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A SHRINKING UNIVERSE:

How concentrated corporate power
is shaping income inequality in Canada

Jordan Brennan

Growing Gap  **.ca**

CANADIAN CENTRE FOR POLICY ALTERNATIVES

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Canadian Centre for Policy Alternatives

500-251 Bank St., Ottawa, ON K2P 1X3

TEL 613-563-1341 FAX 613-233-1458

www.policyalternatives.ca

www.growinggap.ca

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About the Author

Jordan Brennan is PhD candidate in political science at York University and contract faculty in the School of Liberal Arts and Sciences at George Brown College. He is currently working on a dissertation entitled: *The Business of Power: The Structure, Composition and Performance of Dominant Capital in Canada*.

The study is this year's winner of the Progressive Economics Forum student essay contest.

Executive Summary

THE DEEPENING OF INCOME inequality in Canada is a well-documented phenomenon, but the driving forces behind this trend have been subject to less scrutiny.

This paper looks at income inequality over time and shows how the growth of income concentration in the hands of the richest 1% is connected to the concentration of corporate power among the 60 largest Canadian-based firms.

It examines trends in Canada during two post-war periods:

1. The “golden era”, 1945 to the mid-1970s, was characterized by the establishment of the Keynesian welfare state. During this time, governments were activist, sought full employment, regulated capital and currency flows and levied comparatively high taxes to finance social programs. During this era, the power of unions solidified and workers throughout the income spectrum enjoyed a greater share of income gains as a result of economic growth. Income inequality in Canada shrunk during this period.
2. The “globalization era”, mid-1970s onward, led to a reversal of many golden era policies and programs. Inflation-fighting and deregulation replaced the pursuit of full employment. Trade and investment rules were liberalized. There was a retrenchment of welfare state programs, the introduction of tax cuts, and the de-unionization of workers. Income inequality in Canada grew to Gilded Age proportions during this period.

While these trends are well-documented, the degree of corporate concentration and its relationship with the rise of the richest 1% has not been the subject of much discussion. This paper shows that during the golden age, increased unionization led to the growth of workers’ income share. In fact, wages grew at an annual inflation-

adjusted rate of 3.3% throughout the 1950s, they grew at a robust rate in the 1960s and 1970s, and then they stalled entirely between 1980 and 2009. The growth of the middle class reflects the success of one of the largest social movements in Canadian history: the labour movement. During this period, when the middle class was growing, corporate Canada experienced distributional losses, as did the richest 1%.

That trend reversed itself following the implementation of a trade and investment liberalization (TAIL) regime, when trade rules were liberalized and a deunionization effort began taking root in Canada. Since the late-1980s, the majority of workers have experienced a shrinking share of income gains while the richest 1% enjoyed a higher share of income gains reminiscent of the 1920s. Deunionization has effectively led to a redistribution of income, concentrating it back into the hands of an elite few. But corporate concentration had a role to play, too.

The corporate sector became increasingly concentrated after 1980. In 1950, Canada was home to about 43,000 corporations. By 2009, that number grew to 1.3 million. The number of stocks listed on the TSX more than doubled between 1950 and 2010. The total equity market value of all firms listed on the TSX swelled from \$354 billion in 1956 to \$2.2 trillion in 2010 (in inflation-adjusted dollars). Here's the shocker: the top 60 Canadian-based firms account for 67% of all equity market capitalization and 60% of all corporate profit. This is a staggering degree of corporate concentration. When we speak about Canadian business or the corporate sector, we are effectively referring to 60 firms that dominate the Canadian political economy and lead the drive for growing profits. Canada's political economy is not only driven by the performance of the equity market; the equity market is effectively made up of these 60 firms. Many important decisions made in the Canadian political economy are conditioned by their performance and their values.

This report also demonstrates that the income share of the richest 0.1% of Canadians — some of whom are executives within Canada's most powerful corporations — is closely bound with the successes of Canada's largest firms. And these firms are much more flush as well as concentrated. In 1950, an average firm within the top 60 was five times as large as an average firm listed on the TSX. By 1990, that ratio had risen from five to six. In the 20 years following the TAIL regime, that ratio grew from 6 to 23. The top 60 firms have effectively delinked from the rest of the corporate universe, which suggests something dramatic happened precisely when the TAIL regime was institutionalized.

Finally, this paper shows corporate concentration among the top 60 firms closely mirrors the income share of the top 0.1% over time, which is helping to drive worsening income inequality trends in Canada. In 1950, the average profit of a firm within the top 60 was 234 times larger than an average firm in the corporate universe. By 2007, that ratio had risen to 14,278 — that's a 60-fold increase in six decades. And the pattern of this growth is tightly correlated with the pattern of the top income share. The concentration of corporate power into the boardrooms of a few firms has helped shape Canada's political economy and is driving the trend toward the rise of the richest 1% at the expense of the rest.

1. Introduction

Wherever there is great property, there is great inequality. For one very rich man, there must be at least five hundred poor, and the affluence of the few supposes the indigence of the many.

—Adam Smith, *The Wealth of Nations* (1776)

POLITICAL DEBATE IN CANADA is pulling in multiple directions, but two threads stand out. The first thread is premised on the belief that the most pressing problems facing Canadians are the result of over-indebted governments, a bloated public sector, extravagant entitlement programs and unions. To avert fiscal and demographic disaster we need to reform these institutions, and ultimately, rein them in. Austerity is the order of the day.

The second, less prominent, thread is premised on the belief that the social experiment we have been running for the past generation, neoliberal globalization, has failed to deliver on core promises. One manifestation of this failure is a sharp divergence in incomes, with a growing gap between the richest Canadians and the rest.

By now everyone knows that the distribution of income in Canada is becoming increasingly unequal, with a concentration of income gains in the hands of the richest few while incomes for middle class Canadians have stagnated (Osberg 2012). This paper examines the how and the why of this deepening phenomenon. It will demonstrate a strong connection between the well-documented growth of income inequality in Canada and an unprecedented concentration of corporate power.

The argument will be delivered in nine sections. The second section will briefly review why income inequality is important and the third will explore how the distribution of income has changed across the past generation. This will prepare us for the fourth section, which will discuss how income is distributed in broad, aggregate

terms. In the fifth section we begin to disaggregate by examining the concentration and performance of the largest Canadian-based firms. This will pave the way for the sixth section, which will contrast the differential size and performance of the largest Canadian-based firms with the top income share. In the seventh section, we will explore some of the distributional consequences of increasing relative firm size and in the eighth we will survey some of the historical and institutional processes that propelled the growth of large firms across the twentieth century, specifically the role played by that much overused term, “globalization.” The final section provides a summary of the findings and interprets their broader significance.

A final note regarding method: most economists assume that the horizon of economic truth falls in between John Maynard Keynes and Milton Friedman, with Paul Samuelson nestled somewhere in the middle. This study will break with that (untenably narrow) assumption. Instead, it will borrow concepts, assumptions and measurements from the approach to political economy pioneered by Jonathan Nitzan and Shimshon Bichler to try to make sense of rising income inequality.¹ By the end of this story we will see that the beginnings of an explanation for the growing gap can be found if we are willing to ask new questions and entertain new ideas.

2. Why Income Inequality Matters

IN 2009, RICHARD WILKINSON and Kate Pickett published *The Spirit Level*. The thrust of their argument is that rich, developed societies with less income inequality — less relative poverty — do better on a wide range of social indicators even if they have lower absolute levels of wealth.

Their research demonstrates that in the early stages of development, as societies modernize, there are many broad-based improvements to people's lives, notably happiness and life expectancy. But the relationship between national income per capita and happiness and life expectancy has limits. Gains from growth eventually level off, meaning the more growth we experience the less that wealth contributes to our happiness and life expectancy. Once a society crosses a threshold — in their research it is national income per capita of \$25,000 USD — the gains from growth plateau (2010: 8).²

To be clear: this is average income per person, i.e., total national income divided by total population. This does not necessarily mean that individuals who attain this income cannot be made better off from the standpoint of happiness and life expectancy with more income. What it means is that in a society like Canada where national income per capita is approximately \$36,000 USD, we have already surpassed the point where more economic growth can be expected to contribute to increased average life expectancy and happiness.³

From there, Wilkinson and Pickett move into a bit of conventional wisdom. They claim that the social problems faced by societies in the rich, developed world tend to be concentrated in the lower part of the social hierarchy. So people die sooner, are less happy and generally fare worse if they are in the bottom income brackets.

Their main discovery: when they compare rich, developed countries, they find that these social problems bear little or no relation to levels of average income. Across a wide range of social indicators such as levels of trust, mental illness (including drug

and alcohol addiction), life expectancy, infant mortality, obesity, children's educational performance, teenage births, homicide, imprisonment rates and social mobility they find that all the problems associated with being at the bottom of the social hierarchy are more common in more unequal societies. This is another way of saying there is a positive relationship between income inequality and social pathology.

This undermines the view that social problems are caused by poor material conditions. If that were true, then richer societies would do better than poorer ones. What matters, they contend, is not absolute poverty, but *relative* poverty. If this is true, then perhaps it follows that the concepts and measurements we use to explain inequality should themselves be relative.

Their conclusion: ours is the first generation in the history of humanity for whom improvements in the quality of life are not tied to increases in material comfort. Rather, reducing inequality is the best way to improve the quality of our social environment and social life, and this even applies to people at the very top of the social hierarchy. So, if income inequality proxies as a barometer of social pathology how has this metric changed in Canada over the past generation?

3. Trends in Income Inequality in Canada

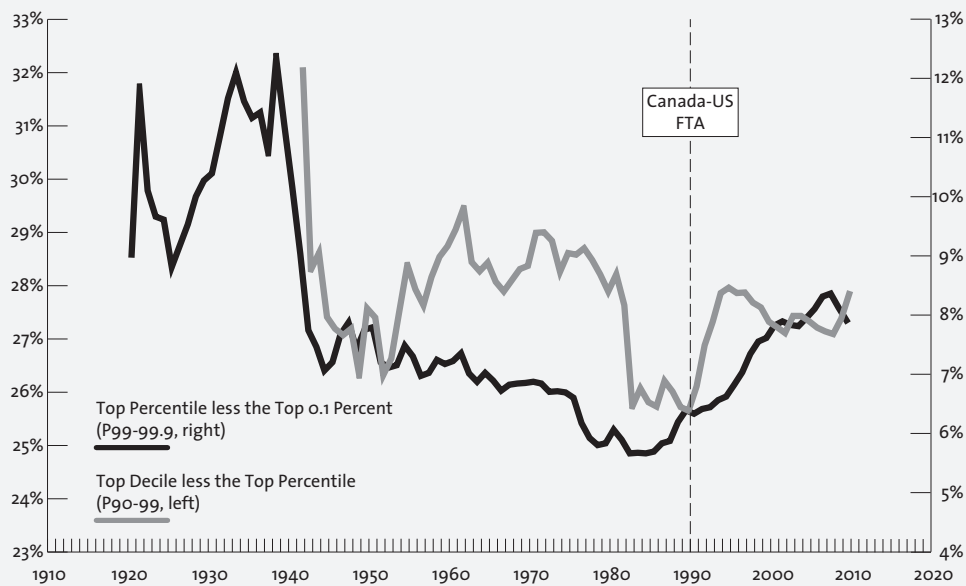
LET'S CARVE THE POST-WAR ERA into two periods: the era between 1945 and the mid-1970s may be identified as the Keynesian welfare state ("embedded liberalism"). This political economy ran into practical and theoretical difficulties and was gradually superseded by another political economy — neoliberal globalization — which began to take shape in the late-1970s and has continually developed into the present.

The political economy of the Keynesian welfare state had a number characteristics: activist government, including state-directed industry (primarily in the form of crown corporations), full employment (at least theoretically), the promotion of economic growth and price stability, regulated capital and currency flows, collective bargaining, comparatively high taxes to finance social programs and large-scale public investment in health care, education and infrastructure.

The political economy of neoliberal globalization, by contrast, has been characterized by a reversal of many of these policies and programs. Instead of the goal of full employment, the Canadian state has committed itself to fighting inflation. In the place of international capital controls and collective bargaining, the state has embraced liberalized trade and investment, deregulated labour markets, and de-unionization. The willingness to engage in deficit-financed public investment has been replaced by welfare state retrenchment, balanced budgets (again, theoretically), lower public debt and tax cuts, especially for business and the wealthy.

