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Employee Ownership and Moral Hazard: How Broad-Based Equity Sharing Can Lower
Agency Costs and Reduce Inequality

A Thesis
Presented to
the Faculty of the College of Arts, Humanities and Social Sciences
University of Denver

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Colin Hudson
March 2021
Advisor: Chiara Piovani

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Abstract

Providing incentives to top managers by offering equity has become the norm; this practice, however, does not hold for all levels of employees. After tax incentives for employee ownership were introduced through the Employee Retirement Income Security Act of 1974, there has been little legislative support to encourage companies to implement broad-based equity sharing programs. Moreover, decades of neoliberal policies have incentivized the pursuit of short-term profits and speculation, which contribute to economic instability and explain the growing gap between productivity and real wages observed since the late 1970s. Developments in the literature contend that employee ownership aligns the goals of ownership and workers and will embolden employees to work more productively and make decisions in the best interest of the firm. Equity incentives can thus generate a mutually beneficial relationship and will result in higher compensation for all levels of employees. By analyzing theoretical and empirical research on equity incentives, this thesis claims that employee ownership increases productivity, compensation, and job stability, and can help contain economic instability and address high levels inequality.

Acknowledgements

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Lastly, I want to thank all the businesses who have taken the risk to shift ownership to the employees. My hope is that, in the future, more employees are able to see the benefits of becoming owners in their company.

Table of Contents

Chapter 1: Introduction	1
Chapter 2: Economic Theory and Historical Evolution of Financial Markets	6
2.1: From the Great Depression to Neoliberalism.....	6
2.2: A New Era of Modest Growth and Instability	10
2.3: Critical Perspectives on Neoliberalism, Financialization, and the Great Depression	20
2.4: Concluding Remarks.....	23
Chapter 3: Equity-Based Compensation	25
3.0: Profit Sharing in Economic History.....	25
3.1: Part 1: Equity-Based Compensation for Executive Employees	30
3.1.1: Economic Theory on Agency Costs	30
3.1.2: Empirical Evidence of Executive Compensation	36
3.1.3: Arguments Against Equity Compensation for Executive Employees	39
3.2: Part 2: Equity-Based Compensation for Non-Executive Employees.....	40
3.2.1: Benefits of Employee Ownership for Workers.....	43
3.2.2: Benefits of Employee Ownership for Firms	50
3.3: Concluding Remarks.....	61
Chapter 4: Broad Based Employee Ownership in Practice	63
4.1: Industries Best Suited for Employee Ownership	63
4.2: Employee Stock Ownership Plans	68
4.3: Employee Stock Purchase Plans	71
4.4: Best Practices for Employee Ownership.....	74
4.5: Can Employee Ownership Address the Need to Increase Wealth	77
4.6: Concluding Remarks.....	79
Chapter 5: Conclusion	81
References	85

List of Figures

Chapter 2: Economic Theory and Historical Evolution of Financial Markets	6
Figure 2.1: Average Real Wages from 1964-2019.....	10
Figure 2.2: Productivity Growth and Hourly Compensation Growth 1948-2018.....	11
Figure 2.3: Union Membership Rates from 1983 through 2018	12
Figure 2.4: Share of Income and Wealth of Top 1% Wealth Earners	17
Chapter 3: Equity-Based Compensation	25
Figure 3.1: Market Value of the Stream of Non-Pecuniary Benefits	33
Chapter 4: Broad Based Employee Ownership in Practice	63
Figure 4.1: Percentage of ESOPs by Industry	67
Figure 4.2: Magnitude of ESOPs by Industry	67

Chapter 1: Introduction

Offering employees an interest in the financial performance of the business has been a component of American business since its foundation. One of the first pieces of employment legislation passed in the United States encouraged profit sharing for one of the country's largest and most vital post-Revolutionary industries. Blasi, Kruse, and Freeman (2018) examine the cod fishing trade in New England, which had been decimated during the Revolutionary War. George Washington, along with Thomas Jefferson, wanted to construct a way to quickly rebuild the industry, so they created incentives for owners of these companies to implement profit sharing through alleviating the tax and duties burden for participating companies. The concept has been understood by numerous business owners for centuries; when employees have a stake in the outcome, they are more inclined to work harder for longer hours and make better decisions. While the cod fishing example utilized profit sharing, there similar mechanisms to tie performance with compensation. This thesis will focus on equity sharing, which distributes company stock to employees, as an efficient method for businesses to implement outcome-based incentives.

Not only does employee ownership programs benefit companies through an engaged workforce, it also addresses the need to increase compensation for a large

portion of workers, which is overdue after 40 years of inequality. Chapter 2 examines the macroeconomic trends since the mid-1970s, and highlights some of the consequences that resulted. This era of legislation was dominated by neoliberal influence and financialization and brought about deregulation of the finance industry at the expense of sustainable growth. Since the early 1980s, an increasing gap between the growth of productivity and wages has been observed. Stagnant wages over the last four decades, in the context of rising profits, have contributed to rising inequality. Moreover, financialization has fostered riskier investing instruments, and has allowed the finance industry to crutch its growth on businesses and households' unsustainable debt burden. These forces have also led to instability and severe recessions from the dot-com bubble to the financial crisis, and – arguably – also the recent crisis spurred by COVID-19 (Nikiforos 2020).

Due to these factors negatively impacting the United States economy, it is necessary to address the ongoing imbalances and pursue sustainable growth and a more equitable income and wealth distribution. In this thesis, we analyze the current state of average wages and pose the question: will changing compensation structure for firms by distributing equity align interests between employers and employees and generate prosperous returns for both parties? In this regard, it is important to examine possible moral hazard¹ issues. These issues emerge from a principle-agent problem based on conflict of interests between the business owners and their employees. The common

¹ Moral hazard is the risk a party takes when entering a contract where misleading or a lack of information gives the other party opportunity to work in their own interests regardless of the desired outcome.

difference at the executive level are concerns over the amount of risk the owners and the manager are willing to undertake when deciding on the direction of the company. Income is typically a primary source of managers' wealth and they wish to keep it stable. So, they tend to make risk averse decisions and are content more modest. For nondecision-making workers, when their payout does not change with outcomes, they are not properly incentivized to put forth consistent, high levels of effort.

Businesses began to explore equity sharing by offering company stock to its top-level executives as part of their compensation as business owners discovered that managers are more likely to make decisions in the firm's best interest when their income is connected to share value. The evidence shows that managers become more inclined to take on added risk in the hopes of large future payouts. Today, equity has become the norm for executives as company stock makes up nearly 50% of compensation for CEOs of S&P 500 companies (Larker and Tayan 2019). This arrangement has become so widespread some argue such robust incentives encourages executive managers to solely focus on increasing share price above employee well-being and career development (Lavoie 2012; Lazonick 2017). Widespread use of equity compensation has taken place for executive level employees, which has resulted in better alignment of interests between executive managers and shareholders. A more effective method to reduce the effects of moral hazard, however, is to offer equity-based incentives for all levels of employees.

Unfortunately, not all employees have experienced the growth of equity compensation executives have. Since the passage of Employee Retirement Income Security Act of 1974, which provided tax incentives for firms establishing themselves as

Employee Stock Ownership Plans (ESOPs), there has not been any substantial legislation to promote broad-based employee ownership. Research suggests that there can be a mutually beneficial relationship between workers and owners who offer equity-based incentives to all employees. For employees, data shows that they see higher compensation, more job security, and better career development. On the other side, firms benefit from higher productivity, better financial performance, and less turnover. Furthermore, one of the most frequent critiques against employee ownership is that the group incentive creates an invitation for free riders to take advantage of the program. Conventional theory suggests that workers will only put forth the effort when they believe their work will change the outcome. However, research also finds that positive externalities are generated from the ownership culture that is established when firms become employee-owned. In general, employee owners are more likely to encourage their colleagues to put for their best effort and discourage other employees from shirking.

Despite these benefits, widespread employee ownership has not taken place. The research in this thesis supports the belief that employee ownership is a mutually beneficial relationship between firms and employees and should be considered by all companies. To analyze the current and potential use of employee ownership, this paper is broken into five chapters. Chapter 2 examines the economic trends of the 20th century and their effects on wages which justify a need to distribute wealth more evenly throughout the economic spectrum. Chapter 3 reviews the economic history of profit sharing, then is broken into two parts. Part 1 analyzes equity sharing for executive employees and Part 2 explores equity sharing for all employees. In chapter 4, we analyze which industries are

utilizing equity programs most effectively and examine the most common legal pathways to offer broad-based employee ownership. Chapter 5 concludes the thesis by drawing inferences from the previous chapters and explains the relevance and necessity to expand broad-based employee ownership to more companies.

Chapter 2: Economic Theory and Historical Evolution of Financial Markets

2.1 From the Great Depression to Neoliberalism

The aftermath of the Great Depression not only brought about dire consequences for the American economy, but also became a catalyst to launching new economic theory into political policy. John Maynard Keynes quickly became one of the most popular and consequential economists during the 1930s and for the next several decades. His theory of aggregate demand as the driver of business cycles allowed for his assertion that government intervention by means of monetary and fiscal policy can provide correcting behaviors of a poorly performing economy to govern conventional theory at that time. Keynes believed that when recessionary pressures occur, government could increase its spending and reduce taxes to promote consumption and ultimately push the economy to full employment. With unemployment reaching as high as 25% in the 1930s, the state of the economy needed a transformation. As it relates to policy, many of the ideas from classical economists lost their significance and the historical evidence contributed to make Keynes' theory mainstream. After the Great Depression, Americans distrusted banks and doubted the ability of the financial market to stabilize itself, and by end of World War II, both economic theory and economic policy were dominated by what is referred to as a "Keynesian consensus" (Singer 1997).

