETR (federal, state, and foreign income taxes as a percentage of pretax domestic and foreign income) for US nonfinancial corporations in Compustat disaggregated by size. In the bottom part of the figure, we find bars with the ETRs. The dark grey bars plot the worldwide ETR for the top 10 percent in Compustat, and the light grey bars plot the worldwide ETR for the bottom 90 percent. The line above the bars allows for an easier comparison of the worldwide ETRs of the top 10 percent and the bottom 90 percent, expressing them as a ratio. The ratio can be interpreted as measures of the progressivity of the domestic and foreign tax structures.[56] A ratio of one indicates a proportional tax regime (i.e. large corporations are subject to the same ETR as smaller corporations), a ratio above one indicates a progressive tax regime (i.e. large corporations are subject to a higher ETR than smaller corporations), a ratio below one indicates a regressive tax regime (i.e. large corporations are subject to a lower ETR than smaller corporations).

[Figure 3 here]

When viewed over the entire period, we see that the worldwide ETR for the top 10 percent declines from 37 percent in 1970-74 to 28 percent in 2015-18. The worldwide ETR of the bottom 90 percent

exhibits an inverted U-shape: From 34 percent in 1970-74, it climbs to a high of 62 percent in 1995-99 before falling to 41 percent in 2015-18. What is most noteworthy in Figure 3 is the persistent regressivity in the corporate tax structure from 1980 onwards. During the 1970s, at the tail-end of the period of the tax state, the worldwide corporate tax structure was progressive, with large corporations facing higher ETRs than smaller ones. With the dawn of the debt state in the early 1980s, the tax structure turns proportional, with the worldwide ETR of large corporations equalling that of smaller corporations. From the mid-1980s the worldwide corporate tax structure turns regressive and has remained so for almost four decades. In the most recent period from 2015-18, the worldwide ETR of a large corporation was 13 percentage points lower than the worldwide ETR of a smaller corporation.

What accounts for the persistently regressive worldwide ETR since the mid-1980s? Is the gap between the worldwide ETRs of large and smaller corporations the product of foreign tax structures? In what ways do domestic taxes, federal and state, contribute to this gap? One of the hallmarks of the latest phase of globalization is the geographical dispersion of corporate activity. As a result, we need to take into account all three tax structures in order to determine what is driving the worldwide ETRs of the top 10 percent and bottom 90 percent.

Figure 4 presents our findings on jurisdictional ETRs. The graph in the top left-hand corner of the figure focuses on the domestic ETR, which measures federal and state income taxes as a percentage of pretax domestic income. As in Figure 3, the bars in the graph show the respective ETRs of the top 10 percent and bottom 90 percent, and the line gages the overall progressivity of the tax structure. Here we see that the domestic ETR of the top decile increases slightly over the entire period, from 30 percent in 1984-89 to 34 percent in 2010-18. The same thing can be said for the bottom 90 percent, as its domestic ETR increases from 43 percent in 1984-89 to 50 percent in 2010-18. What is most remarkable about the top left-hand graph is the pronounced gap in the domestic ETR of large and smaller corporations. The domestic tax structure is persistently regressive throughout the entire period, and in 2010-18 the domestic ETR of large corporations was a mere 0.68 times the size of the domestic ETR of smaller corporations.

[Figure 4 here]

The next two graphs in the figure break down the domestic ETR into its federal and state components. In the graph in the top right-hand corner, we find the federal ETR. Here we see that the federal ETR of the top 10 percent has increased from 25 percent in 1984-89 to 30 percent in 2010-18. Meanwhile the bottom 90 percent saw its federal ETR increase from 36 percent to 44 percent over the same period. The federal tax structure is persistently and highly regressive, with the ratio hovering between a high of 0.78 in the 1990s to a low of 0.70 in 2010-18. The graph in the bottom left-hand corner of Figure 4 shows the state ETR. As a percentage of domestic income, state taxes are obviously much smaller than federal taxes. But what we find is that the state tax structure is even more regressive than the federal one. Over the entire period the state ETR of the top 10 percent is considerably lower than that of the bottom 90 percent, and the state tax structure becomes increasingly regressive over time.

In the the bottom right-hand corner of Figure 4 we find a graph with the foreign ETR. One thing that immediately stands out is the sharp decline in the foreign ETR of both the top 10 percent and the bottom 90 percent. For the top decile, the foreign ETR fell from 47 percent in 1984-89 to 25 percent in 2010-18. For the bottom 90 percent, the foreign ETR decreased from 40 percent to 29 percent over the same period. As for the progressivity of the foreign tax structure, we see that up until most recently the foreign ETR is progressive, with large corporations consistently facing higher foreign ETRs than smaller ones. But in the latest period, 2010-18, the foreign tax structure dips sharply into regressive territory, with the foreign ETR of the top decile only 0.90 times the size of the foreign ETR of smaller corporations.

The dramatic fall in the foreign ETRs of both large and smaller corporations coheres with the widely-accepted notion that tax competition has intensified with the increasing globalization that has come under the debt state. But our findings on the progressivity of the foreign tax structure may seem somewhat counterintuitive. It is common to assume that *large* multinational corporations enjoy a foreign tax advantage because their inordinate resources allow them to evade taxes and shift profits to low-tax jurisdictions.[57] Our estimates suggest that large corporations do enjoy a foreign tax advantage relative to smaller corporations, but this is something that has occurred only in the past decade.

Taken together, the mapping exercise in Figure 4 suggests that the regressive worldwide tax structure since the mid-1980s is due to the persistently regressive domestic tax structure, on the one hand, and

the recent turn to regressivity in the foreign tax structure, on the other. According to our findings, declining corporate tax progressivity is, as Streeck suggests, a key feature of the debt state as it has evolved over the past few decades. How do we make sense of the persistently regressive worldwide tax structure? What is the significance, if any, of the finding that large corporations consistently face lower ETRs than their smaller counterparts? Before we address these questions, we pivot in the next section to a discussion of recent debates about the consequences of corporate tax reform. Evaluating both sides of this debate puts us in a better position to address questions related to the wider implications of our findings, and eventually bring us back to the thorny question of power.

DEBATING CORPORATE TAX REFORM

In December of 2017 Donald Trump and the Republican party scored a major legislative victory as the Tax Cuts and Jobs Act (TCJA) was signed into law. The legislation introduced sweeping changes to the corporate tax code, replacing the global tax system with a territorial one, altering the system of deductions and credits, and imposing new charges on repatriated earnings. But the hallmark of the TCJA is undoubtedly the sharp reduction in the statutory corporate tax rate from 35 to 21 percent, which, as we saw earlier in our discussion of the transition from the tax state to the debt state, amounts to the biggest corporate tax cut in US history.