While the former era is sometimes referred to as the "golden age of controlled capitalism," some refer to neoliberal globalization as a "new gilded age" (Yalnizyan 2010; Stiglitz 2011; Saez 2012), reflecting a significant shift in income inequality trends in Canada. Until recently (Yalnizyan 2007, for instance), it was thought that income inequality in Canada was being driven by the income share of the top 20 percent of

FIGURE 1 Disaggregated Income Share of Canada's Richest 10% and 1%, 1920-2009



Note: Both income categories are made up of gross market income (reported for tax purposes) excluding capital gains.

Source: Veall (2010) for top income share.

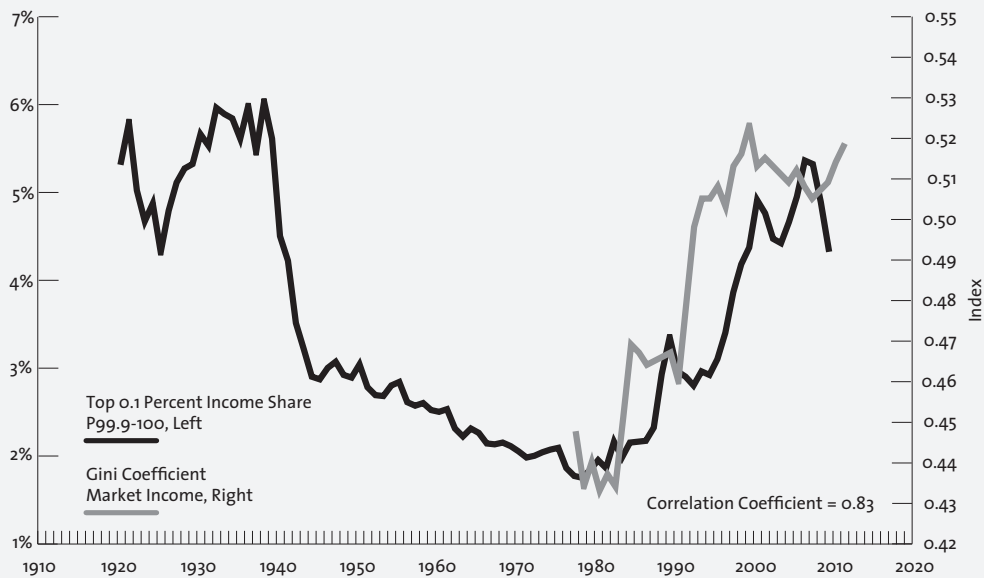
Canadians, with gains likely concentrated in the top 10 percent. At least that's what traditional data sets revealed. Saez and Veall (2003 and 2005; Veall 2010) have since tapped into new data sources to paint a more precise picture of income inequality in Canada over the past century.

Figure 1 breaks down the market income share of the richest 10 percent of Canadians since 1941 and the richest 1 percent since 1920.⁴ When we remove the income share of the richest 1 percent from that of the richest 10 percent (leaving us with the 90-99th percentiles) and the income share of the richest 0.1 percent from the richest one percent (leaving us with the 99-99.9th percentile) we arrive at a highly revealing picture.

Figure 1 shows that both measures fell dramatically during the Second World War. This probably had a lot to do with the war-time move towards a centrally planned political economy replete with price controls and state-directed industry (Taylor 2009: 137-9). Corporate Canada not only lost control of industrial production and prices, but the war effort entailed a move towards full employment. The unemployment rate fell from approximately 11 percent in 1939 to under 2 percent by 1945.⁵

Nitzan and Bichler (2009: 236-7) conceptually argue and empirically demonstrate that, contrary to the received wisdom, a move towards full employment and unlimited industrial production will not be welcomed by business because it undermines the pricing power of large firms and leads to a reduction in the capital income share (measured as the sum of profit and net interest). The fact that the income share of Canada's richest plummeted during the Second World War strengthens Nitzan and Bichler's assertion.⁶

FIGURE 2 **Income Inequality and the Income Share of the Richest 0.1%, 1920-2010**



Note: Top 0.1 Percent income share is made up of gross market income (reported for tax purposes) excluding capital gains.

Source: Veall (2010) for top 0.1 Percent income share; cansim table 2020705 for Gini coefficient.

While the disaggregated income share of the richest 1 percent continued to decline throughout the golden age, the disaggregated income share of the richest 10 percent rebounded before peaking in the early-1960s. By the mid-1980s, the disaggregated income share of the richest 1 percent reached a trough and began to steadily climb upward, silently ushering in the new gilded age. Meanwhile, the disaggregated income share of the richest 10 percent fell almost unabatedly after 1994 and the onset of the North American Free Trade Agreement (NAFTA).

It turns out that it is not the richest 10 or 20 percent driving income inequality trends in Canada — that newly christened sociological entity, the “one percent,” is the real generator of heightened inequality (see Yalnizyan 2010 for a fuller discussion).

Who falls into these income categories? In order to qualify for membership in the richest 10 percent in 2008, a Canadian would require pre-tax entry point earnings of \$65,100. The entry point for membership in the one percent is \$168,200. Because the richest 10 percent experienced distributional losses over the last two decades and the richest 1 percent only mild gains in income share, let’s zero in on a higher income group, Canada’s richest 0.1 percent, or the roughly 25,000 Canadians whose income was above \$590,300 in 2008. What is the relationship between their income share and income inequality?

The Gini coefficient is a broad measure of income inequality. It captures extreme distributions of income and ranges in value from a low of zero to a high of one. What this number tells us is the percent of national income that would need to be redistributed to perfectly equalize incomes.

Figure 2 presents the relationship between the income share of the richest 0.1 percent and the Gini coefficient.

Figure 2 shows the two measures are tightly and positively correlated over time indicating that it is the surging gains made by the very highest income echelons that is driving inequality across Canadian society.

In the late-1970s, the Gini coefficient was 0.43, which means that 43 percent of national income (market income before taxes and transfers) would have needed to be redistributed to perfectly equalize incomes. By 2010, that number had risen to 0.52, or 52 percent of national income — a big jump for this kind of measurement.

Note that the richest 0.1 percent income share also took a U-shape over the twentieth century, falling rapidly during the Second World War, declining more gradually throughout the post-war golden age and rebounding in the early-1980s to usher in the new gilded age. It is surging gains being made by the richest Canadians driving income inequality and, so, also social pathology.

To briefly recap, we employ the Gini coefficient to gauge income inequality over time in Canada because this singular measure doubles as a barometer of social pathology. The concentrated income share of the richest appears to be driving changes in the Gini coefficient. But why?

4. The Struggle for Profit and Wage Gains

NEOCLASSICAL ECONOMISTS HAVE worked hard over the past century to depoliticize the economy. All of the institutions of modern capitalism — from private ownership to business enterprise and the price system — are treated not only as “natural,” but are also treated as institutional generators of social harmony. One consequence of this ideological manoeuvre is the habit of looking at income formation in isolated and absolute terms. Individuals work to produce wealth, so the reasoning goes, and their incomes stand as a function of their individual contribution to the total social product. End of story.

But if we wish to explain income inequality, and if this phenomenon manifests itself in distributive terms (by definition), then it follows that we should query not absolute outcomes, but distributional (*relative*) outcomes. And distributional outcomes may validly be thought of as manifesting, in part, the process of social struggle.⁷

How does this social struggle manifest itself? Business enterprise is the dominant institution of the political economy and the language it speaks is that of accounting. A cursory examination of accounting conventions reveals, in gestation, the process of social struggle. Take the income statement as an example. If we boil the income statement down to its constituent parts, it is made up of a formula expressing three flows: Revenues-Expenses=Profits. Table 1 presents the ways in which we may think of the income statement as embodying the process of struggle between groups in society.

Owners of businesses strive for profits. In order to arrive at a profit, expenses must be smaller than revenues. The largest single expense of many businesses is the cost of labour in the form of wages, benefits and pensions. This means that the owners of businesses stand to benefit by controlling or reducing the costs of labour. Workers,

TABLE 1 **Accounting Conventions, Sociological Categories and Distributional Struggle**

Accounting Entry	Sociological Category	Redistribution
Revenue	Owners vs. Owners	Market share
Revenue	Owners vs. Customer base	Sales price inflation
Expenses	Owners vs. Workers	Wage in/deflation
Expenses	Workers vs. Workers	Wage location in the industrial geography
Profit	Owners vs. Owners	Distributive share
Profit	Owners vs. Workers	Distributive share
Profit	Owners vs. Rest of society	Distributive share

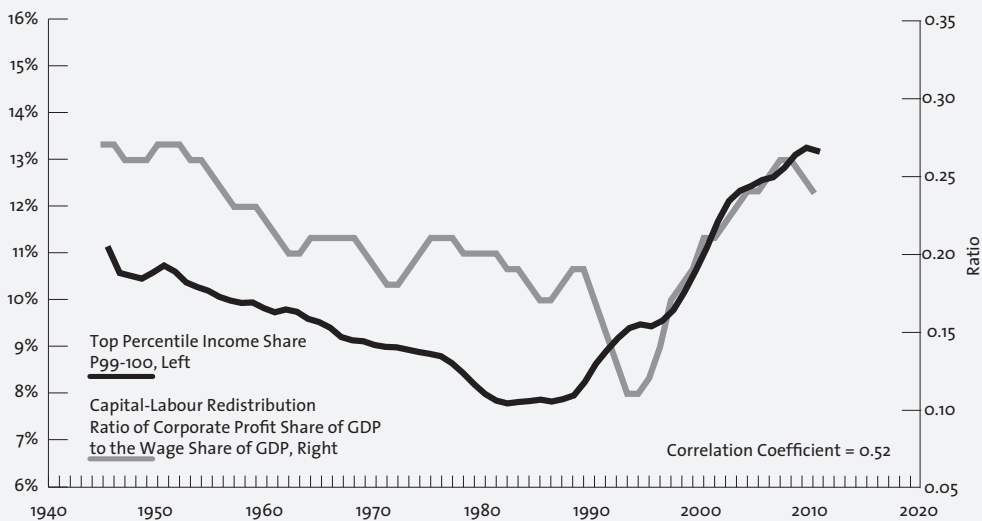
on the other hand, naturally wish to increase their compensation and benefits. This accounting convention pits these two groups against each other.⁸

But that’s not all. Owners can enlarge profits by compressing wages, by diverting market share from competitors and/or by raising the sales price. Competitive markets entail owners competing with other owners for market share. Competitive markets also pit owners, en masse, against their customer base, which obviously prefer lower prices. Some are going to find this claim counterintuitive, if not wholly unorthodox. Don’t the orthodox textbooks tell us that business success comes with higher quality and lower prices? Let’s turn to a business practitioner (not a theorist) for an answer to these questions. James Randall, past president of agricultural processing giant Archer Daniels Midland Company (ADM) was caught on tape by the FBI saying: “our competitors are our friends, our customers are our enemy” during a meeting of the Lysine cartel (quoted in Gagnon 2009: 122). Shocking as his statement may sound it is hardly unique in the annals of political economy. More than two centuries ago, Adam Smith observed: “People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices” (1776: 148).

One implication of the social conflict institutionalized in these accounting conventions is that distributional outcomes reflect a series of struggles between different sociological groups. From this the question emerges: is there a systematic relationship between the top income share and distributional struggle among income earners as manifest in table 1? To answer this question let’s go to the national accounts and extract three basic measures: corporate profit, wages and salaries and gross domestic product.

Step one is to divide the first two measures by the third to arrive at the share of national income going to capital in the form of corporate profit and the share of national income going to labour in the form of wages. Step two is to divide the first measure by the second to arrive at a picture of the distributional struggle between capital and labour over corporate profits and wages. When this ratio rises, corporations are redistributing income away from workers and when it falls, workers are redistributing income away from corporations. This ratio is plotted in figure 3 against the top income share. Because these are such broad measures and we wish

FIGURE 3 Capital-Labour Redistribution and the Income Share of the Richest 1%, 1945-2010



Note: Corporate profit is pre-tax. Both series smoothed as 5-year moving averages.