Through his writings, Keynes introduced the concept of “capacity” into mainstream theory. This was a starting point for many of his ideas. He believed that businesses made purchasing and investment decisions based on potential demand and the expectations of profits. These expectations then determined the amount of resources to supply the quantities of goods and services believed to clear the market (Peterson and Estenson 1996). For investment spending, Keynes contended that businesses make decisions on the premise that future revenues would compensate the cost of financing. This understanding translated into Keynes’ (1936) idea of marginal efficiency of capital² and its importance as a factor into investment decisions. He believed profit expectations shape the marginal efficiency of capital, and fluctuations in these expectations shift the aggregate demand and are a natural cause of business cycles (Snowden, Vane and Wynarczyk 1994). The view Classical economists held, that investment spending depends on the cost of borrowing, asserts that the interest rate was considered to be the key explanatory factor of business investment; by also considering profit expectations, Keynes added the element of uncertainty as a factor to investment spending.

In early the 1970s, a new school of thought emerged. The Monetarist school was led by Milton Friedman who became one of the most prominent economists of his time. The basis of this theoretical framework revolved around the belief that the money stock fostered a much larger role in the economy than preceding economists had realized. They believed changes in the money supply cause severe fluctuations in the economy and is a

² John Maynard Keynes (1936) described the marginal efficiency of capital (MEC) as the rate of discount that will allow the present value of annuities from the returns of a capital asset equal to its supply price. More broadly, it is the rate at which the price of a capital asset equals the present value of the expected payouts.

root cause of business cycles (Snowden, Vane and Wynarczyk 1994). Thus, monetary policy was the foremost tool to expand or contract production. Both Monetarists and Keynesians viewed the causes of business cycles as exogenous forces.

A challenge to these theories emerged when stagflation came about during the 1970s, in the context of two oil price shocks. Neither fiscal nor monetary policy could solve the issues created by these events. Along with high inflation, the oil price shocks created recessionary and shifted the Phillips Curve³ outward and unemployment rose as well. So, the dilemma became to either address inflation or unemployment; policy tools could not respond to both challenges simultaneously. The American Central Bank chose to drastically increase interest rates, and the flourishing economy of the 1950s and 1960s began to curtail in the 1970's. The subsequent recession of the early 1980s became a consequential time for businesses, and unfortunately, we saw many corporations prioritize shareholder value and market share at the expense of their employees, specifically regarding their wages (Crotty 2002).

Thereafter, a larger socio-economic motion began to take place, neoliberalism. Neoliberalism is an economic and policy paradigm that has dominated since the early 1980s. During this shift, the visions of Keynes and his successors were set aside while financial institutions helped facilitate the deconstruction and deregulation of rules put in place after by the New Deal. This deregulation predicated on the understanding that financial market sustainability was maintained by the efficient market hypothesis (Crotty

³ The Phillips Curve illustrates the inverse relationship between inflation and unemployment. When inflation is high, employment will be low, and vice versa.

2009). Neoliberalism gained overwhelming momentum throughout the Reagan administrations and has maintained significant economic influence since. The real catalyst of neoliberalism was the propaganda behind it and the influence it had during the Carter and, more prominently, the through Reagan administration. Merino, Mayper, and Tolleson (2010), in an article focusing on the Sarbanes Oxley Act⁴ and its inability to restrain the finance industry, highlights some effective moments of neoliberal propaganda where it promoted free markets and deregulation as essential components to the American way. The neoliberal message penetrated to mainstream thought through various groups. For instance, leading up to the 1994 election, accountants donated over \$7 million dollars to lobbyists to diminish their legal liability. Similarly, the finance industry contributed to politicians in hopes to help pass the Financial Services Modernization Act in 1999, which repealed the Glass-Steagall Act⁵ put in place after the Great Depression which separated speculative and commercial banking activities (Merino, Mayper, and Tolleson 2010). Neoliberalism led to significant policy changes that had worldwide effects to financial markets and massive accumulation of debt (especially in the United States). Next in this chapter, we will especially emphasize the devastating effects neoliberal policies had on the average American worker.

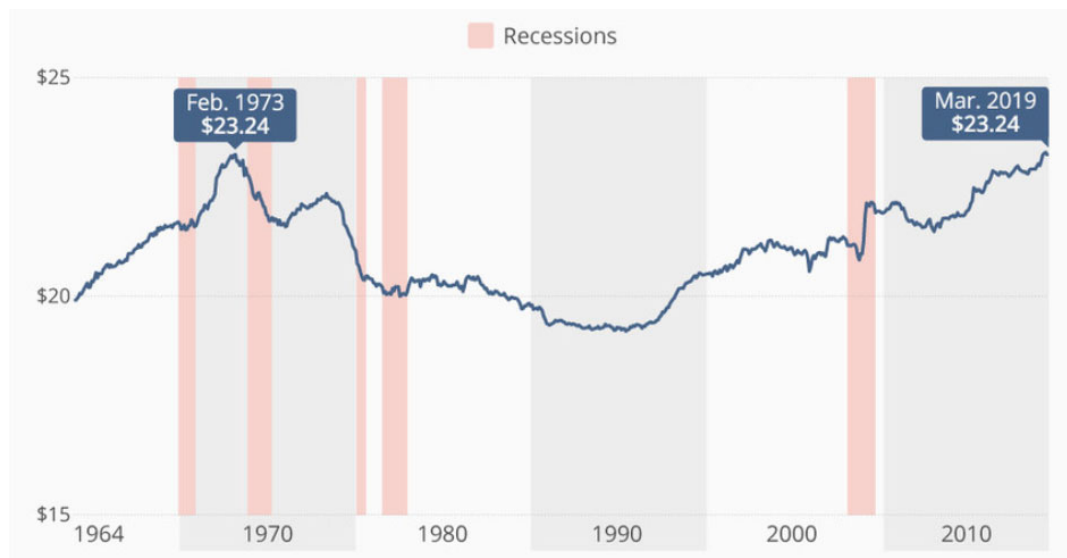
⁴ The Sarbanes Oxley Act was written into law in 2002 and implemented sweeping accounting and financial disclosure regulations after a series of corporate scandals in the early 2000s.

⁵ The Glass-Steagall Act separated speculative and commercial banking activities and established the Federal Deposit Insurance Corporation to protect depositors from insolvency.

2.2: A New Era of Modest Growth and Instability

The decades of the 1950s and 1960s are generally regarded as one of the most prosperous times in American history. During these years, the economy showed robust growth and relatively low inequality. This was supported by a thriving labor market with considerable worker representation through strong union membership. At the time, high effective demand helped sustain high profit rates that could support strong wages (Lavoie 2012). As shown in Figure 2.1, from the late 1960s until the oil shock recession, real wages increased as productivity in the economy grew. However, when the oil shocks hit and profit rates were at risk, businesses made cuts to stay afloat. Most significantly, they cut compensation, leaving a lasting impact on real wages for the next several decades.

Figure 2.1: Average Real Wages from 1964-2019

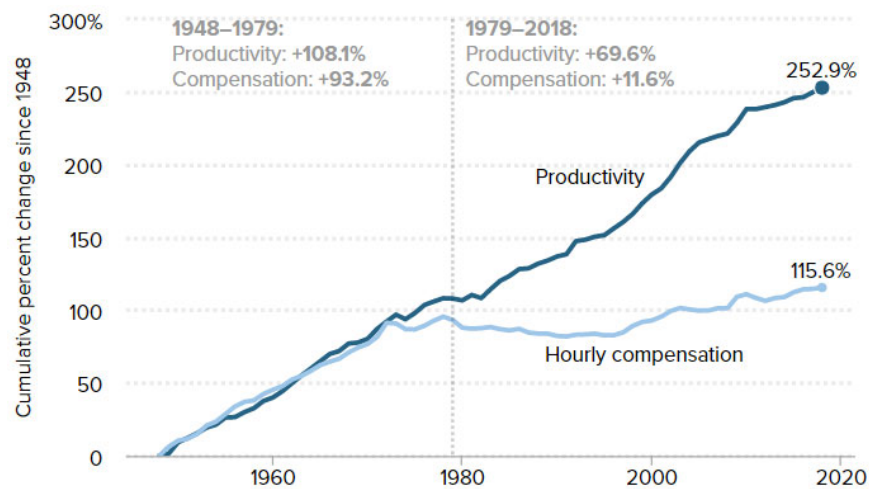


Source: World Economic Forum (2019)

A disturbing aspect of stagnant real wages is that productivity has continued to rise steadily since the 1970s. Figure 2.2 illustrates the relationship between productivity and real wages for non-supervisory work; from 1979 to 2018 the growth of productivity rose

253% while wages only grew 115%. During the Keynesian era, the relationship between productivity and wages was different. From 1948 to 1979, the two series were strongly correlated. Productivity grew 108% and compensation showed 93% growth. During the neoliberal era, however, workers have not realized significant portions of the increased output through wage growth.