As with most of Trump's policies the TCJA has been controversial, sparking a rather heated debate about its anticipated impact.[58] For supporters, the tax cut would play a significant role in reducing the cost of capital and thereby incentivizing companies to increase investment. As companies expand productive capacity in the wake of the tax cut, they will hire more employees and the increased demand for labour will in turn drive up wages. The most sanguine amongst TCJA supporters claim that the tax cut's boost to economic activity will be so immense that it will end up increasing government revenues. For critics, the tax cut is expected to have a negligible effect on investment. The more likely outcome is that corporations will simply replicate their response to George W. Bush's tax cuts and use the windfall to increase dividend payments and share repurchases. Given that the top percentile direct or indirectly owns 40 percent of corporate shares, and the top decile 84 percent, those sceptical of TCJA argue that it is likely to fuel widening inequality.[59] And rather than tax cuts paying for themselves, critical voices also maintain that the tax cut will lead to higher budget deficits and public indebtedness.

It is probably too early to come to any definitive assessment of the effects of TCJA, but preliminary studies are nevertheless beginning to surface. In the 2019 *Economic Report of the President*, Trump's own Council of Economic Advisers (CEA) celebrate what it claims are the unequivocal successes of TCJA.[60] The report emphasizes the results of business surveys, which show a slight post-TCJA increase in businesses reporting plans to increase capital expenditures in the next three to six months, as well as an increase in executives agreeing with the statement that "now is a good time to expand."[61] The report also notes a post-TCJA downturn in Morgan Stanley's index of planned capital expenditures, but a considerable uptick in core capital goods orders.[62] When it comes to direct evidence of actual business investment, the CEA report shows a surge in the "real" dollar amount of private nonresidential fixed investment by noncorporate businesses during the first three quarters of 2018.

There is, however, preliminary evidence that tempers the CEA's optimistic view. As an alternative to the CEA's focus on *total dollar amounts*, a report by Jane Gravelle and Donald Marples of the non-partisan Congressional Research Service instead looks at *rates of change* in "real" private nonresidential fixed investment.[63] Over all four quarters of 2018, Gravelle and Marples find that there has been a significant increase in investment. But what they also show is that since 2013 changes in investment have been quite volatile. Similar upswings in investment were evident in 2013-14 and 2017, making it difficult to attribute the 2018 increase specifically to the TCJA. Gravelle and Marples go on to note how in 2018 a record-breaking $1 trillion in stock buybacks was announced, an indicator of how most of the tax savings have been put to use.[64]

By far the most rigorous study of the early impact of TCJA is from a group of economists at the IMF.[65] Again, the authors of the IMF report observe that growth in private nonresidential investment in 2018 was higher than had been forecasted before the enactment of the TCJA. Yet according to their model, this had very little to do with the effects of the tax cut in lowering the cost of capital. Instead they attribute the investment surge largely to rising aggregate demand, which is a product of personal income tax cuts and government spending increases. Why, then, was the investment response to TCJA so muted? According to the IMF researchers, the limited investment response is largely due to the rising "market power" of large corporations. Their analysis shows the greater the market power of corporations (i.e. the higher their markup), the less likely it is that they will raise their investment in response to tax cuts.

The IMF report highlights one of the key dividing lines between supporters and critics of TCJA. Those in favour of tax cuts base their claims about its positive impacts on the assumption of a power-less economy characterized by perfect competition and frictionless markets.[66] Animated by the equalizing forces of competition, all corporations, according to this view, are compelled to plough windfall profits from a tax cut back into productive capacity lest they lose ground to rivals. But critics point out that these competitive assumptions do not fit with empirical facts. In the real-world where market power prevails, critics claim that a large portion of corporate profits represent so-called "economic rents" – returns to monopoly power – rather than the "normal" returns to investment that occur under competitive conditions.[67] Slashing taxes on monopoly profits, it follows, provides little incentive to invest.

We think that these timely debates on corporate tax reform provide a foundation for exploring the consequences of our own findings, but with two crucial caveats. First, whereas our analysis focuses on ETRs, the debate about TCJA centres on the effects of changes to the statutory rate. For us, however, the difference is somewhat trivial. Both critics and supporters of TCJA would likely agree that cuts in the statutory rate matter only insofar as they affect what companies actually pay in effective terms.[68] Second, even though the critics of TCJA acknowledge power, their usage of the concept differs substantially from our own. Critics juxtapose "normal profits," which arise from the marginal productivity of capital in a perfectly competitive environment, to "economic rents," which arise from "market power" (i.e. the capacity of firms to restrict competition, and increase barriers to entry, in ways that boost their bottom line and reduce overall welfare).[69] But from the perspective of capital as power this dual framework is untenable. As revealed by the Cambridge Controversies a half-century ago, there is simply no way of determining the marginal productivity of capital.[70] Without a measure of capital's productivity, it follows that there is no way of determining what a normal profit level is, and, as a result, no way of ascertaining the level of monopoly rents above normal profits. In our view, power is a defining feature of capitalism, and the relevant empirical question is whether power is concentrated or widely dispersed. Rather than juxtapose monopoly power with an illusory scenario of perfect competition, we are interested in exploring power as it changes over time as measured by fluctuations in the degree of monopoly. This may seem like a trivial distinction, but in the next section we will see that it leads to a very different assessment of the consequences of changes to the corporate tax structure.

TAXES, POWER, AND THE FINANCIALIZATION OF THE FIRM

At this point, it is perhaps useful to re-state our main theoretical proposition. Earlier we surmised that a higher relative degree of monopoly for large corporations implied greater relative power and a lower relative ETR. Thus far our empirical mapping has indeed shown that large corporations have faced lower relative worldwide ETRs since the mid-1980s. What remains to be explored how changes in the relative ETR are intertwined with the relative power of the top decile of corporations, and how, it in turn, affects the distribution of power within the firm.

In the upper left-hand graph of Figure 5 we present data on the degree of monopoly, our proxy for the concentration of power. The bars in the graph show the net profit margins of the top 10 percent and the bottom 90 percent, while the line above shows the ratio of their net profit margins. In the 1970s, when the worldwide tax structure was progressive, we see that the net profit margins of large and smaller corporations were more or less equal. But as the worldwide tax structure turns regressive in the 1980s, the relative profit margins of large corporations start to increase. Since the 1990s, the degree of monopoly for large corporations has been consistently double that of smaller corporations. A sustained reduction in the relative tax burden of large corporations over the past few decades is bound up with a sustained increase in their relative power.

[Figure 5 here]

The next step in our analysis is to investigate the impact of the co-constitutive relationship of power and ETR on investment. To this end, we return to debates about corporate tax reform. Recall that for both supporters and critics, the primary indicator of the success of TCJA was whether or not it spurred investment. The reason investment was an indicator of success is because it would constitute evidence that the tax cut was creating widespread prosperity and not merely serving the narrow interests of shareholders. A tax cut-induced spurt of investment works in the interests of society at large insofar as expanding capacity should, in theory, provide the basis for increasing employment and higher wages. The powerless world of TCJA supporters envisions a *positive* relationship between tax cuts and investment. In the view of TCJA critics, a tax cut for large corporations with "market power" will have *little to no* impact on their overall investment. In the disaggregate view of capital as power, a

reduction in the relative tax burden of large corporations boosts their relative power and *decreases* their relative investment.