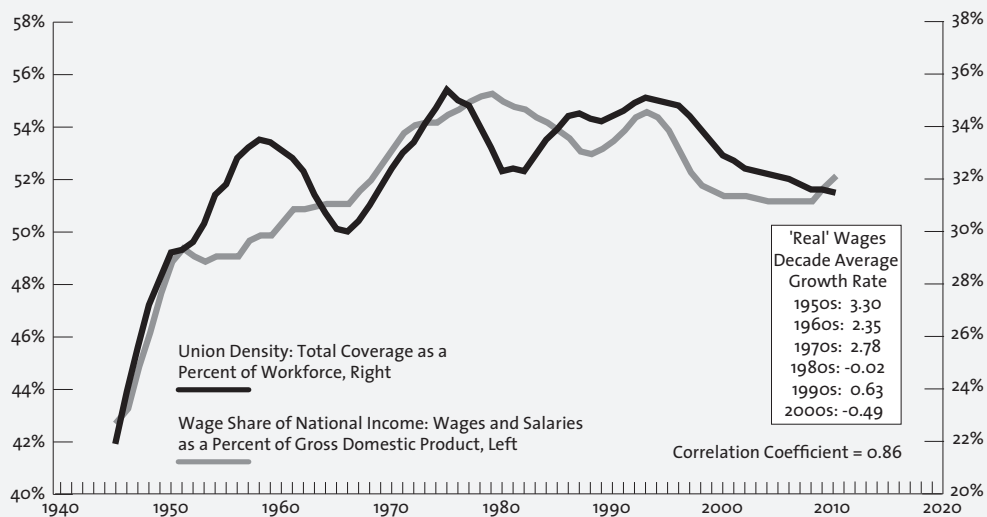
Source: GDP, wages and salaries and corporate profit from Cansim (Table 3800016) and Historical Statistics of Canada (F1-13); Veall (2010) for top income share.

to see the long-term relationship between them, both series are smoothed as a five-year moving averages.

Figure 3 shows us the distributional struggle between corporate profit-seeking and worker wage struggles closely resembles the pattern of the top income share. The ratio fell throughout the golden age, along with the top income share, and rebounded just as a trade and investment liberalization regime (TAIL) came into effect, first between Canada and the U.S. (the FTA in 1988) and then extended to include Mexico (NAFTA in 1994). The early-1990s, with the entrenchment of the TAIL regime, will act as an inflection point in many subsequent measures.⁹

As workers made distributional gains throughout the golden age, narrowing the income gap, corporate Canada experienced distributional losses along with the richest one percent. Who is a part of the “one percent,” beyond a basic income measure? It’s a rather large grouping that is bound to include many people who would not be considered capitalists. This squares with the observations made by Fortin *et. al.* (2012), who examine the composition of the top percentile based on the 2006 Canadian Census and find that most people within it are neither executives nor financiers. A sizeable proportion of the top percentile are health professionals, for instance. We would also expect corporate accountants and lawyers, as well as athletes and entertainers, to populate this top income bracket. But we are safe in presuming that ownership and control of Canada’s corporate sector resides somewhere within the top percentile, though it is probably a very small fraction of the top percentile that effectively wields control of the corporate sector. Certainly the great business dynasties of Canada, including the leading owners of the corporate

FIGURE 4 **Organized Labour Strength and the National Wage Bill, 1945-2010**



Note: Coverage is for non-agricultural paid workers. Both series smoothed as 5-year moving averages.

Source: Union density from Historical Statistics of Canada (E175-177) and Cansim Tables (2790026 and 2820078); wage share and GDP from Historical Statistics of Canada (F1-13) and Cansim (Table 3800016); hourly wages from IMF through Global Insight.

sector and their top executives, reside in the top percentile and are likely driving income trends within it.

If the majority of workers made distributional gains throughout the golden age at the expense of corporations and the richest one percent, how can we account for this? Figure 4 plots the relationship between the national wage bill and union density. The national wage bill is the share of national income going to wages and salaries. Union density is the percentage of the workforce covered by a union, whether in the private or public sector. Because these measures are so broad, they are smoothed as five-year moving averages to capture the long-term trend.

This figure shows us three things of consequence. First, the relationship is tightly and positively correlated over the entire post-war era. Increased union density corresponded with a higher national wage bill. Second, the two measures show an inverse U-shape, rising together from the 1940s, cresting in the late-1970s, then falling together from the 1990s onward. And third, average annual inflation-adjusted hourly wages grew when unions became denser and pushed up the national wage bill. They stagnated or fell when the national wage bill fell.

Wages grew at an annual inflation-adjusted rate of 3.3 percent throughout the 1950s and would continue to grow at a robust rate throughout the 1960s and 1970s before stalling entirely between 1980 and 2009. Inflation-adjusted wages actually contracted throughout the 1980s and 2000s and rose at a miniscule rate throughout the 1990s.

Figure 4 reflects the successes and failures of one of the largest social movements in Canadian history: the labour movement. The process of unionization required large-scale community activism and social mobilization. It was initially a move-

ment of ordinary people rising against the established elite who fought to repress it. Throughout the golden age, we saw increasing union density and a corresponding demographic bulge with the growth of the middle class. In the new gilded age, this process has shifted into reverse. Unionization was a main lever to redistribute income in Canada during the golden age. De-unionization has effectively led to a redistribution of income, concentrating it back into the hands of an elite few.

It is important to note that this is a mutually reinforcing cycle. As more jobs are lost in unionized workplaces and as new non-unionized workplaces are created, organized labour will be put in an even worse bargaining position. Even the jobs that aren't relocated will be subject to wage stagnation. Union decline also implies that non-unionized sectors will be less able to bid wages up, so wage compression for unions implies wage compression for the entire labour market.

In an era where neoliberals focus on meritocracy, it's relevant to ask: how do these processes relate to business performance and corporate rewards?

5. The Concentration and Performance of Large Firms

SO FAR WE'VE SEEN THAT institutional actors, in this case labour unions, have an impact on the distribution of income. This shouldn't surprise us. Large institutions ultimately shape distribution, so let's turn our attention to the other side of the ledger and explore the dominant institution of the political economy: business enterprise.

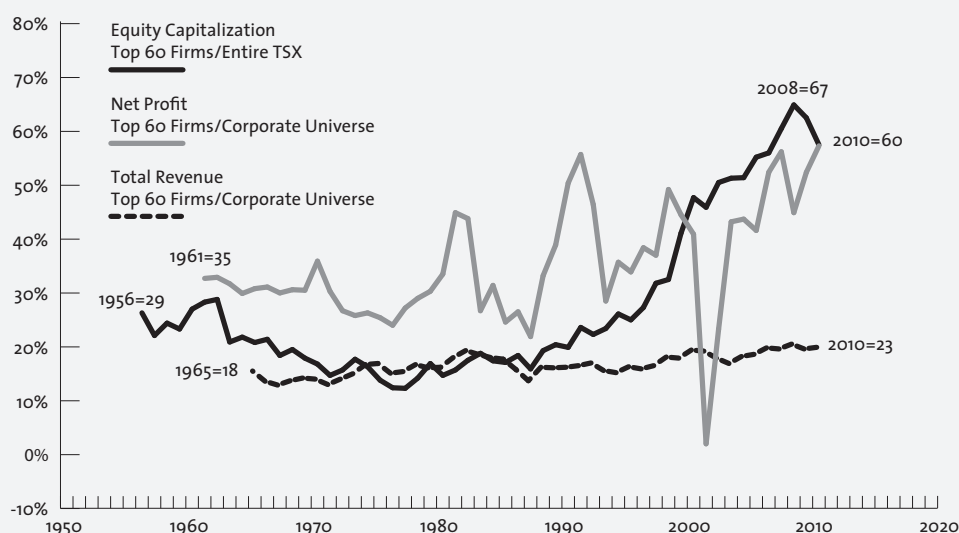
The temptation might be to examine the corporate sector as a whole. This would be a mistake. The mom and pop shop on Main Street is a business and many small outfits of this sort are incorporated. They, too, are subject to the accounting conventions of profit and loss. However, most corporations in Canada have a very small number of employees, modest revenues, little or no profit and no political-economic power in the broadest sense of the term.

Since contemporary Canadian capitalism is driven by very large firms whose profits are in the billions, revenues in the tens of billions, employees in the tens of thousands, they wield enormous power. Most very large Canadian-based firms are listed and traded on a stock exchange. The market for large-scale corporate ownership and control, then, should be the place where our inquiry into business performance begins.¹⁰

The largest market for corporate ownership in Canada is the Toronto Stock Exchange (TSX). It is home to thousands of firms, but we are going to confine our investigation to the very largest of them. The top 60 firms ranked annually by equity market capitalization (the "TSX 60", as it is known to investors) serves as the main benchmark for the performance of large firms in Canada and will serve as our proxy for what Nitzan and Bichler call "dominant capital."¹¹

Aggregate concentration is a measure of the power of large firms. Figure 5 presents this measure for equity capitalization, net profit, and total revenue. This concept is

FIGURE 5 Aggregate Concentration



Note: Ratio of the top 60 Canadian-based firms ranked annually by equity market capitalization and: (i) all listed firms; (ii) all firms, listed and unlisted. Profits are after tax.

Source: Compustat through WRDS for shares outstanding, closing share price, net income and total revenue; Canadian Financial Markets Research Centre; Moody's Corporate Manuals through Mergent Webreports; Report on Business Top 1000 Companies; TSX Review, e-Review and Factbook for total equity capitalization; IMF through Global Insight for total corporate profit; Cansim for total corporate revenue (Catalogue 61-207 and Tables 1800001-1800003).

measured as a ratio that uses the largest 60 firms for the numerator. The denominator is the total of all firms listed on the TSX for equity capitalization and all Canadian corporations, listed and unlisted — the corporate universe — for net profit and total revenue.¹²

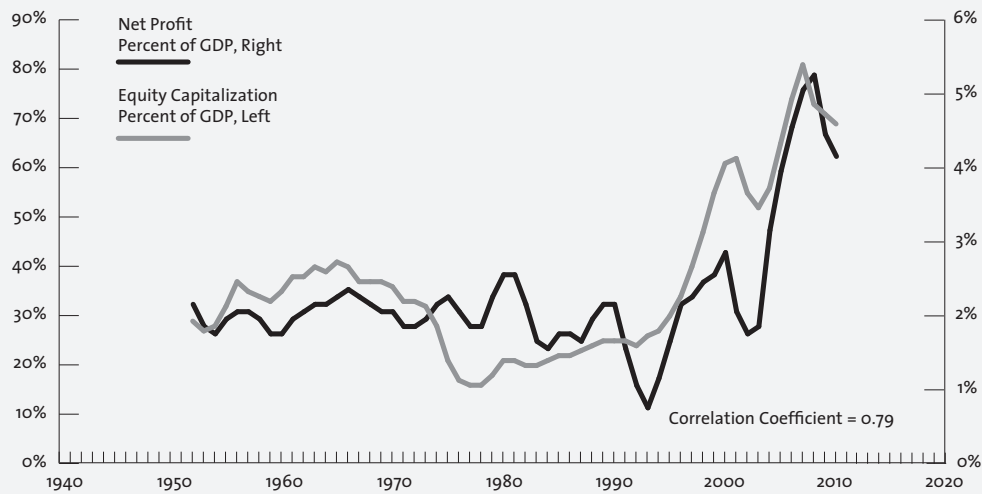
There are a number of striking features to note about figure 5. First, concentration in equity capitalization declined for two decades, falling from 29 percent in the mid-1950s to 13 percent in the late-1970s. The concentration of profit also fell throughout the 1960s and 1970s before rising, but its movement was much more erratic and highly cyclical. The 1980s saw a gradual deepening of equity concentration before its eventual surge in the early-1990s.

The story with corporate revenue is different. Its movement was nearly flat, indicating that larger relative firm size translated into higher distributional profit, but not because of distributional increases in revenue. This is highly significant, as we will see later.

We are holding the numerator constant at 60 while the denominator grew over the past two generations. There are many more listed and unlisted firms today than there were five decades ago, so this should have had the effect of shrinking the concentration ratios. It didn't. Corporate concentration has deepened because the largest firms have grown fast enough to more than offset the numeric increase in firms.