Figure 2.2: Productivity Growth and Hourly Compensation Growth 1948-2018

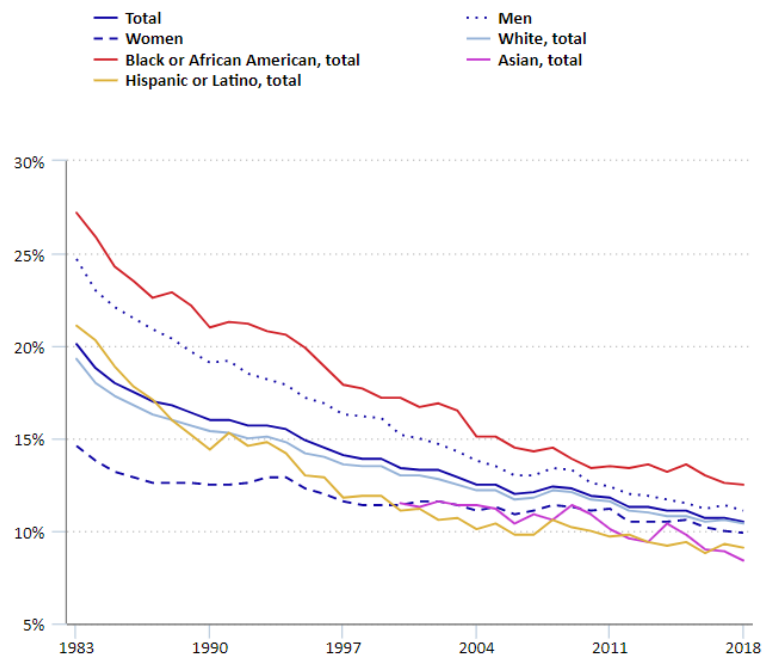


Source: Economic Policy Institute (2020)

Furthermore, the trend represented in Figure 2.1 coincides with a trend of loosened worker representation indicated in Figure 2.3. The US has seen a significant drop in union representation beginning in the 1970s, and unlike real earnings, the decline never made its way upward after the initial descent, with membership reaching an all-time low in 2018 (Bureau of Labor Statistics 2019). Examining the links between neoliberalism and the decline of union membership, Vachon, Wallace, and Hyde (2016) concludes that

increased financialization⁶ affected unions since the rise of shareholder interests during the neoliberal era outlasted the interests of workers. Union membership decline is an important consequence of neoliberalism, as it is a key tool for wage bargaining and ensuring workers' rights against capitalistic ownership (Palley 2007).

Figure 2.3: Union Membership Rates from 1983 through 2018



Source: Bureau of Labor Statistics (2019)

There are many consequences to the macro economy when real wages decline and the standard of living continues to rise as it did throughout the 1980s. First: due to sociological and psychological factors, households do not necessarily break their spending habits when they see a drop in their real wages. Household budget constraints

⁶ Along with neoliberalism, a shift towards financialization gained momentum throughout the 1980s. Financialization refers to increasing use of finance to fund expenditures which led to innovative financial assets and a steady increase in the debt to GDP ratio.

are not ignored, but easier access to debt has loosened these constraints and oftentimes there is no a definitive plan to pay back debts especially when uncertainty arises (Cynamon and Fazzari 2008). Societal pressures inspire this behavior as people who want to appeal to a certain economic status as households tend to mimic spending habits of society (Lavoie 2012). One of the easiest methods to find the means to maintain similar spending habits as upper-class households is to increase their debt. Consumption habits have been reliant on the finance industry to keep growth rates near the levels they were during the 1950's and 1960's. The production growth based on high real wages during that time has been transformed by financialization to a consumption-based system made possible by rising household debt levels (Lavoie 2012). Saez and Zucman (2014) show that household debt has risen from 75% of GDP in 1980 to 110% in 2012.

Second: the finance industry became willing participants of an unsustainable credit system by allowing borrowers to increase their debt burden through innovations that allowed easier access to debt even for those with below average credit scores. At the same time, low interest rates and sustained rises in housing prices allowed financial institutions to offer new means of borrowing. As rising housing value became a tool for collateral, DeBelle (2004) points out that the increasing availability of home equity loans allowed households to extract equity to service new debt. Since interest rates are generally lower for home equity loans than other forms of borrowing, this drove the popularity of households taking on home equity loans to increase expenditures. As indicated earlier, households tend to mimic the spending patterns of their neighbors, so once

people saw how seamless it was to fund their consumption through equity, they followed the trend.

At the same time when equity loans were growing, we saw substantial increases in revolving debt, mostly made up of credit cards. Supported by widespread solicitations, the share credit card's portion of total consumer debt increased to 46% in 1998 despite the late 1990s being a relatively prosperous time with low unemployment (Cynamon and Fazzari 2008). Showing a similar trend, the leverage of public debt has increased dramatically in the neoliberal era. The sovereign debt to GDP ratio for the US has risen dramatically since the 1970s and has been hovering around 100% since 2013, showing exponential patterns during the 1980s and again in 2010. This is a sizeable leap after only being 30% in 1980 (Federal Reserve Bank of St. Louis 2020). These increasing debt burdens are pillars to the trend of financialization which has coincided neoliberalism. During this time, neoliberal trade policy allowed US companies to shift large fractions of the manufacturing sector to capitalize on cheap labor (Kotz 2002). To make up for the lost production, the US has dramatically increased its leverage, and the banking industry has promoted this change.

Unlike many industries, the financial sector has thrived during neoliberalism. As a percentage of GDP, the finance industry increased to 8.3% of GDP in 2006, compared to just 2.8% in 1950 (Greenwood and Scharfstein 2013). Lapavistas (2013) highlights three factors that are significant contributors to the accumulation of debt. First, non-financial businesses, especially large corporations, have become involved in the financial process by utilizing internal finance methods such as issuing stock and have turned to finance

externally on the open market. Second, financial institutions have transformed from traditional borrowing and lending to being mediators and monetizing transaction fees. And third, the accumulation of debt by individuals and households played a large factor in transforming financial institutions during neoliberalism.

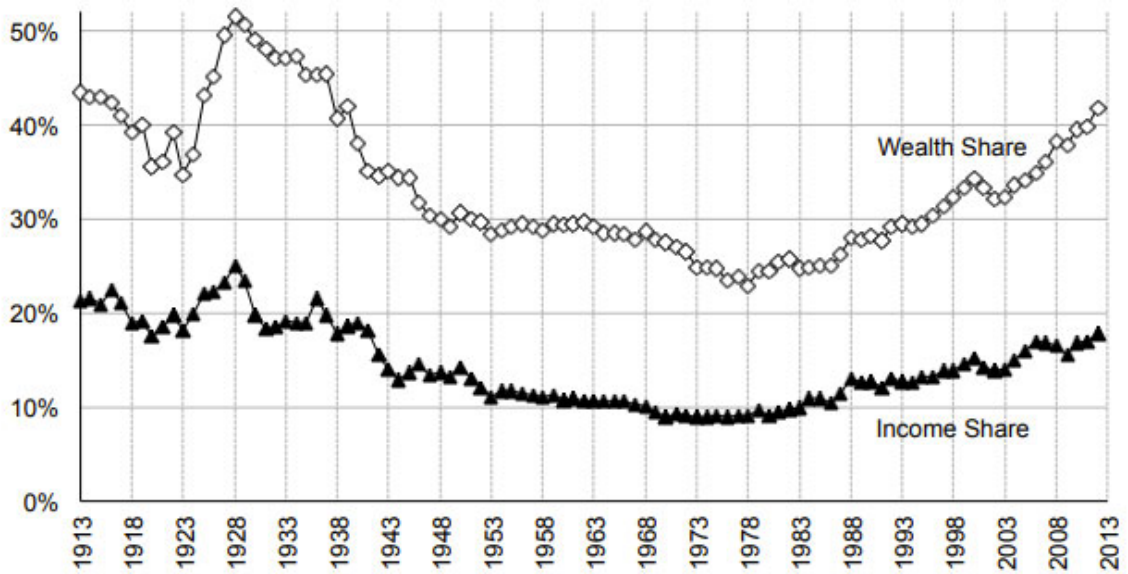
Expanding on Lapavitsas' (2013) first point regarding non-financial businesses, research has analyzed the changes in corporate behavior as both a driver and a result of financialization. Palley (2007) observes corporate trends as they have become increasingly indebted to financial institutions. Since 1980 firms have taken on more debt to fund non-production related items such as repurchasing equity. The increased debt diverts profit streams into interest payment streams, which has more favorable tax treatment. Further, by overhauling the structure of executive compensation to be mostly comprised of stock options and equity, this has enticed business managers to focus on short-term profit goals (including stock buybacks which drive share price and therefore executive wealth upward) as opposed to sustainable growth methods.

Along with changing corporate behavior and a tolerant financial market, the makeup of Gross Domestic Product (GDP) began to shift its composition from labor income (compensation) to profit income from capital. The national income is comprised of different sources of income including compensation, capital gains, government income, and proprietors' income. Typically, compensation encompasses around two-thirds of the national income, but since 2007, there has been a trade-off between wages and profits from capital assets with profits claiming a larger share at the expense of

compensation (Bernstein 2016). Thus, wealth increases are becoming a more significant facet of GDP than income, which has concerning effects on wealth distribution.