The graph in the upper right-hand corner of Figure 5 shows the capital expenditures, one of the most common measures of investment, for large and smaller corporations as a percentage of their total revenues. Previously in Figure 3 we noted a decline in the worldwide ETR of the top decile, from 37 percent in 1970-74 to 28 percent in 2015-18. As the bars in the upper right-hand graph in Figure 5 indicate, the falling worldwide ETR of the top 10 percent has been accompanied by decreasing investment, with their capital expenditures falling from 9.2 percent of revenues in the 1970s to 6.7 percent most recently. Meanwhile the capital expenditures of the bottom 90 percent, which has faced persistently higher ETRs over the past few decades, have been stable and in fact have increased in the most recent period. The relative measure of capital expenditures in the line above the bars of the graph presents an even more striking view of the relationship between tax and investment. In the 1970s, when the worldwide tax structure was progressive, the capital expenditures of large corporations were higher than those of smaller corporations. With the worldwide tax structure descending into persistent regressivity from the mid-1980s onwards, the relative capital expenditures of large corporations steadily decline. By 2010-18 the capital expenditures of large corporations as a percentage of revenues were 0.63 times the size of smaller corporations.

We have seen that as power becomes more concentrated, large corporations face a lower relative ETR and simultaneously curtail their relative investment. Where does this leave the question of shareholder enrichment in our analysis? Critics of TCJA claim that large corporations with "market power" use their tax windfall not to invest but to boost dividend payments and share buybacks, thereby boosting the incomes of shareholders and top executives, the vast majority of whom fall within the top 10 percent of the population.[71] Taking a longer-term view, we find that things are a bit more complex. The graph in the bottom left-hand corner of Figure 5 shows a metric of shareholder value, which is simply dividend payments and stock buybacks as a percentage of revenues.[72] In the bars of the graph we see a steady increase in the dividend payments and share buybacks of the top decile since the 1970s. Yet what we also see is a corresponding rise in the dividend payments and share buybacks of the bottom 90 percent over the same period. As shown in the line above the bars, it is clear that, aside from a peak in the 1990s, large corporations have only been slightly more committed to shareholder value than their smaller counterparts. The secular rise in shareholder value orientation evidenced here

makes it difficult to directly link increasing dividends and share buybacks to the increasing regressivity of the worldwide tax structure. But this is not to say that shareholder enrichment is irrelevant or insignificant to our analysis. As a key aspect of the financialization of the firm, the rise of shareholder value can be viewed as a redistributive process that shifts power from workers to managers and shareholders.[73] We can therefore assess the relationship between the tax structure and shareholder value not only in terms revenues dedicated to shareholder disbursement, but also in terms of the attendant shifts in firm-level power relations. To this end, we construct an index of shareholder power, expressed as a ratio of dividend payments and stock buybacks, a proxy for the interests of shareholders and managers, to capital expenditures, a proxy for the interests of ordinary workers.

The graph in the bottom right-hand corner of Figure 5 presents our index of shareholder power for the top 10 percent and the bottom 90 percent. These indices of shareholder power offer a staggering picture of the transformations of power relations within large and smaller corporations over the past few decades. In the 1970s, when the worldwide tax structure was progressive and corporate concentration was relatively low, the ratio of shareholder power in large corporations was 0.28, slightly lower than the ratio of 0.30 in smaller corporations. But, with the regressive turn in the worldwide tax structure, the dynamic flips. In the 1980s, in the beginning phase of tax regressivity, the power of shareholders within large and smaller corporations equalizes at a higher ratio of 0.42. Since the 1990s, shareholder power within both large and smaller corporations has increased, but the upturn has been much more pronounced for the former than the latter.

Though the contemporary rise of shareholder value is a common experience within the corporate universe, it has had an altogether different effect on power relations within large and smaller corporations. A sustained reduction in their relative tax burden has not compelled powerful corporations to plough their tax savings back into productive capacity. On the contrary, our research demonstrates that as big business becomes more disposed to short-term shareholder value enhancement that directly and disproportionately benefits the asset-rich, it becomes less disposed to advancing productivity, innovation and job-creation through long-term investment in the form of capital expenditures that may indirectly benefit ordinary workers. What this means is that the corporate tax structure is bound up not only with corporate concentration, but also widening inequality in the household sector. This dual rise of concentration and inequality is precisely what we expect under the debt state. Widening income inequality is usually attributed to declining progressivity in the individual

or personal income tax system.[74] But our research suggests an important role for corporate taxation as well. For the past few decades, persistent regressivity in the worldwide tax structure has furnished big business with a distinct tax advantage, one that coincides with a bolstering of its relative power within the corporate universe and a reconfiguration of power relations within and beyond the firm.

CONCLUSION

Our article has explored the contribution of corporate taxes to concentration, building an analysis with reference to two different sets of ideas. First, we contextualized our analysis historically through an engagement with the work of Wolfgang Streeck, which argues that advanced capitalist countries were transformed in the 1980s from tax states into debt states. In particular, we explored one facet of this broad shift: declining tax progressivity as it relates specifically to the corporate sector. We did this by developing the first map of the jurisdictional ETRs of corporations disaggregated by size. Our findings indicate that the worldwide ETR was progressive in the 1970s at the tail-end of the tax state, but has been marked by persistent regressivity since the rise of the debt state in the 1980s. Delving into jurisdictional measures of the ETR, we found that the regressive worldwide tax structure is a product of persistent regressivity of the domestic tax structure combined with the regressive turn in the foreign tax structure in recent years. Second, we examined some of the wider implications of our findings on jurisdictional ETRs by anchoring them within the capital as power approach. We empirically substantiated our main theoretical claims by demonstrating how persistent regressivity in the worldwide tax structure is bound up with the increasing relative power of large corporations within the corporate universe, and a shift of power within large corporations from workers to shareholders and managers.

Overall, our findings suggest that issues of tax deserve much more attention within current debates in the US about corporate concentration than they have hitherto received. In making this claim, we are not trying to diminish the importance of other policies aimed at tackling rising concentration. If anything, the pervasiveness of concentration necessitates a multi-pronged strategy, one aimed not only at corporate taxation, but also antitrust and any other area of policy that has a substantive impact on distributive outcomes. Perhaps most importantly, our findings put paid to the notion that lower corporate taxes will "trickle down" to the benefit of everyone in society. On the contrary, in a system in which successive rounds of corporate tax reform translate into a persistently regressive corporate

tax structure, wealth and income become further concentrated at the top. It seems as if the public, in many ways, already has an intuitive grasp of these realities. Despite the concerted public relations efforts of the Republican Party and the right-wing think tanks that support it, TCJA, both before and after its implementation, has never been popular with voters.[75] Channelling that intuitive discontent into support for restoring progressive taxation just might help to reverse some of the grave inequities of power that have built up under the debt state.