In 1960, there were approximately 1,100 stocks listed on the TSX. That figure nearly doubled to 2,100 by 2010 (excluding the Venture Exchange). In 1965, Canada was

FIGURE 6 The Performative Evolution of the Top 60 Firms, 1952-2010



Note: The top 60 are the largest Canadian-based firms ranked annually by equity market capitalization. Both series smoothed as 3-year moving averages.

Source: Compustat through WRDS for shares outstanding, closing share price and net income; Canadian Financial Markets Research Centre; Moody's Corporate Manuals through Mergent Webreports; Report on Business Top 1000 Companies; GDP from Historical Statistics of Canada (F1-13) and Cansim (Table 3800016).

home to approximately 153,000 corporations (listed and unlisted). By 2009, there were over 1.3 million. In 1956, the total equity market value of all firms listed on the TSX was approximately \$354 billion. By 2010, that number had swelled to \$2.2 trillion (in 2010 dollars).

We see in figure 5 that the top 60 Canadian-based firms account for fully 67 percent of all equity market capitalization and 60 percent of all corporate profit (at their peak). This is a staggering degree of concentration. So when we speak about Canadian business or the corporate sector, we are effectively referring to these 60 firms. They dominate the Canadian political economy, driving the accumulation process. How have these firms performed over time?

Figure 6 maps the performative evolution of these firms since 1950. What are we looking for in terms of performance? The equity market value of a firm is calculated by multiplying the price of a single share — a single unit of ownership — by the total number of outstanding shares. Investors typically evaluate the performance of a firm and its management on the basis of whether the share price is rising, stagnating or falling. Investors are drawn towards large, growing, and stable returns which come primarily in two forms: dividend income and capital gains. Over the long term the most important factor behind both is profit.

As figure 6 indicates, there is a very close correlation between the equity market capitalization of the top 60 firms and profit. Each series is smoothed as three-year moving averages to highlight the trend. Notice the pattern: profit moved cyclically but the overall trend was horizontal (or slightly downward) between 1950 and 1990.

Just as Canada entered into a TAIL regime, we saw an upward surge in this measure. Equity capitalization, too, moved horizontally for two decades before collapsing in the 1970s. The 1980s saw a gradual upward movement which gave rise to surging gains throughout the 1990s and 2000s.

It is important to note that the entire Canadian political economy is driven by the performance of the equity market and the equity market is effectively made up of these 60 firms. Many important decisions made in the Canadian political economy are conditioned by their performance and their values: decisions by businesses about whether to build new factories or expand the workforce; decisions by the Bank of Canada about interest rates and the money supply; decisions by commercial banks about acquisitions and lending; and decisions by governments about bailouts and stimulus. If investors are optimistic about the future, that optimism will be reflected in rising share prices. If pessimistic or panicked, we see declining or collapsing share prices (as witnessed in 2008-09). So the well-being of Canadians is tied in a real way to the outlook and sentiments of these dominant investors.

To briefly recap, we began by looking at distribution in aggregate terms (figures 3 and 4) before taking a disaggregated look at the concentration and performance of the 60 largest firms (figures 5 and 6). Is there a relationship between the performance of large firms and the top income share?

6. Differential Accumulation and the Top Income Share

THE FOLLOWING SECTION DRAWS extensively on the outlook, methods and arguments of Nitzan and Bichler. Their approach to political economy is novel in many ways and builds on their critique of existing frameworks, notably that of neo-classical economics.

Neoclassical economics claims that capitalists are like other “economic agents” insofar as they strive to “maximize” economic returns. The reasoning is simple enough: no upward limit has ever been identified toward which capitalists strive, hence they are profit maximizers.

This assumption may be deeply ingrained in the psyche of economists, but it won’t help us deal with the real world for two reasons. First, no one has any clue what the maximum profit of a given firm is or what the maximum return on a given security should be. Second, capitalists themselves don’t think in maximizing terms because they don’t exist in a vacuum.

In actuality, the performance of a CEO, hedge fund manager or global investor isn’t measured against an absolute standard like maximization but, rather, against a relative benchmark. There exists a “normal” rate of return which investors try to beat. Investors are conditioned to outperform rivals and accumulate faster than the average, i.e., they strive to accumulate *differentially*. The distinction might sound soft, almost semantic, but it is crucial. Investors compare their performance to some average. In the United States, the main equity market benchmark is the S&P 500. In Britain, it is the FTSE 100. In Canada, it is the S&P/TSX Composite Index. Large corporations strive to beat the average and this is the broader meaning of the term “performance.”

To illustrate the point, consider Berkshire Hathaway, the holding company controlled by billionaire investor Warren Buffet. At the height of the financial panic in

2008, Berkshire's annual return was -9.6 percent. Was that the "maximum" possible return that year? If we are unable to answer that question, then how are we to evaluate whether -9.6 percent represents a good return? There is not a soul on the planet capable of credibly answering the first question, including Warren Buffet himself. The second question can only be answered — indeed, is only intelligible — by looking at some benchmark, i.e., the average performance of a comparator group.

In 2008, the average performance of the S&P 500 was -37 percent.¹³ So Warren Buffet's firm outperformed the average by beating the main equity market benchmark. Benchmarking, not maximizing, is the only game in town and the actual measure of corporate performance, so if we wish to explain a phenomenon like income inequality, we need take this into account.

Shifting our thinking from absolute to differential accumulation yields a different set of questions and a new set of measures. Let's begin with differential capitalization. It is a ratio computed in three steps: the first step is to calculate the average capitalization of a firm within the top 60; the second is to calculate the average capitalization of all firms listed on the TSX; and the third is to divide the first computation by the second. This ratio provides us with the differential power of capital and it is plotted in figure 7 against the top income share.¹⁴

The two series are tightly and positively correlated over time, indicating that the income share of the richest 0.1 percent of Canadians is closely bound with the differential size and performance of the largest Canadian-based firms.

Perhaps this shouldn't surprise us. If the multinational corporation is the predominant form that business enterprise takes, and if it has a visible hand in shaping distributional outcomes, then we should expect that the people whose incomes are directly or indirectly tied to the market for corporate ownership and control to fluctuate along with it. These are the trend-setting incomes and they appear to be tied to the relative size and performance of the largest firms.

What is also striking about figure 7 is the change in the rate of growth upon the inception of a TAIL regime. In 1950, an average firm within the top 60 was five times as large as an average firm listed on the TSX. Forty years later, on the eve of the Canada-US FTA, that ratio had risen from five to six. In the 40 years prior to the TAIL regime, there was very little movement in differential firm size. Most of the growth in the corporate sector was either evenly distributed between large and small firms or favoured the small, generating differential decumulation. Since the inception of a TAIL regime, that ratio has risen from 6 to 23. The top 60 firms have effectively delinked from the rest of the corporate universe, which suggests that something dramatic happened precisely when the TAIL regime was institutionalized.¹⁵

The differential performance of the top 60 firms closely mirrors the income share of the top 0.1 percent over time, which reflects worsening income inequality in Canada with the rise of the richest 1 percent and 0.1 percent, as shown in figure 2.

Let's pause to consider what we're looking at. Capitalization is at the core of contemporary capitalism and, surprising as it may sound, the neoclassical orthodoxy

FIGURE 7 Differential Capitalization and the Income Share of the Richest 0.1%, 1950-2010



Note: Ratio of the average of the top 60 Canadian-based firms ranked annually by equity market capitalization and the average of all firms listed on the Toronto Stock Exchange.

Source: Compustat through WRDS for common shares outstanding and closing share price; Canadian Financial Markets Research Centre; TSX Review, e-Review, Fact Book (various years) and Banking and Finance Brief (1962) for total market capitalization and number of listed stocks; Veall (2010) for the top income share.

doesn't have a valid theory to account for it.¹⁶ Economists the world over have been conditioned for over a century to think of capital as an economic category anchored in material reality. They have been disciplined to separate it into different types, the most fundamental division being between the "real capital" or "capital goods" embodied in tools, machines and factories as well as the "nominal capital" or financial wealth associated with the equity and debt traded on the stock and bond markets.

This conceptual scheme is bolstered by accounting conventions which register capital as both the physical equipment whose quantities are listed on the left-hand side of a balance sheet under the asset column and the financial magnitudes — the debt and equity — on the right-hand side of the balance sheet under the liabilities and retained earnings columns. Neoclassical economics presupposes that profits are the reward for the productivity of capital. Indeed, the value of capital is supposed to be determined by its technical productive power. And because "capital goods" are a part of the production process, the owners of capital have a rightful claim against earnings, the proportion of which is determined by the marginal product of capital.¹⁷

As familiar and comforting as these claims may appear they are deeply flawed. Neoclassical economics is unable to tell us not only what capital is, but how to measure it, what governs its rate of accumulation, and importantly, what gets accumulated. This is significant. Without a way of quantifying capital we lose the production function and the marginal productivity theory of distribution.¹⁸ The inability of neoclassical economics to quantify capital without resorting to prices means that distribution cannot be explained by the productivity of capital (or labour or land, for that matter). And here's the kicker: if the distribution of income and income in-

equality cannot be explained with reference to productivity then it may validly be thought to manifest, in part, social power. This conclusion is going to make some people uncomfortable and it probably should. But it is a seemingly inescapable consequence of the bankruptcy of the neoclassical theory of capital and distribution.

In the practice of contemporary capitalism, the theoretical obstacles identified are irrelevant because capitalists themselves ceased to think of capital as physical equipment more than a century ago. The orthodoxy has simply failed to catch up. With the rise of the modern corporation in the late-nineteenth century, capitalists came to think of capital as a corporation's equity and debt, the magnitude of which appears as capitalization. It is for reasons like this that Nitzan and Bichler assert that capital is not tools, machines, factories, and technical knowhow — it is finance and only finance. Capital is capitalization, i.e., the debt and equity on the right hand side of the balance sheet, not the material and immaterial equipment on the left.

Irving Fisher, perhaps the greatest of all American economists, took “income [to be] the alpha and omega of economics” (1930: 13). If this is true — if what the study of economics strives for is an explanation of income streams — then how does capitalization and distribution fit into the picture? According to Nitzan and Bichler (2009), when an investor buys an asset, he or she acquires a claim on future earnings, or legal title to an income stream. Capitalization is the process of discounting to present value the expected risk-adjusted future earnings associated with an asset. The accumulation of assets under a single owner or collection of owners entails the accumulation of income streams. And the changing distribution of asset ownership entails a changing distribution of income streams.

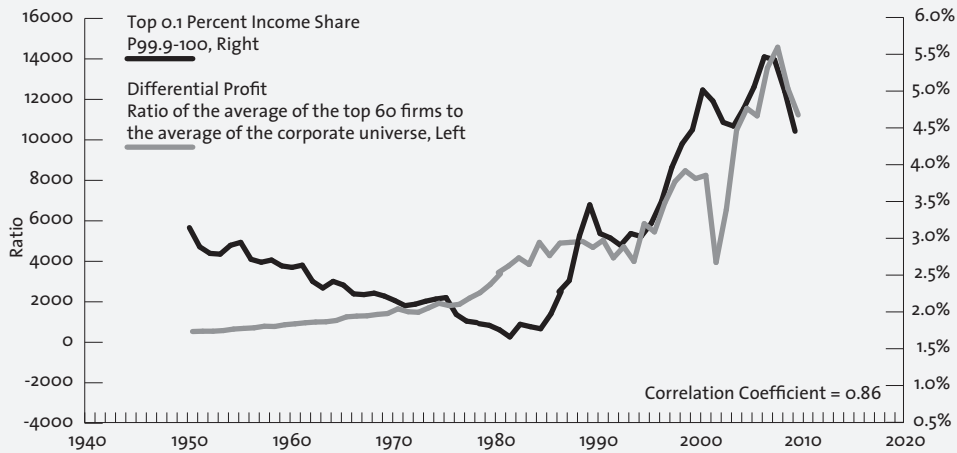
Historically speaking, the magnitude of capital and its rate of accumulation hinge mostly on earnings. In general, the higher the earnings the larger the capitalization. The faster the growth of earnings, the more rapid will be the rate of accumulation.¹⁹

So, if we are to explain the growth of differential capitalization as portrayed in figure 7, we need to examine the pace of earnings growth. We will begin by looking at differential profit, which is also a ratio. The numerator is made up of the average pre-tax profit of a firm within the top 60 while the denominator is made up of the average pre-tax profit of all Canadian-based firms, listed and unlisted.²⁰

Figure 8 plots differential profit against the top 0.1 percent income share. In 1950, the average profit of a firm within the top 60 was 234 times larger than an average firm in the corporate universe. By 2007, that ratio had risen to 14,278 — a 60-fold increase in six decades. And the pattern of this growth is tightly correlated with the pattern of the top income share.