It has been noted that the inequality of wealth is more severe than income inequality (Blasi, Kruse, and Freeman 2017). The income structure which now comprises heavy degrees of equity and stock options for executive managers has generated a rapid increase in the income of top earners and is considered a cause of the increasing wealth disparity. Saez and Zucman (2014) underscore the factors driving the wealth gap. Firstly, labor income inequality shifted at a time when the wealthiest income earners were younger than years past and enabled them to set aside more income for saving practices. While the savings rate for the wealthiest 1% has mostly remained the same the savings rate for the bottom 90% households averaged 6% from 1929 to 1980 to a 0% average since. For these workers, the gains in wealth through vehicles such as pensions have been largely offset by increased debt. Meanwhile, the wealthiest 1% have seen their share of labor income steadily rise from less than 10% to almost 20% from 1980 to 2013 (Saez and Zuchman 2014). Figure 2.4 depicts the shift of the top 1% earners share of income compared to wealth share. The authors find that wealthier earners have access to high savings interest rates, which is indicative in figure 2.4. While the rise in labor income share is relatively linear, the increase in wealth share depicts an exponential pattern, which suggests the effects of compounding is further driving their share upward.

Figure 2.4: Share of Income and Wealth of Top 1% Wealth Earners



Source: Saez and Zuchman (2014)

By shifting executive manager salary from wages to equity, owners (shareholders) have aligned their interests with those in charge of driving the direction of the firm. Managers have become more focused on short term profitability goals (as well as more incentivize to make use of stock buybacks). Lapavitsas (2013) stresses the word “epochal” when discussing the impact of financialization on contemporary capitalism. He notes a definitive change in our economy when debt began to rise faster than production starting in the 1970s. Or rather, when the investible surplus became absorbed by finance instead of being consumed through the cycle of production. Furthermore, Palley (2007) contends the shareholder mindset of managers as a catalyst for corporations adopting the same interests of financial markets. Owners and managers are beholden to a profit motive which influences share price. Managers are incentivized to maximize profits by minimizing costs, which includes lowering wages or keeping them stagnant. This is

contrast to workers, who, above profits, are more likely to desire substantial wage increases and sustainable productivity growth driven by improved quality and production efficiencies. The managers' fixation on cost minimization, along with declining worker representation have resisted upward pressure on real wage growth we saw throughout the 1950's and 1960's and kept average households reliant on borrowing.

Along with increasing debt levels, another troubling trend of financialization were the modernized products and altering make-up of financial products. financial innovation designed new ways to package and sell debt products. While these trends began in the 1980's, they became incredibly popular in the early 2000's, specifically with securitization, where financial institutions would allow investors to purchase debt and receive payments as borrowers made payments on their loans. The packaging of these securities has become opaque and increasingly complex since their origination. Financial innovations such as these poses a risk to the borrower, since there exists asymmetric information which generally benefits the lender. Lim (2018) recognizes the how the complexity of structured financial products creates moral hazard. The financialization of the economy is riddled with conflicting incentives between capitalists, employees, and other market participants. While, the employers are interested in growing their enterprise, mostly through an increased share price, the employees are interested in maintaining a standard of living and healthy work-life balance. In addition, the financiers of these operations are interested in lowering their risk and increasing profits.

As many economists predicted, several decades of growing debt via financialization came to an abrupt halt in 2008 when Bear Stearns, over leveraged on bad

speculative investments, declared bankruptcy. Shortly after, the world economy entered the second largest crisis of capitalism, only trailing the Great Depression partly due to another risky investment product. Alongside the mortgage securities, the protection against the products became popular during the 2000's. Credit default swaps acted as insurance for investors purchasing securities against defaulted mortgages making up the securities. The issue with default swaps, however, is they do not require an investor to own the asset they were protecting themselves against, and companies such as AIG were willing to sell default swaps to whoever was willing to pay. This allowed for massive speculation to occur and was justified on the back of the housing market which had seen sustained growth for several decades. Months prior to the collapse of October 2008, the credit default swap market had reached \$62 trillion (four times the US GDP in 2007), but only covered \$5 trillion in assets (Crotty 2009). The systematic risk of investing with derivatives became apparent when default rates for housing grew (as lenders were giving loans to less creditworthy borrowers⁷), and massive payment obligations became due for insurers which required massive bailouts from the American government.

The recession of 2008 resulted from decades-worth of neoliberal policy influence for two primary reasons. First, by placing continuous downward pressure on wages, this allowed for growing inequality and the lower and middle classes continued consumption patterns by borrowing. Second, innovation of financial products with little-to-no oversight allowed for vast speculative investing. Lysandrou (2011) made the distinction

⁷ In 2007, subprime mortgages made up 13% of first lien mortgages and half of the foreclosures. Financial institutions packaged these subprime mortgages with high credit mortgages (collateralized debt obligations or CDOs) and were able to attain triple A ratings because of the diversification (Fang 2015).

between two distinct factors. While increasing inequality and lower wages can explain a need for household credit, it does not explain the need for securitization and transformation into a commodity. It took a prominent and deliberate effort of neoliberal policy to become so uncontrolled it drove the world economy into a severe recession.

2.3: Critical Perspectives on Neoliberalism, Financialization, and the Great Recession

The recession in 2008 was unprecedented and was caused by factors once considered inconceivable. Lapavitsas (2013) stated:

Under conditions of classical, 19th-century capitalism, it would have been unthinkable for a global disruption of accumulation to materialize because of debts incurred by workers, including the poorest. However, this is precisely what has happened under conditions of financialized capitalism. (p. 792).

Sure enough, though, scholars were heeding warnings how an overleveraged and financialized economy would have systematic consequences. Hyman Minsky (1986) was an early critic to the role of finance within our economy and considered the role of investment the biggest factor to business cycles and instability. Minsky's work expands on many of Keynes teachings, particularly the role of finance. He emphasized Keynes' view that the money supply was determined endogenously through increased or decreased lending. These decisions by financial institutions were determined future profit expectations. Minsky emphasized this notion as he warned about the rapid increase of investment spending becoming the foremost driver of instability and was critical of mainstream theory's failure to address this. He expressed that if policy makers do not

understand what the causes of financial instability are, they cannot design policy to fix the issue.

Hyman Minsky is most famous for his work around the structure of debt, most prominently with his Financial Instability Hypothesis. Minsky (1977) describes three separate financial positions businesses and consumers take when incurring more debt. At the most basic level, hedge borrowers exist when operating cash flows from assets are ample enough to cover payment obligations. Next, once leverage is widened, speculative finance exists when operating cash flow can meet interest payments, but not enough to meet principal payments and must be rolled over or refinanced. Third, and most severe, occurs when borrowers engage in “ponzi” investing where the cash flows are not sufficient to meet any payment obligations and the borrower must incur more debt to meet these payments with the belief that the assets will appreciate enough to cover debt payments. Minsky believed that all three levels were correlated, and rising interest rates would push the investor into a higher tier. Further, he was adamant this structure would inherently cause a financial crisis. Through the Financial Instability Hypothesis, instability is created by borrowers who incur debt during times of stability but become so burdened over time, a financial crisis occurs from an over leveraged economy.

Looking back, it is apparent why Minsky’s hypothesis experienced a second growth of popularity after the 2008 recession. It was mentioned earlier in this chapter how households increased their debt dramatically during the Neoliberal era. Households’ financing was primarily collateralized by real estate. The growth regime of the Neoliberal era became increasingly dependent on household consumption, but these patterns could

only continue to grow as the debt to income ratio continued to rise. In principle, a constant debt to income ratio generates a lower aggregate demand as more money is being diverted to interest payments (Lavoie 2012). Beginning in 2007, the American economy saw the ramifications of over-leveraged financial institutions and households suffered consequences because their debt was bounded by the assumption the housing market would continually rise.

Cynamon and Fazzari (2008) make a connection between Minsky and the financial crisis. The fragility created by concentrating so much leverage on the housing market made the economy much more vulnerable to shocks. We saw this as mortgage defaults began to rise and a series of ripple effects crumbled the economy as so much weight was dependent on the housing market, and the more fragile the system is at the peak of the boom or bubble, the more severe a contraction will be. Furthermore, financial innovation added to the severity of the leverage. As demand for mortgages was increasing, originators made creative packages to entice low credit borrowers by offering them loans with adjustable rates that were lower at the beginning (teaser rates) to reduce up-front borrowing costs (Cynamon and Fazzari 2008). The asymmetric information favors the lender as they were mainly concerned with signing the debtor to a mortgage before they packaged it into securities for other investors and the more complex arrangements the higher the asymmetry (Lim 2018). Also, it shifts a healthy lending structure to a Ponzi scheme in which financial institutions are a willful participant. The banking industry was taking on more and more mortgages, with the assumption that a continuous rise in real estate value would sustain. As Minsky predicted, their leverage

would break as they approached the peak of a bubble, the crash that followed was severe and devastating to the world economy.

The 2008 financial crisis was the result of decades worth of neoliberal influence and many critics were adamant this new era of capitalism was not sustainable. A decade prior to the crash, the United Nations (1997) came out with a damning report highlighting the flaws of the global economic performance during the Neoliberal era. Some facts drawn were: the world economy is growing too slowly to generate sufficient employment with adequate pay or to alleviate poverty, capital has gained in comparison with labor, growing wage inequality between skilled and unskilled labor is becoming a global problem, and the hollowing out of the middle class has become a prominent feature of income distribution in many countries. The United Nations (1997) also expressed a need to combat these trends as history indicates there exists significant risk of socio-political instability. The focus on household debt and its disadvantages in this chapter alludes to the remaining chapters of this paper, which addresses that there is a substantial need to find ways to increase real wages for workers and reduce the need to accumulate more credit.