NOTES

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[34] For a classical account of political power theory, see Salamon and Siegfried, "Economic Power and Political Influence."

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[37] Scott D. Dyreng, Michelle Hanlon, Edward L. Maydew, and Jacob R. Thornock, "Changes in Corporate Effective Tax Rates over the Past 25 Years," *Journal of Financial Economics* 124, no. 3 (2017): 443.

[38] Richter *et al.*, "Lobbying and Taxes."

[39] For an excellent overview of this literature see Pepper D. Culpepper, "Structural Power and Political Science in the Post-crisis Era," *Business and Politics* 17, no. 3 (2015): 391-409.

[40] Kevin A. Young, Tarun Banerjee, and Michael Schwartz, "Capital Strikes as Corporate Political Strategy: The Structural Power of Business in the Obama Era," *Politics & Society* 46, no. 1 (2018): 3-28.

[41] The literature on business power has had surprisingly little to say about the corporate size-ETR nexus. Adopting an instrumentalist approach, David Jacobs assumes that large corporations have closer ties to government officials and greater resources for lobbying and campaign financing, and that the ability of large corporations to translate these ties and resources into power hinges on the degree of concentration. With concentration it is much easier for large corporations to organize and overcome collective action problems in order to push for their preferred tax policies. Jacobs predicts that asset concentration will be accompanied by a lower sectoral ETR, not just for large corporations but for all corporations within that sector. In his regression analysis, Jacobs uses asset concentration within the manufacturing sector as a proxy for instrumental power and finds that it has a strong and negative influence on the sector's total ETR. Jacobs also operationalizes various proxies for structural power, including percentage changes in "real" investment in manufacturing, pre-tax returns to capital in manufacturing, and percentage of unemployed, and finds that they have no meaningful relationship with ETRs in the manufacturing sector. David Jacobs, "Corporate Economic Power and the State: A Longitudinal Assessment of Two Explanations," *American Journal of Sociology* 93, no. 4 (1988): 852-881. In a spirited critique, Dennis Quinn accuses Jacobs of mis-measurement. Using the total corporate ETR in place of the manufacturing ETR, the percentage change in "real" GDP as an alternative proxy for structural power, and retaining Jacobs' measure of concentration, Quinn's own regression analysis finds strong support for the effect of structural variables on the ETR and finds no effect for Jacob's proxy for instrumental power. One conclusion to draw from Quinn's structuralist critique is that concentration is irrelevant to the determination of ETRs. Dennis P. Quinn, "Corporate Taxation and Corporate Economic Power: Testing Class-Power and Business-Confidence Models," *American Journal of Sociology* 94, no. 6 (1989): 1419-1426. See also Dennis P. Quinn and Robert Y. Shapiro, "Business Political Power: The Case of Taxation," *American Political Science Review* 85, no. 3 (1991): 851-874. Though this debate on instrumental versus structural power offers more sophisticated ideas about power than the debate between political cost theory and political power theory, it is of limited use to our own analysis for one simple reason. In focusing on the sectoral ETR, it reveals nothing about the ETRs of corporations disaggregated by size.

[42] Nitzan and Bichler, *Capital as Power*; Tim Di Muzio (ed.), *The Capitalist Mode of Power: Critical Engagements with the Power Theory of Value* (London: Routledge, 2014). For a critical evaluation of the applicability of the theory outside the US, see

Joseph Baines and Sandy B. Hager, "Financial Crisis, Inequality, and Capitalist Diversity: A Critique of the Capital as Power Model of the Stock Market," *New Political Economy* online first (2019): 1-18.

[43] Nitzan and Bichler, *Capital as Power*, 373; Joseph Baines, "Fuel, Feed and the Corporate Restructuring of the Food Regime," *Journal of Peasant Studies* 42 no. 2 (2015): 295-321; Joseph Baines, "Accumulating through Food Crisis? Farmers, Commodity Traders and the Distributional Politics of Financialization," *Review of International Political Economy* 24, no. 3 (2017): 497-537; Michal Kalecki, "The Determinants of Distribution of the National Income," *Econometrica* 6, no. 2 (1938): 97-112.

[44] Nitzan and Bichler, *Capital as Power*, 315-316.

[45] Nitzan and Bichler, *Capital as Power*, 228, 231-239. See also Veblen, *Absentee Ownership*, 66-68, 112-113.

[46] Gerald A. Epstein (ed.), *Financialization and the World Economy* (Cheltenham: Edward Elgar, 2005); Julie Froud, Johal Sukhdev, Adam Leaver, and Karel Williams, *Financialization and Strategy: Narrative and Numbers* (London: Routledge, 2006); Samuel Knafo and Sahil Jai Dutta, "The Myth of the Shareholder Revolution and the Financialization of the Firm," *Review of International Political Economy* online first (2019): 1-24; Karsten Kohler, Alexander Guschanski, and Engelbert Stockhammer, "The Impact of Financialisation on the Wage Share: A Theoretical Clarification and Empirical Test," *Cambridge Journal of Economics* 43, no. 4 (2019): 937-974; Greta R. Krippner, *Capitalizing on Crisis: The Political Origins of the Rise of Finance* (Cambridge MA: Harvard University Press, 2011); William Milberg, "Shifting Uses and Sources of Profits: Sustaining US Financialization with Global Value Chains," *Economy and Society* 37, no. 3 (2008): 420-451; William Lazonick and Mary O'Sullivan, "Maximizing Shareholder Value: A New Ideology for Corporate Governance," *Economy and Society* 29, no. 1 (2000): 13-35. For comprehensive reviews of the literature on the financialization of the firm, see Leila E. Davis, "Financialization and Investment: A Survey of the Empirical Literature," *Journal of Economic Surveys* 31, no. 5 (2017): 1332-1357; Natascha Van der Zwan, "Making Sense of Financialization," *Socio-Economic Review* 12, no. 1 (2014): 99-129.

[47] Recent works on financialization that deal systematically with firm size but not tax include Leila E. Davis, "Identifying the 'Financialization' of the Nonfinancial Corporation in the U.S. Economy: A Decomposition of Firm-Level Balance Sheets," *Journal of Post Keynesian Economics* 39, no. 1 (2016): 115-141; Leila E. Davis, "Financialization and the Nonfinancial Corporation: An Investigation of Firm-Level Investment Behaviour in the United States," *Metroeconomica: International Review of Economics* 69, no. 1 (2018): 270-307; Joel Rabinovitch, "The Financialization of the Nonfinancial Corporation: A Critique of the Financial Turn of Accumulation Hypothesis," *Metroeconomica: International Review of Economics* online first (2019): 1-38.