To briefly recap, the generative process of the political economy is differential capitalization (figure 7), and differential earnings are the principal driver of differential capitalization (figure 8). Investors are forward-looking creatures, which means they are not only concerned with realized earnings, but expected future earnings as well. And because future earnings are inherently uncertain, investors are also concerned with the risk and hype associated with those earnings.

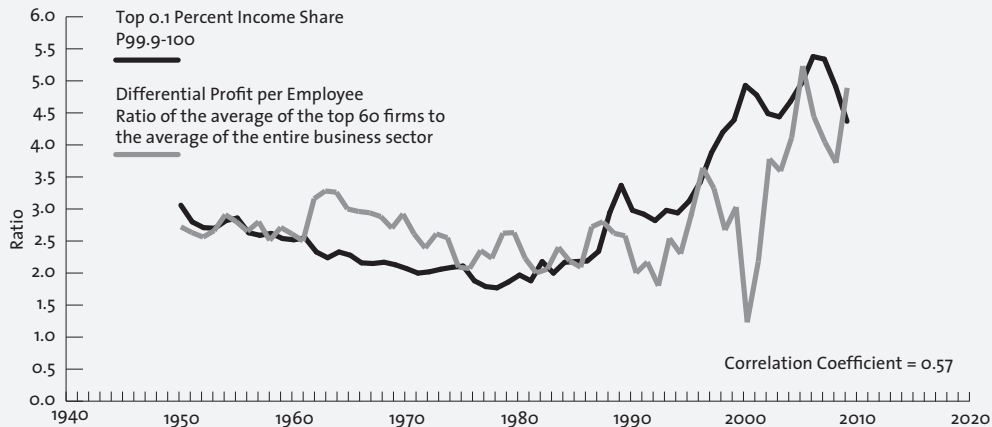
FIGURE 8 Differential Profit and the Income Share of the Richest 0.1%, 1950-2009



Note: Ratio of the average of the top 60 Canadian-based firms ranked annually by equity market capitalization and the average of all firms, listed and unlisted. Profits are pre-tax. Total number of corporations in the corporate universe interpolated between 1989 and 1998 based on trend growth rate.

Source: Compustat through WRDS for shares outstanding, closing share price and net income; Canadian Financial Markets Research Centre; Moody's Corporate Manuals through Mergent Webreports; Report on Business Top 1000 Companies; IMF through Global Insight for total corporate profit; total number of corporations from Cansim and the Bryce Report (1978); Veall (2010) for the top income share.

FIGURE 9 Differential Profit per Employee and the Income Share of the Richest 0.1%, 1950-2010



Note: Profits are pre-tax.

Source: Compustat through WRDS for shares outstanding, closing share price, net income and employees; Canadian Financial Markets Research Centre; Moody's Corporate Manuals through Mergent Webreports; Report on Business Top 1000 Companies; corporate profit from Cansim through Global Insight; private sector employment from Cansim (Table 2820012) and Historical Statistics of Canada (D528-539); Veall (2010) for the top income share.

The framework developed by Nitzan and Bichler posits that differential capitalization by dominant capital can happen using any combination of the following: raising differential earnings, raising differential hype or lowering differential risk. The first, raising differential earnings, is the most potent and has primacy over the long haul. Differential earnings per employee, which they label “depth,” is one component of differential earnings and it captures the “elemental power per unit of organization” (Nitzan and Bichler 2009: 328). This measure is plotted in figure 9 against the top income share.

As the chart indicates, differential depth is positively correlated with the top income share across six decades. It takes the average profit per employee of the top 60 firms and divides it by the average profit per employee of the entire business sector. Data does not exist for the total number of employees in the corporate universe, but utilizing employment in the business sector will give us a close approximation. By controlling for number of employees we get a view into the organizational power large firms have apart from their size (measured by the number of employees per firm).

If figures 7 through 9 indicate that the differential size and performance of the top 60 firms closely shadows the level and pattern of the top income share, what happens as firms grow relatively larger?

7. The Visible Hand of the Mega-Corporation

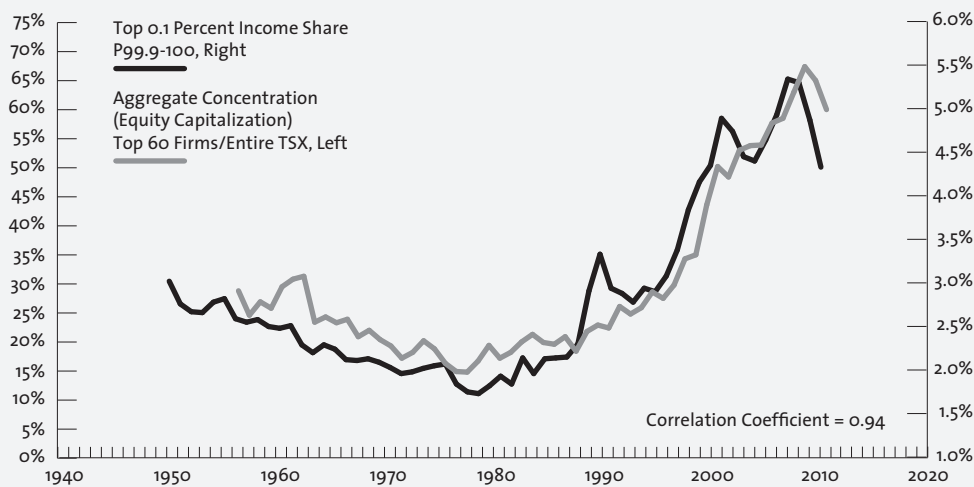
IN THE LATE-EIGHTEENTH CENTURY, Adam Smith could plausibly claim that individuals pursuing their own self-interest in tandem with the disciplinary effect of intense competition between many small firms could effectively regulate the economic life process. The market mechanism, not authority or tradition, would order and organize society and it would do so in a way that would generate social harmony and help enlarge the “wealth of nations” (Smith 1776: 484-85).

Two centuries later, Alfred Chandler Jr. (1977), the Harvard business historian, observed that the emergence of the modern corporation in the late-nineteenth century signalled the eclipse of Smith’s competitive capitalism in favour of managerial capitalism. Chandler’s key claim was that the modern corporation, because of its overwhelming size and structure, effectively replaced the market mechanism. The coordination and allocation of resources would no longer be led by the “invisible hand” of the market, but would be actively steered and administered by the visible hand of the mega-corporation.²¹

Before dealing with the direct effects of large firms, let’s just see how concentration in the equity market stacks up against the top income share. Figure 10 shows a remarkably tight correlation between concentration in the equity market and the top income share. The two measures are very tightly correlated, indicating that corporate concentration in the equity market plays a role in the income formation of top earners.

We are tracking how much of the total value of all firms listed on the TSX are accounted for by the top 60 Canadian-based firms. In 1956, the top 60 made up 29 percent of all equity market value. That number would decline for two decades, reaching a low of 15 percent in 1977 before climbing upward. On the eve of NAFTA,

FIGURE 10 Corporate Concentration and the Income Share of the Richest 0.1%, 1956-2010



Note: The Top 60 are the largest Canadian-based firms ranked annually by equity market capitalization.

Source: Compustat through WRDS for shares outstanding and closing share price; Canadian Financial Markets Research Centre; TSX Review, e-Review and Factbook for total equity capitalization; Veall (2010) for the top income share.

the top 60 would account for 25 percent of the TSX and then surge upwards to 67 percent by 2008. This is a relative measure, not an absolute one. What the evidence tells us is that Canadians have experienced a higher degree of corporate concentration and this phenomenon closely shadows the concentration of income in the hands of the elite few.

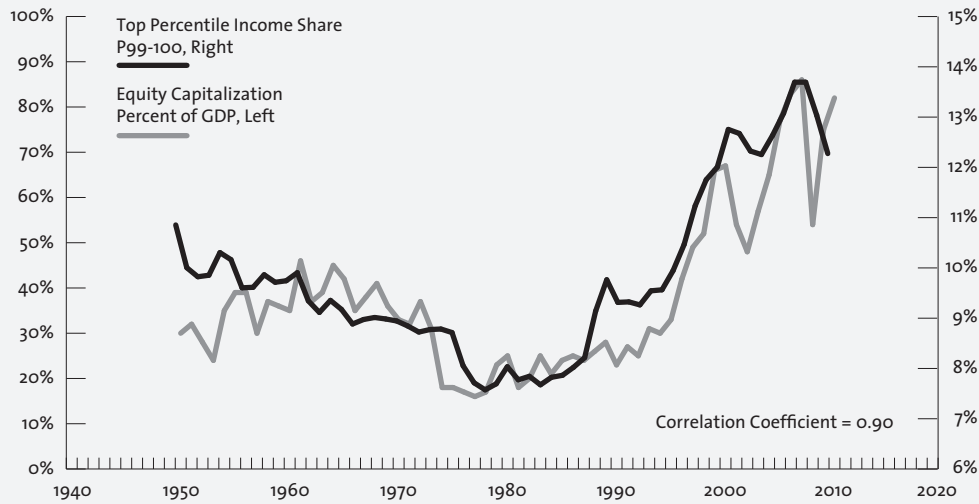
Figure 11 contrasts the equity capitalization of the top 60 firms as a percentage of GDP with the income share of the richest 0.1%. Once again we see a startlingly tight correlation. But why would larger relative firm size and heightened concentration have this effect?

Michal Kalecki, the great Polish political economist, tried to theorize economic power. As he saw it, heightened concentration would lead to the formation of giant corporations whose relative size meant they did not operate in perfectly competitive markets and were not price-takers. Rather, they could impact overall market prices through practices like tacit agreement or other cartel-like behaviour where a leading firm fixes prices which other firms follow suit.

These large firms effectively exist, then, in a separate political economy than the majority of small- and medium-sized firms who are price-takers and are relatively powerless. Large firms are price-shapers and price-makers. They have a visible hand in shaping not only the industrial process, but the distribution of income, and therefore the growth or reduction of income inequality as well.

Kalecki conceived of the “degree of monopoly” as a quantitative proxy for economic power, the effect of which is disclosed in the markup. The markup is measured as the percent of profit in the sales price, or total net profit divided by total revenue. It

FIGURE 11 **Equity Capitalization of the Top 60 Firms and the Income Share of the Richest 1%, 1950-2010**



Source: Compustat through WRDS for shares outstanding and closing share price; Canadian Financial Markets Research Centre; GDP from Historical Statistics of Canada (F1-13) and Cansim (Table 3800016); Veall (2010) for top income share.

represents the per dollar percentage of revenue accruing to the owners of the firm in the form of profit.

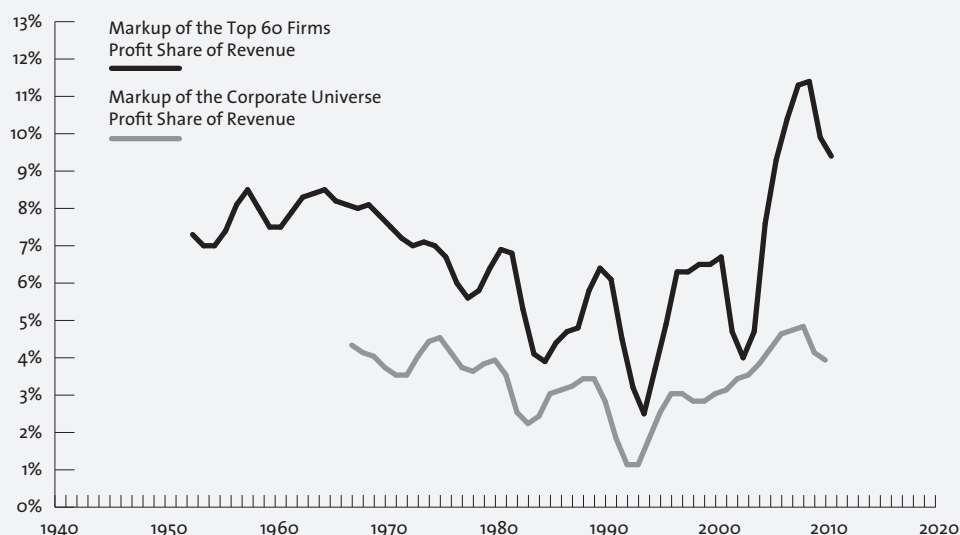
A major counteracting force to the degree of monopoly, Kalecki thought, was the strength of unions, whose relative bargaining position is improved when the ratio of profit margins to wages increases. Changes in the degree of monopoly have decisive importance for the distribution of income between workers and dominant corporations. How has the degree of monopoly changed across the post-war era?