2.4: Concluding Remarks

The post-Great Depression economy needed to configure away to improve demand and drive the country out of the remaining effects of the depression. As Keynesianism became mainstream, policy makers were reliant on his interventionist

theory and regularly used fiscal policy to expand and contract output. The United States experienced prosperous growth throughout the 1950's and 1960's and increases in productivity were matched with increases in average real wages. However, the recession created from the oil shocks could not be solved through government intervention, and policy makers were forced to decide between high inflation or high unemployment, which curtailed Keynes' influence on mainstream economic theory. A paradigm shift emerged and moved the United States further away from the prosperity experienced in prior decades. Neoliberal influence oversaw a widening productivity to wage gap as well as rapidly growing wealth inequality.

In Chapter 3, we examine compensation mechanisms that determine workers' wages and overall wealth. We explore the option of equity sharing as a method of aligning growth with employee pay. In Part 1, we will take a historical look at equity incentives as they relate to executive managers and the effects on their decision making. In Part 2, we will transition this analysis to broad-based equity sharing in which all employees become part owners and analyze the macroeconomic implications from implementing such programs.

Chapter 3: Equity-Based Compensation

3.0: Profit Sharing in Economic History

This chapter examines the potential mutual benefits between businesses and employees when adopting alternative compensation structures based on equity considerations. The notion of equity-based compensation has emerged from the concept of profit sharing, and abundant research has been done on these alternative compensation mechanisms. While profit sharing and equity sharing can have the same general impact on employees, since both mechanisms allow gains to be shared with the employee, it is important to note they are not one in the same. Profit sharing is a method in which the workers receive a portion of the profits made by a company; equity sharing, or employee ownership, offers some degree of ownership to its employees. For equity sharing, this does mean that employees will benefit when the company's stock price increases, which often is correlated with high profits and why they have similar attributes. However, depending on the structure of equity, employees' potential compensation can decrease if the company does not perform well (or broader market factors drive down evaluations); however, issuing stock to employees creates a seamless way to give workers a stake in the firm's performance. Also, the psychological effects of an ownership culture benefit the company and encourage workers to work in the best interest of the firm.

Economists continue to examine if incentives that give employees a stake in the outcome can create a mutually beneficial relationship for ownership and employees, but the concept of gain sharing came about centuries ago. One of the earliest economic references on this topic was by Adam Smith (1776), who wrote about the added efficiency from sharecropping compared to the output provided under slavery. He noted French *métayers* (sharecroppers in 18th century France) had an inherent interest to produce the greatest yields possible as their pay was variable to the amount of crop produced. Under slavery, the workers did not share this interest since they were not reaping any of the benefits of the yield. So, aside from the moral argument against slavery (which most of Western Europe had already banned), Adam Smith presented an economics argument to give workers a stake in the outcome of the production.

In the late-nineteenth century, John Bates Clark (1904) highlighted profit sharing and its benefits. Although he was a sympathizer of laissez-faire capitalism that had become synonymous with Adam Smith's vision of the economy, Clark presented moral arguments on worker exploitation and was concerned about the sustainability of fair wages. In his book *The Distribution of Wealth*, Clark (1899) set out to prove that wages were controlled by a natural law guided by the invisible hand⁸ which allows workers "just" compensation for the amount goods they are producing. He was referring to the marginal productivity⁹ theory based on which firms will hire more labor only if the cost

⁸ The Invisible Hand is a metaphor used by Adam Smith to describe how peoples' self-interest, under conditions of perfect competition, lead to efficient outcomes without need for active government intervention.

⁹ The marginal product or marginal product of labor refers to the increase in the amount of output given the addition of one unit of factor of production while keeping other factors constant.

of adding labor (wage) is less than or equal to the firms' marginal product. When wages are equal to the marginal productivity, this ensures workers are being paid in accordance to the added production they provide. Clark believed this theory keeps wages fair and prevents workers from exploitation. He also acknowledged that this law was reliant on a stable marginal product, which fluctuates with the prices of inputs more frequently than with changes in wages. Therefore, a theory contending that wages are equal to the marginal product can only exist in a static world. Clark built his wage determination theory after Henry George (1879)'s theory of rent, which claims that wages were not set by marginal product, rather, (in the context of agriculture) the amount of money they could make if they procured their own land and became produced their own commodities. Marginal productivity for Clark was a determinant to configure a firm's distribution of income. Stabile (1995) interprets Clark's use of marginal productivity as validation that wages are determined by the prices of labor and capital. Therefore, increases in capital can increase wages and continue to guarantee workers are paid in accordance with what they contribute to production.

Clark's argument on wages was a moral one, as he wanted to ensure workers were not exploited. He used his marginal productivity theory on wages as an argument against the growing popularity of socialism around the turn of the century. To him, wages were justified if they reflected what the workers produced. Clark was aware of the shortcomings of his theory as it relied on very restrictive assumptions. Not only does his wage theory necessitate perfect competition; it also requires the costs of labor and capital to be fixed. Clark wanted to find a way to make wages less rigid and capable of matching

the variability of input prices. So, to ensure workers would benefit when production efficiencies resulted in higher profits, Clark believed workers were better equipped when they were given a stake in the economic outcome through their wages. A simpler approach, according to Clark (1904), was to establish a wage system that rewards workers in accordance with the variability of their value added. Profit sharing became an ideal system for him since it aligned the interest of the workers with the owners. Further, it was beneficial for the firms to implement because it would attract higher skilled workers, and they will be encouraged to maximize productivity (as opposed to working slowly to maximize hours worked). Further, he believed profit sharing created a pareto optimal outcome because workers would benefit more from the increased earnings than employers.

When applying profit sharing to the macroeconomy, Martin Weitzman (1984) presented reasoning how firms utilizing wage variability could offer employment stability and help resist recessionary pressure. On the need to move away from a strict wage economy, he wrote:

For when a contractionary impulse hits, not only is the initial response of a wage economy to throw people out of work, but a wage system can deepen a recession, multiplying its adverse consequences until the economy is trapped in a vicious circle of persistent involuntary underutilization of the major factors of production. (p. 46).

Weitzman (1984) believed this issue was corrected in a profit-based system where workers were partially paid for a percentage of profits the company realizes from the worker's output. In *The Share Economy* (1984), he demonstrates how to solve stagflation issues through profit sharing mechanisms. A firm that does not implement profit sharing

for its employees wants to hire labor until their marginal revenue is sufficient to equal the marginal cost of producing. So, in the case that a worker is paid \$20 per hour, businesses will reduce their workforce if the employee's output is less than \$20 per hour. In a profit-based system, where workers' compensation package includes profit sharing, businesses will hire as long as the employee's base wage equals the marginal cost. The profit-sharing portion of compensation allows for more labor flexibility since it does not factor into marginal costs. If recessionary or other forces drive down profits, for instance, if a worker's base pay is \$15 per hour and another \$5 is tied to profit sharing, the company will not reduce its workforce until marginal output is less than \$15 per compared to \$20 in for a non-profit sharing firm. Thus, alternative compensation structures can have stabilizing effects to employment rates (in addition to equity considerations).

The two most prominent issues that firms hope to improve by implementing profit sharing and employee ownership programs include better decision making and increased productivity. Aside from keeping wages at a justified level for workers, John Bates Clark believed it was in the firms' best interests to acquire skilled managers and retain them as committed investors which could be accomplished through profit sharing (Blasi, et al. 2010). When the employee becomes an investor by having stake in the firm's outcome, their interests are more aligned with the objectives of the firm. Moreover, owners want to ensure that employees give a consistent and high level of effort on the job, and a simple way to achieve this is to incentivize employees to do so. In Weitzman's (1984) model, he describes the profit sharing portion of wages as a substitute, which could deter workers as they would receive less wages when profit goals were not met. Further, Stiglitz (1974)

noted profit sharing's most significant detriment, the fact that workers bear risk. Workers at all levels are not interested in increasing their risk without a reward to counterbalance the added risk. By offering a portion of ownership to employees, they have an additional incentive to make decisions and put forth effort that are in the best interest of the business.

The remainder of this chapter is broken up into two parts to address the differences in equity incentives for executive and non-executive employees. Although there is crossover with incentives, the employers are primarily interested in better decision making for their executive employees and increasing effort for their non-executive employees. First, we will explore the uses of equity sharing with executive managers.

3.1: Part 1: Equity-Based Compensation for Executive Employees

3.1.1 Economic Theory on Agency Costs

As companies grew to unprecedented levels during the industrial revolution, the relationship between business ownership and management began to take new shape as well. At this point, a separation of ownership and management took place out of necessity. Prior to the industrial revolution, the majority of companies were managed by their owners since they were smaller and less complex (Chandler 1984). With new management structures in place, this brought about new problems for owners to solve.

Ownership now needs to ensure their incentives are aligned with the managers they hire since they expect the managers to make decisions in the owners' best interest. In this new format, a principle-agent problem emerges. The principle in this scenario are the business owners who are looking to hire and properly compensate their managers, the agent. The principal-agent problem becomes a form of game theory as the principle aims to design a contract which can guide interests of the managers making decisions in the best of both their interests.