[48] A report from the Government Accountability Office finds that the federal ETR of large US corporations (i.e. corporations with assets of at least $10 million) is consistently lower than their worldwide ETR. Government Accountability Office, *Report to the Ranking Member, Committee on the Budget, U.S. Senate: Effective Tax Rates Can Differ Significantly from the Statutory Rate* GAO-16-363, (Washington: United States Government Accountability Office, 2016). Another report from the Institute on Taxation and Economic Policy (ITEP) finds that the domestic ETR of large and profitable US companies drawn from the Fortune 500 list is equal to their foreign ETR. Matthew Gardner, Robert S. McIntyre, and Richard Phillips, *The 35 Percent Corporate Tax Myth: Corporate Tax Avoidance by Fortune 500 Companies, 2008 to 2015* (Washington: Institute on Taxation and Economic Policy, 2017). A study by the *Financial Times* found that in 2016 the domestic ETRs of the large US technology companies (Apple, Alphabet, Microsoft, Facebook, and Amazon) were significantly higher than their foreign ETRs. Rachel Toplensky, "Multinationals Pay Less Tax Despite Curb on Avoidance: Effective Rate drops 9% in a Decade, State Cuts Make Up Only Half of Fall," *Financial Times* (March 12, 2018): 1. Drawing on a sample of 15,330 firm years from 1988 to 2012 for large US multinationals (i.e. corporations with assets of at least $10 million), another co-authored study reported a higher foreign ETR than domestic ETR. Dyreng *et al.*, "Changes in Corporate Effective Tax Rates." One exception to the otherwise exclusive focus on large corporations is the work of Wright and Zucman, which estimates that the foreign ETR of US multinationals has fallen from 48 percent in 1965 to 15 percent today. Thomas Wright and Gabriel Zucman "The Exorbitant Tax Privilege," *NBER Working Paper Series* no. 24983 (2018): 1–15.

[49] Belz *et al.*, "Taxes and Firm Size," 2; Mihir A. Desai, Fritz C. Foley, and James R. Hines Jr., "The Demand for Tax Haven Operations," *Journal of Public Economics* 90, no. 3 (2006): 514; Kevin Farnsworth and Gary Fooks, "Corporate Taxation, Corporate Power, and Corporate Harm," *Howard Journal of Criminal Justice* 54, no. 1 (2015): 25-41; Sheila Killian, "Where's the Harm in Tax Competition? Lessons from US Multinationals in Ireland," *Critical Perspectives on Accounting* 17, no. 8 (2006), 1071-1072; Sonja O. Rego, "Tax-Avoidance Activities of U.S. Multinational Corporations," 805-833; Streeck, *Buying Time*, 67.

[50] Compustat has three main data items for corporate taxes: total income taxes (including deferred charges), current income taxes (the total tax liability of the company according to the tax code), and income taxes paid (the actual cash taxes a company pays to tax authorities). Only current income taxes are reported on a jurisdictional basis.

[51] Available at: https://data.worldbank.org/indicator/CM.MKT.LDOM.NO?locations=US

[52] Bichler and Nitzan, "Asymptotes of Power," 51; Sandy B. Hager, "Corporate Ownership of the Public Debt: Mapping the New Aristocracy of Finance," *Socio-Economic Review* 13 no. 3 (2015): 508; Nitzan and Bichler, *Capital as Power*, 316-319.

[53] Gardner *et al.*, *The 35 Percent Corporate Tax Myth*; GAO, *Report to the Ranking Member*; Dyreng *et al.*, "Changes in Corporate Effective Tax Rates."

[54] Joseph Bowring, *Competition in a Dual Economy* (Princeton: Princeton University Press, 1986), 105.

[55] Reuven S. Avi-Yonah and Yaron Lahav, "The Effective Tax Rates of the Largest US and EU Multinationals," *Tax Law Review* 65, no. 3 (2012): 375-390; Dyreng *et al.*, "Long-Run Corporate Tax Avoidance."

[56] Porcano, "Corporate Tax Rates," 17-31.

[57] See note 49.

[58] Useful summaries of the opposing sides in this debate can be found in Patricia Cohen, "Opinions are Divided on Whether Tax Plan Will Lift the Economy," *New York Times* (November 3, 2017): 15; David J. Lynch, "Investors May Be Tax Cut's Big Winners," *Washington Post* (December 8, 2017): 16.

[59] The oft-cited data on share ownership are from Edward N. Wolff, "Household Wealth Trends in the United States, 1962 to 2016: Has Middle Class Wealth Recovered?" *NBER Working Paper Series* no. 24084 (2017): 53.

[60] Council of Economic Advisers, *Economic Report of the President, Together with the Annual Report of the Council of Economic Advisors* (March 2019).

[61] Council of Economic Advisers, *Economic Report of the President*, 42.

[62] Council of Economic Advisers, *Economic Report of the President*, 44.

[63] Jane G. Gravelle and Donald J. Marples, "The Economic Effects of the 2017 Tax Revision: Preliminary Observations," *Congressional Research Service Report* R45736 (June 7, 2019): 1-18.

[64] Gravelle and Marples, "The Economic Effects of the 2017 Tax Revision," 14

[65] Emanuel Kopp, Daniel Leigh, Susanna Mursula, and Suchanan Tambunlertchai, "U.S. Investment Since the Tax Cuts and Jobs Act of 2017," *IMF Working Paper* WP/19/119 (May 2019): 1-37.

[66] These assumptions are made explicit in Alan D. Viard, "Economic Effects of the Corporate Tax Rate Reduction," *Tax Notes* (March 5, 2018): 1393-1406.

[67] Kopp *et al.*, "U.S. Investment Since the Tax Cuts and Jobs Act of 2017," 11; Paul Krugman, "Why Was Trump's Tax Cut a Fizzle?" *New York Times* (November 16, 2018): 25.

[68] In theory, proponents of supply-side economics claim changes in the marginal rate (i.e. the amount of tax paid on an additional increment of income), not changes in the effective rate or statutory rate, are of primary importance to incentives to invest, work, and save. See Norman B. Ture, "The Economic Effects of Tax Changes: A Neoclassical Analysis," in B. Bartlett and T.P. Roth (eds.), *The Supply-Side Solution* (London: Macmillan Publishers, 1984): 26-61. But this has not stopped

supply-siders from advocating blanket cuts to statutory corporate tax rates as an effective means of boosting net corporate income and thereby enhancing investment. For discussions of supply-side views on corporate taxation and their influence on US politics see Cathie Jo Martin, "Business Influence and State Power: The Case of U.S. Corporate Tax Policy," *Politics & Society* 17, no. 2 (1989): 200-204; Elizabeth Popp Berman and Nicholas Pagnucco, "Economic Ideas and the Political Process: Debating Tax Cuts in the U.S. House of Representatives, 1962-1981," *Politics & Society* 38, no. 3 (2010): 347-372; Monica Prasad, *Starving the Beast: Ronald Reagan and the Tax Cut Revolution* (New York: Russell Sage Foundation, 2017).