Figure 12 presents the degree of monopoly for the top 60 firms and for the corporate universe. These measures are highly cyclical, so both series are smoothed as three-year moving averages to more easily identify the secular trend.

The overall pattern is U- or V-shaped, with both series falling throughout the golden age and rebounding after the instituting of a TAIL regime. Historically speaking, we are now “off the chart” when it comes both to relative firm size and the markup. What’s more, the markup of the top 60 firms is considerably higher than that of the corporate universe, which is just as this theory would predict. Larger relative firm size means less competitive pressure and greater pricing power.

This reinforces the trend we’ve seen elsewhere. The top income share is U-shaped, along with the markup, while the national wage bill and union density take an inverted U-shape. But is there a relationship between the pricing power of large firms as manifest in the markup and relative firm size? Figure 13 contrasts concentration in the equity market with the markup of the top 60 firms. Because these are such broad measures and we are looking at them over the long term, they are smoothed as three-year moving averages.

FIGURE 12 The 'Degree of Monopoly', 1952-2010



Note: Profits are after tax. Both series smoothed as 3-year moving averages.

Source: Compustat through WRDS for shares outstanding, closing share price, total revenue and net income; Canadian Financial Markets Research Centre; Moody's Corporate Manuals through Mergent Webreports; Report on Business Top 1000 Companies; IMF through Global Insight for corporate profit; Cansim for total corporate revenue (Catalogue 61-207 and Tables 1800001-1800003).

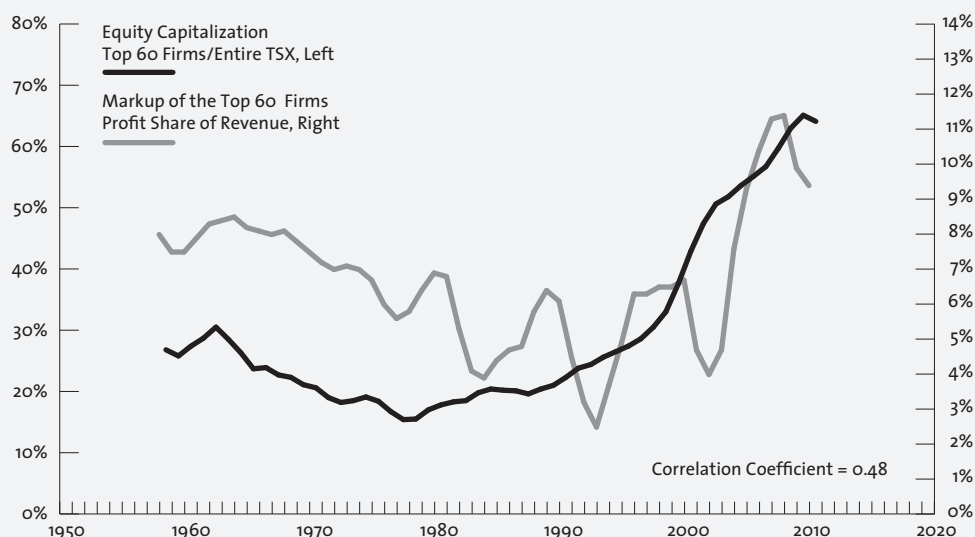
Given the breadth of the indicators, there is a surprisingly tight correlation. Both measures fell throughout the golden age, which means that as firms shrank in relative size, they lost pricing power. In the past two decades, both measures have surged upwards, signalling the re-establishment of pricing power by large firms. So Kalecki was correct: larger relative firm size translates into greater pricing power.

What bearing does this have on distribution? We'll address this question in two parts. To begin, Hugh Mackenzie's (2012) recent report, *Canada's CEO Elite 100*, examines executive compensation in Canada. Of the top 100 executive salaries examined, how many of them derive an income from a firm within the top 60? It turns out that 59 of them do, with a further 16 deriving their incomes from firms that are in the top 100 (in positions 61 through 100).²²

This makes perfect sense. Larger firms have greater pricing power, higher profits, more cash flow and so more money to spend on executive salaries. And it is those very high executive incomes — among Canada's richest 0.1 percent — that are playing a key role in driving income inequality across Canadian society.

So that's one way in which relative firm size and pricing power figures in distribution. The second way is presented in figure 14.²³ It turns out that the markup of the top 60 firms closely resembles the distributional struggle between capital and labour over profits and wages. Over a 60-year period, there is a tight correlation between the two measures despite their relative breadth. Again, each series is smoothed as three-year moving averages to more easily identify the secular trend.

FIGURE 13 Corporate Concentration and Pricing Power, 1958-2010



Note: The top 60 are the largest Canadian-based firms ranked annually by equity market capitalization. Both series smoothed as 3-year moving averages.

Source: Compustat through WRDS for shares outstanding, closing share price, total revenue and after-tax profit; Canadian Financial Markets Research Centre; Moody's Corporate Manuals through Mergent Webreports; Report on Business Top 1000 Companies; TSX Review, e-Review and Factbook.

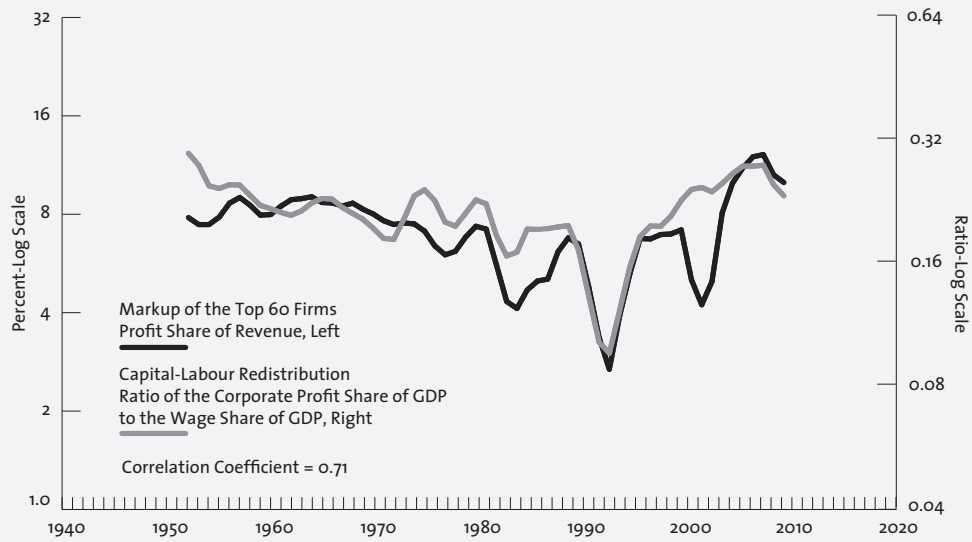
Recall figure 4, which demonstrated that the strength of organized labour as manifest in union density has a direct bearing on the national wage bill and inflation-adjusted wages. Historically, unions have played a role in redistributing income from corporations to workers. We now have a picture of what is at stake in that distributional struggle. As workers deepened unionization throughout the golden age, pushing up wages and enlarging the ranks of the middle class, the arithmetic consequence was the squeezing of profit margins (the markup).

The process culminated in the 1970s and the socio-political-economic-ideological disruption that ensued displaced the Keynesian welfare state as the core way to manage the political economy. It was eclipsed by neoliberal globalization. Distributional outcomes began to move in the opposite direction throughout the 1980s and would accelerate in the 1990s after the introduction of the TAIL regime.

Figure 15 shows a clear relationship between the institutional strength of large firms as manifest in the profit markup and the institutional strength of organized labour in the form of union density. Both series smoothed as five-year moving averages to highlight the long term trend.

The two series are mirror images of each other, that is, they are tightly and *negatively* correlated. As the ranks of organized labour swell and collective bargaining pushes up wages, profit margins get squeezed. The instituting of the TAIL regime marks a decisive turning point, with organized labour seeing a dramatic fall in its membership and large firms seeing a corresponding enlargement in their markup.

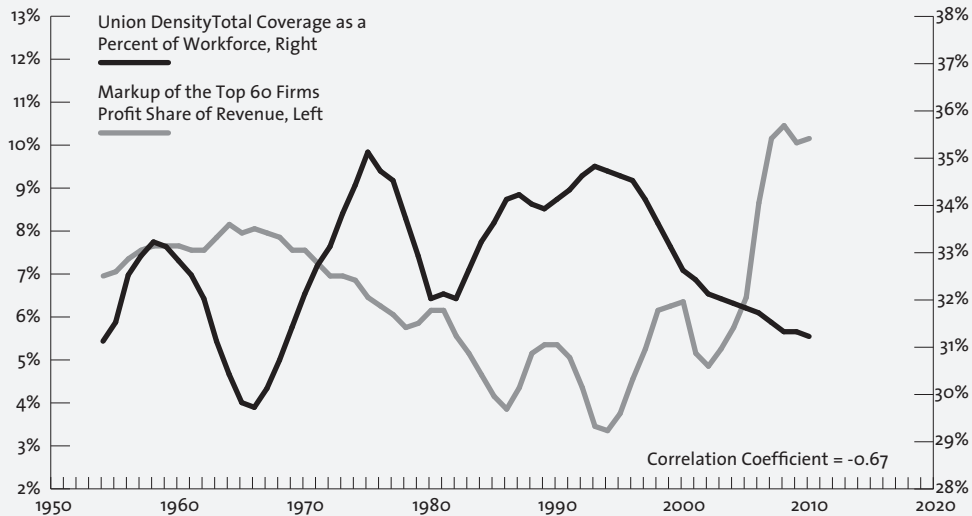
FIGURE 14 Markup of the Top 60 Firms and Capital-Labour Redistribution, 1952-2010



Note: Both series smoothed as 3-year moving averages.

Source: Compustat through WRDS for shares outstanding, closing share price, total revenue and net income; Canadian Financial Markets Research Centre; Moody's Corporate Manuals through Mergent Webreports; Report on Business Top 1000 Companies; GDP, wages and salaries and corporate profit from Historical Statistics (F1-13) of Canada and Cansim (Table 3800016).

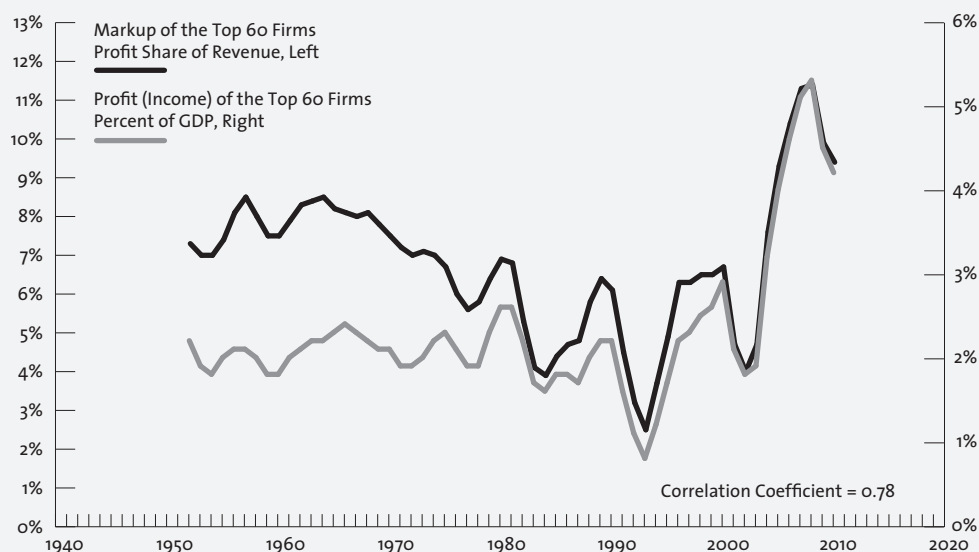
FIGURE 15 Institutional Strength: Big Business vs Organized Labour, 1954-2010



Note: Both series smoothed as 5-year moving averages.