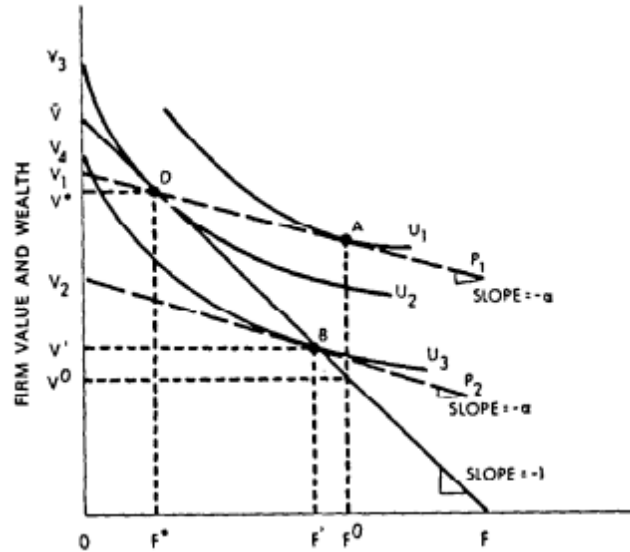
Agency theory focuses on the individual utility as the driving force behind their personal incentives. Broadly, the agency problem comes about any time two parties enter into an agreement, but employers (principals) are primarily focused on the costs associated with hiring outside workers (agents) to act on the firm's behalf. Eisenhardt (1989) distinguishes the two issues that agency theory aspires to solve. First, the principal and agent maintaining different desires or goals add costs for ensuring the manager is working in ownership's best interest. Typically, these costs are associated with monitoring and auditing employee behavior. The second issue is risk sharing and the different propensity to risk between the two parties. While the latter issue can technically be encompassed by the first, they are viewed separately by owners and have different solutions. The employment contracts between managers and owners are incomplete and welcome the prospect of moral hazard. While employers are never able to fully enforce their desired behavior, they can design incentives to encourage it.

A hypothetical scenario modeled by Jensen and Meckling (1976). The authors model the expansion paths firms face when deciding how much money to allocate

towards non-monetary benefits (such as paid time off, office perks, retirement matching, etc.) to demonstrate how incentive differences between managers and owners translate to agency costs for a firm. They compare expansion paths between full managerial ownership and partial ownership by management.¹⁰ In the case of full managerial ownership, the manager is limited to a certain budget constraint ($\bar{V}F$ in Figure 3.1), where the owner manager will have to give up firm value to purchase non-monetary benefits. When the owner sells equity of the firm, their individual utility and indifference curve alter from the firm's, and their budget constraint flattens out since they no longer bear full costs and therefore, they do not give up as much value in return for non-monetary benefits. The now, partial owner-manager's indifference curve is depicted by U_1 in Figure 3.1. Their budget constraint is now represented by the line V_1P_1 and the ideal amount of non-pecuniary benefits to spend is point A. In this example, the flattening of the budget constraint entices the partial owner-manager to spend more on benefits, which sinks the value of the firm (to V_0) since the business is still operating under the same budget constraint ($\bar{V}F$). In this example, the flattening of the budget constraint entices the partial owner-manager to spend more on benefits, which sinks the value of the firm (to V_0) since the business is still operating under the same budget constraint ($\bar{V}F$). The drop in value is the agency cost associated with managerial decisions being made by managers who do not have the same incentives as the owner.

¹⁰ In the text, Jensen and Meckling (1976) model the expansion paths under the assumption that the manager owns a significant portion of the firm; the theory, however, can be applied for any firm where the manager does not have full ownership.

Figure 3.1: Market Value of the Stream of Non-Pecuniary Benefits



Source: Jensen and Meckling (1976)

Another major issue concerning owners is the managers' attitudes toward risk. This issue is characterized by the principal-agent theory. Risk transference requires a quantitative approach to the principal-agent problem to find the optimal solutions. Managers are more risk averse than their owners since they value a consistent salary as opposed to more volatile investments (Weitzman and Kruse 1990). Typically, a large percentage of a manager's wealth is generated by their salary, and they are not able to diversify their income. Owners fear that their managers will take the least risky route when making decisions on which direction to drive their firm's activities. Managers most likely will not desire additional risk until they are compensated to factor in the risk they are taking on. The more uncertainty a facing a firm, the greater the risk premium owners must pay to their managers as compensation to overcome the added risk to the managers' income streams (Eisenhardt 1989).

For firms, agency costs are incurred whenever there is more than one party working towards a goal, which is also referred to as “cooperative effort.” Jensen and Meckling (1976) define agency costs as the sum of the residual loss caused when managers make decisions in self-interests and the costs associated with monitoring and bonding managerial behavior. Monitoring costs are those associated with aligning the incentives of the managers with the shareholders, typically by contractual arrangements that add benefits to the manager when the firm’s goals are met. Bonding costs occur when the firm spends resources on operations that can guarantee to restrain manager decisions against ownership interests. This is regularly done by hiring outside auditors to review financials or contractual arrangements that limit managers’ decision making.

Many scholars have concluded that workers are not influenced by authoritative and disciplinary measures, but rather by the design of specific contractual structures that bring about a mutual beneficial relationship between the principal and the agent (Alchian and Demsetz 1972). Further, business owners can align incentives and risk preferences by including some degree of ownership into their executive managers’ salaries. When describing how managers only weigh their personal interest when making decisions for firms, Jensen and Murphy (1990) state:

If one abstracts from the effects of CEO risk aversion, compensation policy that ties CEO’s welfare to shareholder wealth helps align the private and social costs and benefits of alternative (inefficient) actions and thus provides incentives for CEOs to take appropriate actions. Shareholder wealth is affected by many factors in addition to the CEO, including actions of other executives and employees, demand and supply conditions, and public policy. It is appropriate, however, to pay CEOs on the basis of shareholder wealth since that is the objective of shareholders. (p. 226).

One of the most common methods to tie pay to shareholder value is to include company stock (or stock options which is common for executive managers) as part of the executive's compensation plan. By doing so, a manager's salary will rise and fall with the valuation of the business.

Building onto the Jensen and Meckling's model explained earlier, Haugen and Senbet (1981) demonstrate how managers react when some degree of ownership is added to their compensation portfolio. They introduce the idea of call options, where the partial owner-manager has the right to buy a defined amount of company stock at a certain price in the future (therefore, regardless of the set price, the higher the value of the stock the more valuable the call option becomes). In the Jensen and Meckling's (1976) model, the firm's value is driven down by the manager's desire to consume more perquisites since they are not bearing all the cost as they were as the sole owner. When Haugen and Senbet (1981) introduce a call option that allows the partial owner-manager to purchase back the entire equity of the firm at an exercise price, the value of the option augments the manager's wealth line (i.e., the budget constraint in Jensen and Meckling's model) and the value of the call option increases as the value of the firm increases. Now, since incentives have changed, they are more incentivized to increase the value of the firm. It is no longer in the manager's interest to consume excessive perquisites, as it will cost them in the long run with a lower call option value. The objective, however, is for the firm to ensure that the new manager's wealth line is tangent to the utility curve obtained from sole ownership (at the point V^*, F^* in Jensen and Meckling's) model. To do this, the contract must be designed to ensure the value of the call option is sufficient to assure the

manager will not consume any more benefits than they did as a sole owner. If the firm can accomplish this, agency costs will be reduced to zero.

It has been widely theorized that managers make decisions in their own interests before considering the firms' objectives. Agency costs come from the differences between ownership and managers, so it is in the owners' interest to align their goals. Further, the company can reduce the agency costs associated with monitoring or auditing managerial decisions. Through incentive alignment by use of equity, the executive managers have shifted their role in the firm. Prior to receiving equity, their goals aligned closer to the workers. Sustainable growth, job stability, and increased compensation drove their business decisions. Now, they have become owners themselves and align with the interests of a profit motive and look to reduce costs where profit maximization can be achieved and often includes reducing the workforce or their pay.

3.1.2 Empirical Evidence of Executive Equity Compensation

Aside from conceptual analyses, the literature has investigated how to reduce agency costs through the implementation of equity-based incentives. Jensen and Murphy (1990b) write about the need for research to focus on how CEO's are being paid as opposed to how much. They provide the example of Disney from 1984 through 1990 and their former CEO, Michael Eisner, whose pay is highly associated with company performance through stock options and other profit-based incentives. Eisner was regarded as overpaid by some business press because of the large sticker price of his salary. These

sources of criticism, however, did not consider the variability of his pay relative to the variability of shareholder wealth, which increased by around \$7 billion in the six years he had been CEO. When factoring incentive compensation, Jensen and Murphy rank Michael Eisner fourth best paid CEOs in a survey of 430 companies.