[69] Kopp *et al.*, "U.S. Investment Since the Tax Cuts and Jobs Act of 2017," 11

[70] Geoffrey C. Harcourt, "Some Cambridge Controversies in the Theory of Capital," *Journal of Economic Literature* 7, no. 2 (1969): 369-405; Nitzan and Bichler, *Capital as Power*, 79-83; Joan Robinson, "The Measure of Capital: The End of the Controversy," *Economic Journal* 81, no. 323 (1971): 597-602.

[71] To align the interests of managers with shareholders, executive pay has become increasingly tied to stock market performance. Stock buybacks raise share prices, boosting the incomes of managers with stock and stock options. J. Adam Cobb, "How Firms Shape Income Inequality: Stakeholder Power, Executive Decision Making, and the Structuring of Employment Relationships," *Academy of Management Review* 41, no. 2 (2016): 324-348.

[72] For a similar analysis that measures shareholder value in terms of dividend payments and stock buybacks as a percentage of revenues in the pharmaceutical sector, see Matthieu Montalban and Mustafa Erdem Sakinç, "Financialization and Productive Models in the Pharmaceutical Industry," *Industrial and Corporate Change* 22, no. 4 (2013): 981-1030.

[73] Van der Zwan, "Making Sense of Financialization," 107-110.

[74] Thomas Piketty, Emmanuel Saez, and Gabriel Zucman, "Distributional National Accounts: Methods and Estimates for the United States," *Quarterly Journal of Economics* 133, no. 2 (2018): 598-601; Sandy B. Hager, "Varieties of Top Incomes?" *Socio-Economic Review* mwy036 (2018): 12-13.

[75] Ben Casselman and Jim Tankersley, "Tax Cut, with Faster Growth and Higher Wages? People Aren't Buying It," *New York Times* (December 16, 2017): 13; Demetri Sevastopulo, Sam Fleming, and Courtney Weaver, "Republicans Battle Scepticism over Tax," *Financial Times* (December 4, 2017): 1.

FIGURES 1-5

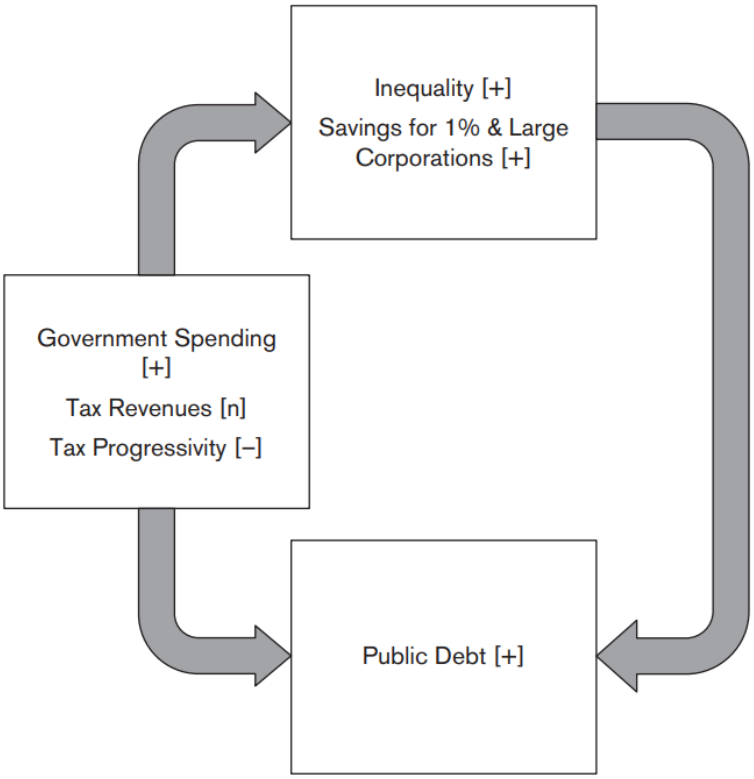

Figure 1. The Logic of the Debt State

Source: Hager (2016: 67)