Source: Union density from Historical Statistics of Canada (E175-177) and Cansim Tables (2790026 and 2820078); Compustat through WRDS for shares outstanding, closing share price, total revenue and net income; Canadian Financial Markets Research Centre; Moody's Corporate Manuals through Mergent Webreports; Report on Business Top 1000 Companies.

FIGURE 16 Top 60 Firms: Markup and Income Share, 1952-2010



Note: Both series smoothed as 3-year moving averages.

Source: Compustat through WRDS for shares outstanding, closing share price, total revenue and net income; Canadian Financial Markets Research Centre; Moody's Corporate Manuals through Mergent Webreports; Report on Business Top 1000 Companies; GDP from Historical Statistics of Canada (F1-13) and Cansim (Table 3800016).

We are finally getting closer to an explanation. If the markup is a measure of the power of large firms and if it is inversely related to the strength of organized labour, then this strongly supports Kalecki's thesis. Distributional struggle closely tracks the degree of monopoly, which itself is a quantitative proxy for the power of dominant capital.

What remains to be addressed is the bearing this has on differential business performance. If the political economy, and income inequality are driven by large firms trying to differentially accumulate, and if differential accumulation is governed over the long haul by earnings, is there a relationship between the markup (i.e., pricing power) of the top 60 and their income share (i.e., distributive power)?

The answer is yes. Figure 16 shows a very tight correlation between the income share (earnings) of the top 60 and the markup (profit share of revenue). Both series are smoothed as three-year moving averages to more easily identify the trend.

We have almost fully rounded the circle. Income inequality in Canada is being driven by the richest 1 and 0.1 percent (figures 1-2). This distributive outcome is closely mirrored by the struggle between labour and corporations over wages and profits (figure 3). We know that labour unions have an impact on the national wage bill (figure 4) and so broadly affect distribution.

On the other hand, we have the largest 60 Canadian firms which are heavily concentrated and which dominate the Canadian political economy (figure 5). Their relative size is governed by their performance, the principal driver of which is earn-

ings (figure 6). These large firms are driven to accumulate differentially and this has a bearing on the top income share (figures 7-9). Larger relative firm size—itsself a consequence of differential accumulation—leads to greater pricing power, both of which shape the distribution of income (figures 10-16).

Some questions follow from this. First, how have large firms managed to increase their earnings? And second, does state policy play a role? If the income share of the top 60 firms is the driving force behind the entire process, then we need to begin to understand how and why this happens.

8. The Globalization of Canadian Business (Ownership)

IN ORDER TO ANSWER THESE questions we need to briefly review one of the key drivers of corporate development across the twentieth century. The modern corporation as we know it came into being in the late-nineteenth century as a consequence of a series of court decisions, mainly in the United States. These legal rulings reorganized business enterprise and paved the way for the transformative effect this institution would have on the lives of North Americans.

The twentieth century was characterized by the emergence of big business followed, in turn, by big government and big labour. Firms grew in relative size primarily by merging with or acquiring other firms. The evolution of corporate amalgamation was anything but haphazard, unfolding instead in four broad “waves.”²⁴

In the so-called monopoly wave (1887-1904), firms expanded by combining with other firms within their own industries. Corporate restructuring proceeded through an oligopoly wave (1916-1929), in which large, vertically-integrated firms came into being. This was succeeded by a conglomerate wave (1960s-1970s), in which large firms moved horizontally across sectors, pushing up against national borders. And a fourth merger wave began in the 1980s, which might aptly be called global.

The transition between the third and fourth merger waves is significant for our story. Having become national in scope by the 1970s, continued expansion by large firms required a new universe of take-over targets. The political engineering of neo-liberal globalization, i.e., the internationalization of ownership and control, played an enabling role.

What happens when Canadian investors or Canadian firms “invest” in a foreign country?²⁵ Because economists tend to think of capital in material-productive terms, i.e., as capital goods or machinery and equipment, the popular mythology is that

capital “flows” across state borders and that this has some bearing on productive capacity and industrial efficiency.

But this is rarely what happens in practice. Liberalized investment has little to do with the movement of machines or equipment. Cross-border investment is more often a rearranging of ownership claims and nothing more.

“Capital mobility” and “investment liberalization” effectively lead to a reconfiguration of the structure of corporate ownership. And when ownership is restructured the distribution of income changes along with it. Why is this so?

A corporation is a legal-organizational vehicle which grants the owners lawful claims on future (and realized) earnings. And so as firms grow larger by acquiring other firms the legal claims of the resulting owners grow in tandem with the newly enlarged income streams. This is the real motive for globalization. The cross-border flow of goods and services plays a role too, but the overwhelming effect of liberalized trade and investment is to increase cross-border acquisitions.

What evidence is there to support this contention? Merger and acquisition data do not go back very far historically, but we can get a glimpse of this process by consulting a few facts supplied by the United Nations.²⁶

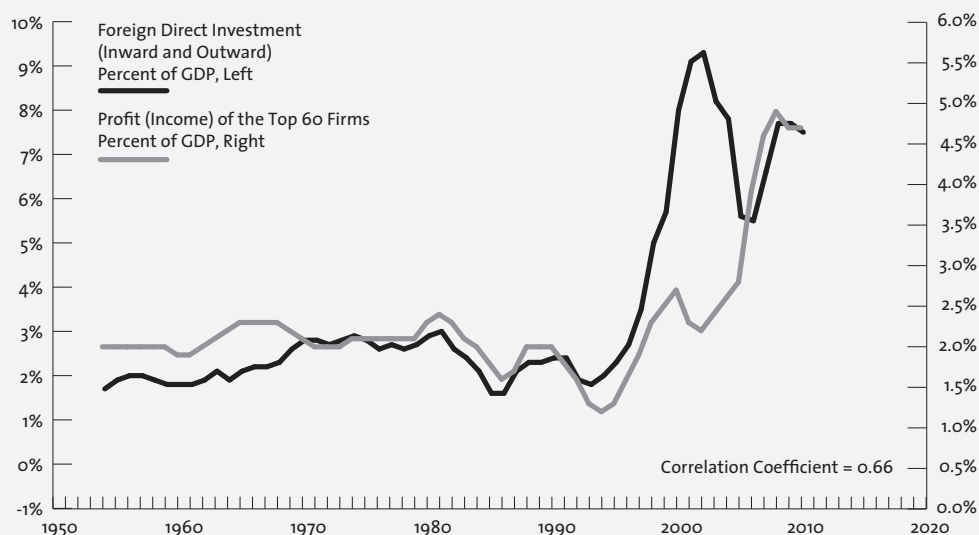
First, an overwhelming percentage of cross-border mergers and acquisitions are actually just acquisitions (about 97 percent). And most acquisitions are for majority, as opposed to minority, stakes — approximately 67 percent create majority ownership, while 33 percent create minority ownership. Second, the total number (as opposed to dollar value) of cross-border mergers and acquisitions grew at an astounding annual rate of 42 percent between 1980 and 1999. And finally, of total global foreign direct investment in 1999, over 80 percent of it was made up of mergers acquisitions, a truly stunning figure.

In the developing world, what’s called green-field investment, or the building of new plant and equipment, is still dominant, but in the developed world the majority of cross-border investment takes the form of acquisitions.²⁷ Nitzan and Bichler map the history of investment in the United States by comparing corporate amalgamation (mergers and acquisitions) and green-field investment.²⁸ At the close of the nineteenth century, for every dollar spent on green-field investment, less than one cent was spent on mergers and acquisitions. One hundred years later, every dollar spent on green-field investment saw more than two dollars spent on mergers and acquisitions (Nitzan and Bichler 2009: figure 15.2, p. 338).

This is an important change in the history of capitalism. Mergers and acquisitions as a percentage of gross fixed private domestic investment was less than one percent in 1896 and would surpass 200 percent by the first decade of the twenty-first century.

Recall that the instituting of a TAIL regime acted as an inflection point in most of our measures. How does this fit with the set of facts we just reviewed? The logic of globalization is such that in order for large firms to continue to accumulate, they need a new universe of take-over targets. And the political engineering of continental integration via the FTA and NAFTA did just that. The TAIL-era ushered in

FIGURE 17 Foreign Direct Investment and the Income Share of the Top 60 Firms, 1954-2010



Note: Both series smoothed as 5-year moving averages.

Source: Compustat through WRDS for shares outstanding, closing share price and net income; Canadian Financial Markets Research Centre; Moody's Corporate Manuals through Mergent Webreports; Report on Business Top 1000 Companies; Balance of International Payments (Capital and Financial Accounts) through Cansim (Table 3760002); GDP from Historical Statistics (F1-13) of Canada and Cansim (Table 3800016).

an explosion of cross-border investment. Continental integration effectively led to a fairly constant restructuring of North American corporate ownership. And when ownership changes hands, the associated legal claims on future earnings change hands as well, which has a direct bearing on the distribution of income.²⁹

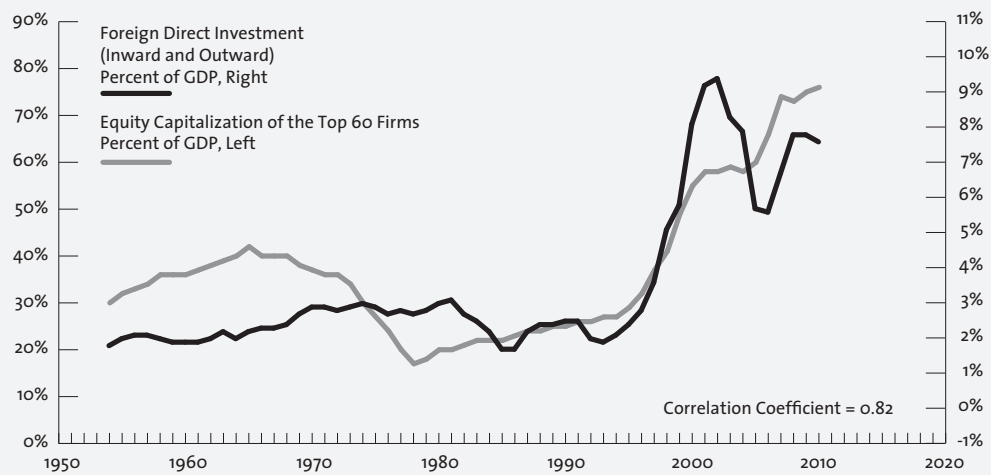
If the top 60 firms effectively dominate the corporate sector, and if their differential performance shapes the top income share, then what impact did the TAIL regime have on their relative size and earnings?

Figure 17 presents the relationship between the income share (earnings) of the top 60 firms and foreign direct investment (FDI). The income share of the top 60 and FDI are compared to GDP in order to give us a scale of comparison, i.e., in order for these measures to have meaning they must be made relative to something. Both are smoothed as five-year moving averages to capture the long term trend.

The sum of inward and outward FDI gives us a sense of the changing magnitude of total Canadian assets owned by foreign investors and the foreign assets owned by Canadian investors. And because the effects of FDI tend to be cumulative from the standpoint of earnings, we would expect that the income share of the top 60 firms would continue to increase even as the pace of FDI slows down.

The two series are tightly and positively correlated over the long term. Note the pattern: both measures move horizontally for four decades before surging upwards with the inception of the TAIL regime. So the TAIL regime has had enormous redistributive effects, as this and earlier figures testify.

FIGURE 18 Foreign Direct Investment and the Equity Capitalization of the Top 60 Firms, 1954-2010



Note: Both series smoothed as 5-year moving averages.

Source: Compustat through WRDS for shares outstanding and closing share price; Canadian Financial Markets Research Centre; Balance of International Payments (Capital and Financial Accounts) through Cansim (Table 3760002); GDP from Historical Statistics (F1-13) of Canada and Cansim (Table 3800016).

Over the past decade, annual FDI flows have been lower than they were in the 1990s, but the income share of the top 60 continued to rise and the pattern they exhibit follows the pattern of FDI. Also note that Canadian firms of all sizes may trade with U.S.-based firms or sell their products to American customers. However, corporate amalgamation and cross-border acquisitions will be a game played almost exclusively by large firms. So it makes sense that the income share of the top 60 firms would move in tandem with cross-border investment.