Much of the research done on CEO compensation involves testing the mechanics of agency theory and examining if equity incentives meet expectations by using real sampling data. Mehran (1995) provides extensive testing on firm performance and its relation to CEO compensation structures using prediction modeling and significance testing. The author explores the differences in the CEO's relation to ownership, and notes differences in equity-based composition with characteristics such as the percentage of stock held by insiders and whether the directors are inside or outside the organization. The study examines 130 randomly selected manufacturing firms from 1979-1980 and finds a significant relationship between equity-based incentives and firm performance where performance is measured by their return on assets. The estimate show that firm performance is positively correlated with the percentage of equity-based CEO pay in support of agency theory, in which managers with a higher stake in the firm's wellbeing are going to make decisions in their company's interest more often than those with lower stake. Mehran (1995) also tests the significance of board member characteristics and finds that equity-based compensation is used less when the board of directors come from within the organization, suggesting the inside directors are looking out for their manager's interests more than the company's. Moreover, the study finds that companies with larger insider holdings or outside block holders offer less equity-based incentives

than those with lower insider holdings, and managers who have a larger percentage of holdings are likely to have less equity incentives suggesting that equity incentives are inversely related to the manager's percentage of ownership. In sum, the results of Mehran's (1995) testing are indicative of agency theory, such that firm's owners or directors must consider many factors when designing incentive packages for managers.

While many tests have shown the general benefits to a firm, many owners seek evidence that their managers will adjust their risk tolerance when they have a larger stake and are incentivized to take on more risks. DeFusco, Johnson, and Zorn (1990) examine stock price variances to see if stock option plans have effects on the volatility of the options, stock price, and shareholder and bondholder wealth, and examine if issuing stock to managers' compensation creates more volatility. To test the change in variance of the options they look at the rate of change in variance of six months pre-adoption and six month post-adoption and find that the change in variance in the price of stock options is significantly higher for firms who have adopted stock option plans for executive leadership. To test the variance of stock price pre- and post-adoption they use much longer periods of time (500 day and 24 months) to avoid the effects of volatility due to adoption and measure the volatility by daily returns in order to find accurate short-term variance. They use an NYSE (New York Stock Exchange) control group and find a mean variance of 1.03, where the mean variance for firms proposing stock option plans is 1.161. For firms making the changes, they found a Z score of 4.34 (meaning 4.34 standard deviations from the mean value), which all indicates variance is significantly higher for firms who implement stock option plans. Further, they test the volatility for

bondholder and stockholder wealth in the days following the plan adoption. They find that of the 107 firms tested there was a .40% increase in shareholder wealth on the event date and .68% increase during a two-day interval around the event date. All the results from the testing performed by DeFusco, Johnson, and Zorn (1990) indicate the hypothesis that managers undertake more risk when their compensation is tied to equity is true. Other research¹¹ provides support to these results as well.

3.1.3 Arguments Against Equity Compensation for Executive Employees

Under neoliberalism, CEO pay has risen dramatically and has become a noteworthy factor for arguments against rising inequality. In a compensation data compilation done by Larker and Tayan (2019), they show the average CEO (for S&P 500 companies) makes around \$10 million per year. This is a phenomenon most prominent to the United States. Statista Research Department (2018) shows that the United States leads the world in CEO holdings despite of Jensen and Murphy (1990) pointing out that the average CEO in 1984 owned less equity than the average CEO in 1938 in terms of the magnitude of their holdings, the amount of CEO equity after 1984 exploded to much larger levels. The data from Larker and Tayan (2019) show the salary of the CEO only incorporates around 13% of their total compensation package, while equity and stock options make up almost 75%. These numbers indicate owners and boards are fully aware

¹¹ Additionally, Testing done by Amihud and Lev (1981) suggested that firms with stock option compensation plans for managers were less likely to involve themselves in conglomerate mergers which is viewed as a risk reducing maneuver and indicates that manager's with wealth tied to stock price aren't as interested in stabilization as managers without.

of agency theory and its effects on executive leadership and decision making. However, a dramatic increase in total compensation from about \$1 million in the 1970s to \$9 million in the 2000s and vast majority from equity has caused concern from economists that this solution is overcompensating for the agency costs and has contribute to aggravate the problem of rising inequality.

There are several reasons why excessive equity compensation can hinder a company. Jensen and Murphy (1990) are not strong advocates of the necessity of stock options for several reasons. First, managers typically have better information than the owners, and are therefore better suited for decision making regardless of compensation incentives. Second, they suggest CEOs may not be as critical for firms' growth as shareholders may be induced to believe. They also suggest incentives may not be as important because many of the functions and responsibilities of a CEO are dependent on their ability to lead a company, which may not be responsive to incentives. Further, they find that increases in salary for CEOs is significantly correlated with increases in shareholder wealth but not by substantial amounts. Their research finds that a \$1,000 increase in shareholder wealth only results in a \$.03 increase in CEO salary. Similarly, Kumar and Sopariwala (1992) suggest that share prices can be an unreliable indicator of manager performance because of the many aspects outside of managerial control, such as the maturity of a company which can affect the upside potential of stock price. They propose that companies should use long-term performance plans with profitability incentives to reduce the issues associated with equity-based pay.

Aside from inefficiencies within firms, agency theory for executive managers has drawn critics at the macro level as well. As mentioned in Chapter 2, the drastic increase in CEO salary has been a contributing factor to wealth inequality, which is driven by income disparities. Moreover, by incentivizing managers to generate greater shareholder wealth, equity incentives have created an unhealthy focus on stock prices. Lavoie (2012) links the popularity of performance-to-pay with obsessive dedication to shareholder metrics, such as earnings-per-share and has enticed managers to focus on these targets to enhance the stock price. This becomes problematic because maneuvers that increase the stock price typically divert resources away from the firms' and workers' well-being. It leads to wealthier executives but not more sustainable and healthy firms. While profits used to be re-invested into business activities, such as research & development, they are now often used as payouts to investors. Lazonick (2017) labeled this trend as going from "retain-and-reinvest to one that is best described as downsize-and-distribute" (p. 221). He attributes the focus on the neoclassical agency theory for executives as a key driver of this trend. The focus on share price led to distribution of revenues in ways that raised share price that benefits only a few wealthy managers and shareholders. It provides little benefit to the non-executive workers at the firm by neither redistributing to their pockets nor enhancing the longevity of the firm by reinvesting in into the well-being of the company. One of the most popular methods firms downsize-and-distribute their profits is by initiating stock buybacks, which increase stock price by reducing the number of outstanding shares (Lazonick and O'Sullivan 2000).

Critics make a convincing case that agency theory as it relates to executive managers leads to a solution that is worse than the initial problem. A compulsive focus on share price threatens the sustainable growth of the firm and the macroeconomy. In part 2 of this chapter, we explore the implications of spreading equity throughout the firm by implementing broad-based employee ownership.

3.2: Part II: Equity-Based Compensation for Non-Executive Employees

As seen in the previous section, reducing agency costs by offering equity incentives for executive managers is widely accepted by researchers and utilized by many companies. So, the problem has been solved as employers spend substantial efforts to ensure that their interests are aligned with the managers in charge of the direction of the company. Similar logic can be applied to offering equity to all employees. Using incentives, not only will employees make better decisions, but by having a stake in the financial outcome, they will be more willing to put forth the extra effort necessary to meet the firms' goals. Broad-based employee ownership remains much less utilized than for equity incentives for executives. In the second part of this chapter, we will use research data to examine the mutually beneficial relationship between employee owners and business owners that can emerge when all employees become partial owners of the company.

3.2.1: Benefits of Employee Ownership for Workers

Higher Wages

The efficiency wage theory¹² implies that workers who are paid at the market clearing rate are less incentivized to put forth consistent high levels of effort, so that it becomes advantageous for firms to pay above market rate to eliminate shirking (Yellen 1984). As a result, in contrast to Weitzman's (1984) proposal to consider profit as a substitute for base wages, the efficiency wage theory indicates that - for owners to obtain higher effort from workers - the value of the incentives to the employee needs to complement their current wage. Ugarkovic (2008) contends that there is complementarity between profit sharing and wages, and the incentive portion is in addition to the worker's regular salary. By measuring wage growth in a study of firms who introduced profit sharing mechanisms between 1998 and 2002, the author finds that the growth rate of base wages increases during this period. If profit sharing were a substitute for wages, the growth rate of base wages should be flat or declining. This evidence suggests firms add wages through gain sharing instead of using a portion of their salary as a variable, profit sharing as a substitute to their overall compensation. Regarding the overall wealth of employees, Buchele et al. (2010) examine firms with ownership plans and find that purchases of stock through a company plan adds to the employees' wealth as opposed to replacing it. Buying company stock adds almost a dollar-for-dollar increase to the

¹² Shapiro and Stiglitz (1984) show that higher wages can induce higher effort. When workers are paid at the market clearing rate, the cost of finding another similar job is the only concern for the worker. However, when they are paid above the market rate, the opportunity cost by losing their job raises as it's less likely they will be able to find another job at that rate. Therefore, when compensation is above market rate, workers are incentivized to give a higher level of effort to reduce the threat of unemployment.

employee's total wealth which, indicates that equity incentives are a supplement to households' wealth.