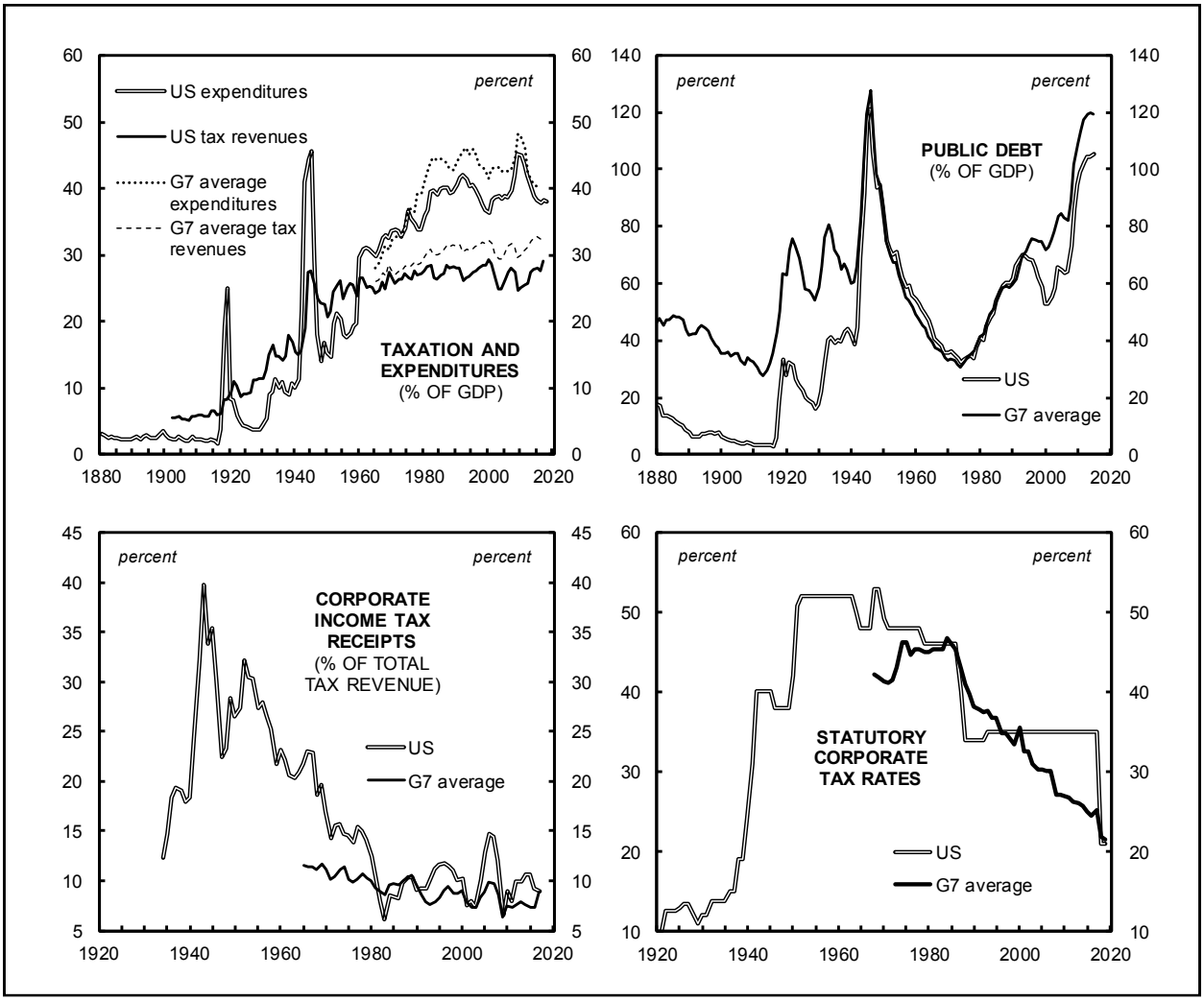

Figure 2. The Contours of the US Debt State

Source: 1880-2011 government spending data from Ortiz-Ospina and Roser (2019). 2012-17 government spending data from Trading Economics (2019). 1902-2008 US tax revenue data from Piketty (2014), 2009-2017 US tax revenue data and tax revenue data for all other G7 countries from OECD (2019a). Public debt data from IMF (2019). US corporate income tax receipts data from Office of Management and Budget (2019). Corporate income tax receipts data for all other countries from OECD (2019b). 1920-2011 statutory corporate tax rate data from University of Michigan World Tax Database (2019), 2012-2019 data from OECD (2019c)

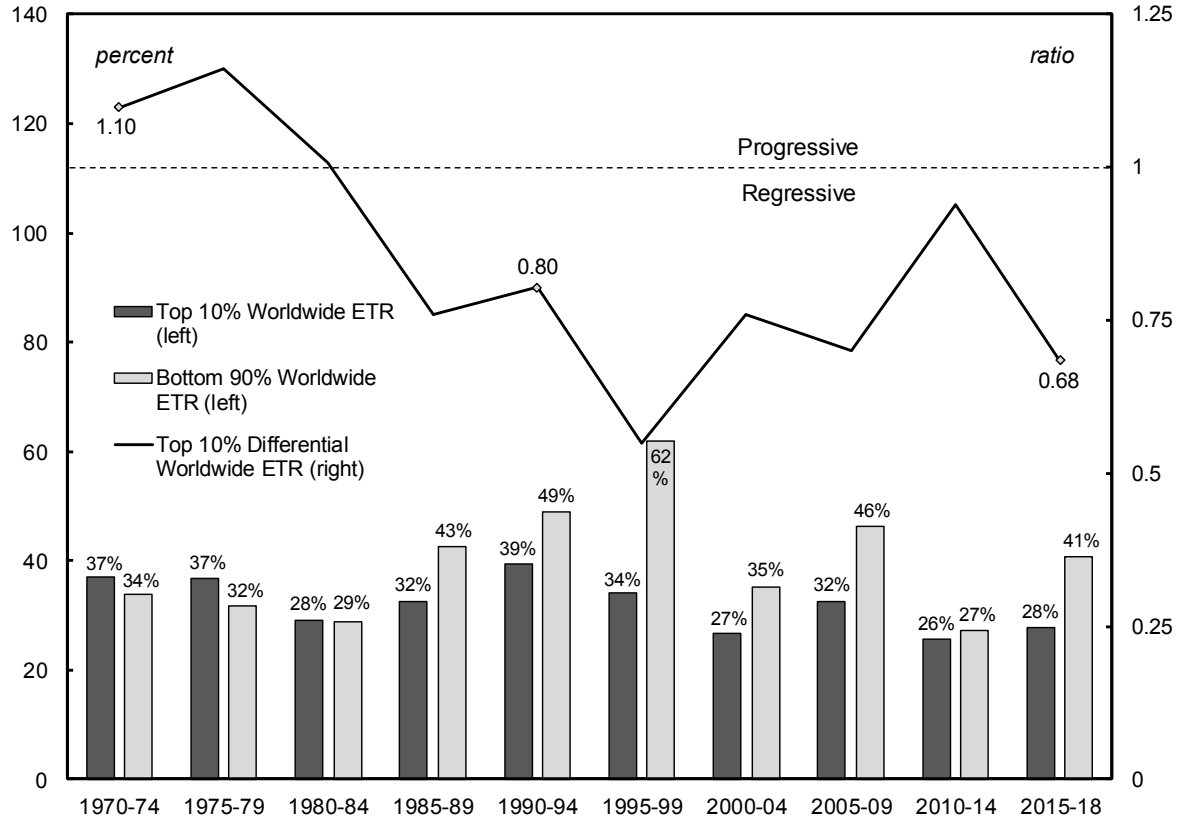

Figure 3. Worldwide Effective Tax Rates: Top 10% versus Bottom 90%

Source: Compustat through WRDS (2019)