And what of capitalization? Recall that corporate performance is driven primarily by earnings, but not earnings alone. Investors are also sensitive to risk and hype. Profits, risk and hype all have a bearing on what an investor is willing to pay for a unit of corporate ownership and the entire equity market is shaped by the buying and selling of these ownership claims by investors. So how did the instituting of a TAIL regime affect the equity market value of the top 60 firms?

Figure 18 presents the relationship between foreign direct investment and the equity capitalization of the top 60 firms. Both series are smoothed as five-year moving averages to highlight the long-term trend.

The two series are tightly and positively correlated over six decades, indicating that, in fact, the political engineering of the TAIL regime had a decisive impact in boosting relative firm size and deepening concentration in the equity market. On the other side of the ledger, what impact did the TAIL regime have on unions and wages? Larger relative firm size, itself partly a consequence of cross-border acquisitions, coupled with enhanced capital mobility, leads to greater pricing power for employers and better enables business to resist unionization and wage demands. The combined effect is de-unionization and stagnant wages, as the evidence amply demonstrates.³⁰

9. Conclusion

OVER THE PAST GENERATION, Canadians have been witness to steadily increasing income inequality and surging distributional gains by the highest income echelons. This investigation has tried to demonstrate that the concentration of income in the top income brackets shadows the differential size and performance of the largest Canadian-based firms. By the standards offered by post-war Canadian history, we now have unprecedented concentration of both income and corporate power.

This investigation has also tried to demonstrate that the distribution of income is shaped by the major institutions of the Canadian political economy, notably large firms, labour unions and the state.

Neoclassical economics makes a series of assumptions about the distribution of income — the most important being that acquisition of wealth entails production of it. If Canadians on the upper end of the income hierarchy enjoy a greater share of national income, it is assumed that they created it. This presupposition is derived from the orthodox belief that production and distribution stand in a linear relationship and are two sides of the same coin.

But this assumption is questionable. If we are serious about making sense of the distribution of income and worsening income inequality, an absolute prerequisite is an examination of the distribution of corporate ownership. Delineating who effectively owns and controls the Canadian political economy, and the changing concentration of that ownership, would contribute to an explanation of the changing distribution of income.

The political economy of the Keynesian welfare state saw robust economic growth, a rapid expansion of unions, wage gains and a corresponding bulge in the ranks of the middle class. Income was redistributed from capital to labour and the incomes of working and middle class Canadians grew at a faster clip than that of the establishment. The last three decades of neoliberal globalization has seen this process

go into reverse. Pro-business, anti-labour policies on the part of government, combined with investment liberalization via NAFTA, have weakened the majority of working Canadians' ability to secure wage gains. Those efforts are dwarfed by the largest corporations, who wield an unprecedented degree of power. When it comes to identifying contributors to worsening income inequality in Canada, look at the corporate power and consider it tantamount to a smoking gun.

**TABLE 2 Differential Accumulation and the Top Income Share:
Data and Correlation Coefficients**

Year	Differential Capitalization	Differential Profit	Differential Profit Per Employee	P99.9-100
1950	5.5	234	2.6	3.06
1951	5.5	250	2.6	2.80
1952	6.1	250	2.5	2.71
1953	5.5	281	2.6	2.70
1954	6.8	355	2.8	2.82
1955	4.3	389	2.7	2.86
1956	5.4	417	2.6	2.63
1957	4.7	496	2.7	2.59
1958	5.1	483	2.4	2.62
1959	4.9	570	2.6	2.54
1960	5.5	615	2.5	2.52
1961	5.7	667	2.4	2.55
1962	5.9	704	3.1	2.33
1963	4.3	715	3.2	2.24
1964	4.5	779	3.2	2.33
1965	4.3	959	2.9	2.28
1966	4.4	996	2.9	2.16
1967	3.8	1,010	2.9	2.15
1968	4.0	1,079	2.8	2.17
1969	3.9	1,122	2.6	2.13
1970	3.8	1,353	2.8	2.07
1971	3.3	1,212	2.5	2.00
1972	3.6	1,185	2.3	2.02
1973	4.2	1,403	2.5	2.06
1974	4.0	1,629	2.5	2.09
1975	3.5	1,514	2.0	2.11
1976	3.2	1,579	2.0	1.88
1977	3.1	1,889	2.3	1.79
1978	3.4	2,149	2.2	1.77
1979	3.7	2,559	2.6	1.86
1980	3.3	3,093	2.6	1.97

TABLE 2 **Differential Accumulation and the Top Income Share:
Data and Correlation Coefficients (con't)**

Year	Differential Capitalization	Differential Profit	Differential Profit Per Employee	P99.9-100
1981	3.7	3,012	2.2	1.88
1982	4.1	2,788	1.9	2.18
1983	4.7	2,439	2.0	2.00
1984	4.6	3,063	2.3	2.17
1985	4.7	2,945	2.1	2.18
1986	5.5	2,844	2.0	2.19
1987	5.2	3,575	2.6	2.34
1988	6.0	4,686	2.7	2.95
1989	6.2	4,390	2.5	3.37
1990	5.9	4,739	2.5	2.98
1991	6.7	3,872	1.9	2.92
1992	6.2	4,424	2.1	2.82
1993	6.6	3,695	1.7	2.98
1994	7.5	5,564	2.5	2.94
1995	7.2	5,155	2.2	3.12
1996	8.1	6,587	2.9	3.42
1997	9.8	7,645	3.6	3.88
1998	10.0	8,177	3.2	4.20
1999	12.8	7,791	2.6	4.39
2000	14.3	7,950	3.0	4.93
2001	13.3	3,646	1.2	4.78
2002	14.6	6,262	2.1	4.49
2003	15.3	10,191	3.7	4.44
2004	16.2	11,259	3.5	4.68
2005	18.9	10,887	4.0	4.97
2006	20.1	13,260	5.2	5.38
2007	22.2	14,278	4.4	5.34
2008	23.3	12,235	4.0	4.91
2009	21.6	10,934	3.6	4.37
2010	20.7		4.8	
Correlation Coefficient	0.93	0.86	0.57	

Endnotes

- 1 See their *Capital as Power: A Study of Order and Creorder* (2009) for an overview. This book and plenty of other materials are freely available on their website: <http://bnarchives.yorku.ca/>.
- 2 Literature on the economics of happiness would suggest that the relationship between national income per capita and happiness may be more complex than Wilkinson and Pickett admit. See Easterlin (2001), Easterlin, et. al. (2010), Stevenson and Wolfers (2008), Helliwell and Barrington-Leigh (2010) and Helliwell, et. al. (2012: chapter 2), for a small sample.
- 3 Canadian national income per capita for 2011 from OECD (constant prices, constant exchange rate): <http://stats.oecd.org/>.
- 4 Figures on the top income share have been updated to 2009 based on data provided by Michael Veall in July of 2012.
- 5 Unemployment rate computed from Historical Statistics of Canada, Series D124-133.
- 6 Nitzan and Bichler's argument resembles arguments made by Michal Kalecki in his 1943 essay, "The Political Aspects of Full Employment." Unemployment, Kalecki argues, is an essential tool for disciplining the workforce. See a collection of his essays in Kalecki (1971).
- 7 We might just note that the neoclassical orthodoxy's habit of the thinking of income formation in isolated and absolute terms represents a break from the outlook of the classical political economists that preceded them. From David Ricardo and John Stuart Mill right through Karl Marx, the classical political economists conceived of the political economy as a terrain of conflict between different social classes who were engaged in a perpetual struggle over wages, profits and rent.
- 8 This claim does not preclude the possibility that the interests of capitalists and workers within sectors often converge, especially in the short run (e.g., as they did during the North

American auto bailout of 2008-09). Over the longer term, however, the interests of workers and capitalists as classes tend to coalesce. See Frieden (1991) for an elaboration of the specific-factors model.

- 9 A note about verbiage: social scientists tend to use the term “free trade” to cover agreements like NAFTA. This is a very old habit and one which is potentially misleading. The image that comes to mind when we use the term “free trade” is of two individuals exchanging goods across a border. But agreements like NAFTA are about a good deal more than the cross-border movement of commodities. The significance of multilateral investment treaties like NAFTA comes with cross-border acquisition, ownership and control, not just the exchange of commodities. We will return to this subject in section 7, but in the meantime trade and investment liberalization — TAIL for short — will be used in place of “free trade.”
- 10 In 2009 99.4% of all businesses registered in Canada were classified as small, 0.4% were classified as medium and 0.1% as large (computations based on data in Cansim Table 1790005).
- 11 This analysis will break with their definition of dominant capital, choosing instead to use it to denote the largest Canadian-based firms trading on Canadian equity markets.
- 12 Data are unavailable prior to 1956 for the concentration of equity capitalization, 1961 for net profit and 1965 for total revenue.
- 13 Both figures from Berkshire Hathaway’s annual report.
- 14 See Table 2 at the end for differential accumulation data and correlation coefficients.
- 15 Note that because we are using averages, not sums, it does not matter that we hold the numerator constant at 60 while the denominator grows.
- 16 See Cohen and Harcourt (2003) for a review of the Cambridge Capital Controversy, a subject which every economics student (nay, every aspiring social scientist) should be taught, but few are. Chapter 6 of Keen’s (2004) superb book pulls apart the orthodox theory of capital in some detail. See Veblen (1908a, 1908b, 1908c and 1908d) for the beginnings of the dismantling of the neoclassical theory of capital and distribution.
- 17 For a summary of this view see Samuelson and Nordhaus (2010: chapters 12 and 15). The neoclassical theory for the returns on capital and for distribution are only meant to hold under certain conditions, e.g., perfect competition, no population growth, no technological change, no risk, no inflation, etc. In other words, the initiate is supposed to assume conditions which have never existed, do not currently exist and will never exist in any possible future. For a discipline that claims scientific status for itself beginning with assumptions which are ahistorical and sociologically impossible is questionable.
- 18 See Clark (1899) and Fisher (1896; 1906) for the beginnings of the neoclassical theory of capital, finance and distribution. See Veblen (1908a and 1908b) for a critical appraisal.
- 19 We will further examine the relationship between income streams and distribution in

section 8, but for now what we need to know is that capitalization is at the core of contemporary capitalism and the engine of its accumulation is earnings (see Nitzan and Bichler 2009: 185-7 for a fuller discussion).

- 20 Notice that the denominator has changed from figure 7. Data limitations compel us to use the entire corporate universe as a comparator group. Comparing the average of the top 60 firms with the average of all firms listed on the TSX would leave far too many gaps. Besides, using the corporate universe brings us closer to actual differential power of capital.
- 21 For the shift from “market” to “administered” prices see Means (1972).
- 22 The top 100 firms are ranked annually by equity market capitalization.
- 23 A logarithmic scale has the effect of magnifying the size on the chart of smaller values while condensing the size of larger values. This is useful when presenting data with large and abrupt variations in values.
- 24 This brief synopsis is derived from Scherer and Ross (1990).
- 25 This discussion draws on Nitzan and Bichler (2009), pp. 350-359.
- 26 United Nations Conference on Trade and Development (2000).
- 27 The UN document from which these facts are extracted is somewhat dated and it applies to the global political economy, so we need to be careful about deriving any conclusions about Canada from it. That caveat aside, we are safe in presuming that a hefty proportion of the foreign direct investment in North America does nothing to enhance productive capacity or improve industrial serviceability. It is a rearranging of the financial claims on the right-hand side of the balance sheet, not an alteration of the physical equipment on the left.
- 28 Recall: the former process centres on buying existing capacity while the latter builds new capacity. For now let’s just assume that the pattern exhibited by the US will be closely mirrored by Canada.
- 29 These claims may sound strange, but they really shouldn’t. After all, the word “investment” is derived from the Medieval Latin *investitura*, which originally signified the acquisition of rank, title and prescriptive right by an office holder. After taking a loyalty oath, a vassal would be *invested* by his overlord with a fief. This ceremony would grant the vassal new powers, importantly among them distributive power.
- 30 And as the recent Caterpillar closing of the Electro-Motive plant in London shows us, foreign direct investment often has nothing to do with enhancing productive capacity or improving industrial efficiency and everything to do with the alteration of income streams resulting from ownership changing hands.

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