Note: The years 2000-02 and 2008 are omitted from the dataset

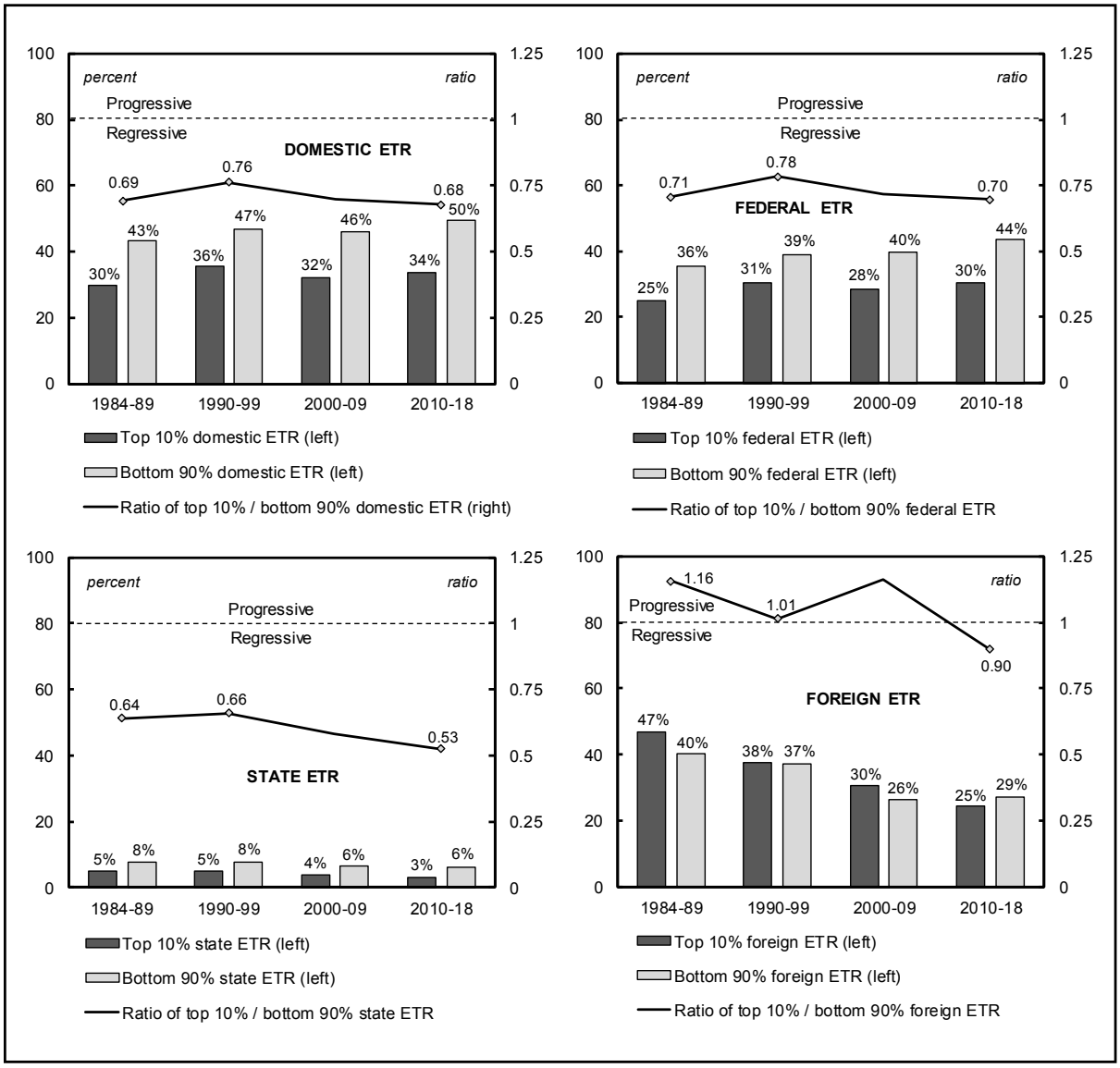

Figure 4. Jurisdictional Effective Tax Rates: Top 10% versus Bottom 90%

Source: Compustat through WRDS (2019)

Note: The years 2000-02 and 2008 are omitted from the dataset

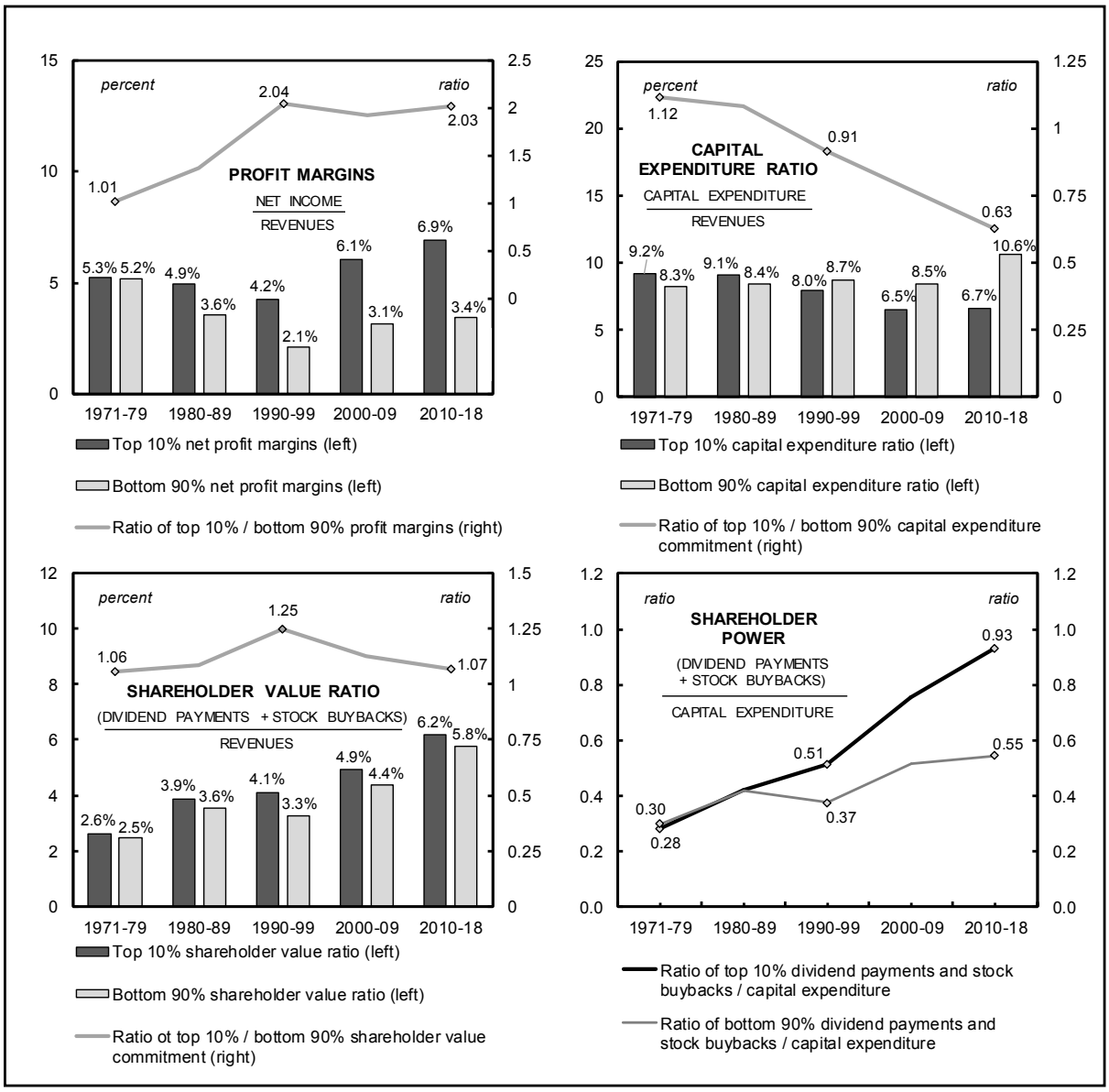

Figure 5. The Degree of Monopoly and the Financialization of the Firm: Top 10% versus Bottom 90%

Source: Compustat through WRDS (2019)

Notes: The years 1999-2003 are omitted from the profit margins dataset