To clarify whether equity incentives are a complement or a substitute, researchers have drawn comparisons between total compensation for workers at firms that offer equity and those with no employee ownership. Blasi, Conte, and Kruse (1996) examine 562 public firms with at least a 5% employee ownership stake and compare their 1990 financial metrics against 4,716 public businesses without employee ownership. The regression results of their study indicate that firms with at least 5% employee ownership stake showed 8% higher compensation for their employees. In a similar study, Handel and Gittleman (2004) use 1995 data from the US Bureau of Labor Statistics and find a 9% wage differential for profit sharing firms. Furthermore, Azfar and Danninger (2001) examine the growth rate of wages and find higher growth rates for firms with profit sharing as part of employee compensation. In a comprehensive study using NBER and GSS data,¹³ Kruse, Freeman, and Blasi (2010) find that both datasets indicate that shared

¹³ The National Bureau of Economic Research (NBER) is a private, nonpartisan organization that provides economic data and analysis of major economic issues by a network of 1600 economists. It was initially founded as a progressive mechanism to provide analysis into 1920's arguments on income distribution according to their website. A survey on companies using different mechanisms of shared capitalism was conducted and used in the book *Shared Capitalism at Work. Employee Ownership, Profit and Gain Sharing, and Broad-Based Stock Options* by Kruse, Freeman, and Blasi (2010). The book is composed of either separate academic papers (from various authors) from the NBER conference in 2006. They all use the same survey which showcases fourteen various companies from 323 different worksites from 2001 through 2006. All fourteen companies have implemented some form of shared capitalism and employee surveys were conducted on factors such as job and wage satisfaction. The results of the NBER study are compared to similar employee surveys conducted by the General Social Survey (GSS) from 2002 and 2006. The GSS is a data gathering survey to analyze and monitor trends and constants in attitudes, behavior, and attributes conducted by the National Opinion Research Center. The GSS surveyed 1,145 employees in 2002 and 1081 in 2006. Many questions from the NBER study were replicated so the authors could compare the results of the NBER study to account for biases. *Shared Capitalism at Work* compiles a list of articles that utilize the NBER and GSS survey information to analyze different aspects of shared capitalism and will be referenced frequently throughout this chapter.

capitalism (which refers to the different mechanism of compensation where worker pay depends on the company or group performance) is associated with higher pay and benefits, and workers are more likely to feel they are being paid what they deserve. More specifically, employee ownership is linked to higher compensation compared to the market rate of compensation for the same job. These correlations are strongest for companies that have a defined Employee Stock Purchase Plans (ESPPs) or Employee Stock Ownership Plans (ESOPs). These studies show compensation in general is higher for firms who have implemented shared capitalism which suggest either these companies offer more generous levels of pay or workers are more efficient resulting in higher profits which is being shared to them. In any case, the data suggests gain sharing supplements wages rather than substitute their pay.

Job Security

Another important attribute for job seekers is stability. Freundlich (2009) uses survey data from the Mondragon Corporation¹⁴ and examines the motivation that draw workers into the cooperative worker system.¹⁵ The findings indicate that job security is a one of the foremost reasons for joining a cooperation. It is also a strong indicator in whether the worker is satisfied with the cooperative arrangement. The author shows a one-point increase in perceived job security equates to a third of a point increase in

¹⁴ The Mondragon Corporation is a co-operative federation located in Spain comprised of 96 companies (with approximately 81,000 workers) operating as worker cooperatives.

¹⁵ A worker cooperative is company that is both owned and managed by its employees. While shared capitalism only refers to monetary ownership, cooperatives allow for more decision making and voting rights amongst its employees.

worker satisfaction for younger workers (with higher results for older generation workers). Additionally, Heras-Saizarbitoria (2014) indicates, the need for job security is a vital influencer for job seekers when choosing whether to look for a new job, and this is especially true during recessionary periods.

In addition to increased pay, employee ownership has proven to provide workers with more stability as well. Craig and Pancavel (1992) examine figures from the logging industry in the Pacific Northwest where the competing companies were similar in size, costs, and constraints, but differed in the makeup in ownership. They find the firm operating as a worker cooperative was less likely to show changes in employment as a result of the changes in the prices of inputs or outputs. The study compared firm performance during the 1972 expansionary period versus a reactionary period in 1980 and found that while 1980 employment in the conventional firms was 72% of 1972 employment numbers, cooperative firms remained at 99% of 1972 employment numbers. The findings suggest this is in part due to more flexibility and willingness from the cooperative's members as they were more likely than conventional firms to see hourly wage decreases during recessionary periods.

From the GSS and NBER survey, respondents were gauged by their sense of job security by asking if they believed they would be laid off within the upcoming year. The data shows that employee ownership is linked with a higher perception of job security (Kruse, Freeman, and Blasi 2010). Employee owners maintain a positive impression towards their own job security which is indicative of lower turnover. Recent studies continue to show employee-owned firms are less likely to administer layoffs. In an

assessment also using GSS data, Rosen (2015) notes that in the general, working population, 9.5% of workers reported having been laid off in 2014 compared to only 1.3% of respondents who were employee owners. Additionally, the results from 2014 are consistent in this study all the way back to 2002, when the GSS began tracking ownership type. Kurtulus and Kruse (2017) explore employment figures from all publicly owned companies from 1999 through 2010 to show how companies performed during the recessions of 2001 and 2008. They find that for a one-point drop in employment-to-population rate, firms with no employee ownership experience a 4.2% drop in employment; firms with some employee ownership only show a 3.9% drop in employment. The likelihood is dropped substantially when controlling for firms which only show a 2.7% decline in employment.

Research indicates employee-owned firms are less likely to administer layoffs, but job seekers may also be concerned about the stability of the firm itself since survival is indicative of job security. Companies can shut down for a variety of reasons, which leads to unemployment; for this reason, it is worthwhile to examine if employee ownership can alleviate some of these risks. Blair, Kruse, and Blasi (2000) considered 27 publicly traded firms obtained from five different data sources that met their employee ownership criteria (where at least 20% of stock was owned by employees); they compared this sample to a control study where they selected two control firms for each employee-owned sample and compared the company performances from 1994 through 1997. The authors use this data to see if firms with large employee ownership stand a better chance of surviving through a given timeframe; they find that employee firms do

show a higher survival rate. Furthermore, only one of the 27 sample firms ceased to exist by means of bankruptcy, liquidation, or a buyout, while 11 of the control firms disappeared through one of those methods. Using more current data, Kurtulus and Kruse (2017) examine employee-owned company performance against their peers by using statistics from all publicly traded companies in the United States to evaluate company performance during two recessions. Their findings show that employee-owned firms are less likely to disappear for any reason than non-employee-owned. Additionally, the amount of employee ownership plays a substantial role in firm disappearance. An increase of \$1,000 in company stock per employee relates to a half a percent less likelihood for the firm to dissipate. They find significance in the magnitude of employee ownership, which also affects the likelihood of disappearance. According to their results, there is 22.4% lower likelihood of disappearance for firms with 100% employee ownership to those with none. In all scenarios, the study indicates the more employee ownership, the better.

The positive correlation with employee ownership and company longevity suggests the principal agent problem is being reduced by aligning goals with the employees and the owners. This tells us that employees are motivated by ownership incentives and firms are more productive as a result. Kurtulus and Kruse (2017) suggest that incentive alignment through equity incentives helps create an “ownership culture” that motivates employees to make decisions that enhance company longevity. Lampel, Banerjee, and Bhalla (2018) reveal that employee-owned businesses are more long-term oriented when making decisions regarding investment and growth than conventional

firms. They suggest this is partly due to employees' willingness to be more flexible regarding pay and with their decision-making, which adds to the firm's resilience. Research continually shows that employee-owned firms have characteristics that improve stability of the firm, which is valuable to workers.

Career Development

When it comes to career development, employee ownership can potentially reintroduce the career-with-one-company employment model Lazonick (2017) mentions is rapidly declining as it relates to firms' reluctance to retain and reinvest in their employees (which is a factor contributing to growing inequality). Robinson and Zhang (2005) find that workers are more likely to receive firm provided training and make other investments in human capital when their company is employee-owned. When employees are learning new skills, especially firm-specific, they retain value to the employer and can increase wages due to expanded skill sets. Furthermore, ownership culture allows for employees to be more involved in decision-making, as their expanded knowledge and increased skill set makes their input important to the direction of the company. Kruse, Freeman, and Blasi (2010) emphasize that employee participation is an important factor for job satisfaction, and their research links higher job satisfaction to higher levels of employee ownership. Handel and Levine (2003) conclude in their study that while equity incentives are effective, they are enhanced when combined with higher levels of employee involvement. Ability to learn new skills and being invested in decision-making can be considered mutually reinforcing; companies with more employee involvement

depend more on employees to take initiative and have the desire to increase their skillset and enhance their careers.

3.2.2: Benefits of Employee Ownership for Firms

Since the managerial incentive model presented by Jensen and Meckling (1976) was published, there has been little rebuttal from economists and businesses to the soundness of their theory. It remains standard knowledge that executives' salary should depend on firm performance, and equity and stock options now make up almost 75% of CEO salary (Larcker, and Tayan 2019). However, the use of broad-based equity incentives, where all levels of employees receive equity as part of their pay, remains a contentious subject in the literature. Researchers still question whether employee ownership can really generate a true mutually beneficial relationship between employers and employees. For instance, Aboody, Johnson, and Kasznik (2010) claim that lower ranked employees are not able to improve firm production given that their decision making is too low to make a substantial difference. Bergman and Jenter (2007) notes that standard economic theory suggest that any positive incentives not attached to closely monitored individual performance would invite a free rider¹⁶ issue more sizeable than the benefits of increased production firms would experience from employee ownership.

¹⁶ The free rider problem represents the incentive for a person to take advantage of a collective benefit without paying for it. As it relates to employee ownership, the employee considers how much effort is required to make a difference towards meeting the goals required to obtain the benefit. If the worker believes their performance will not change the outcome, they will not be incentivized to put forth extra effort and will rely on their colleagues' collective effort to make the difference. Because performance

The counter arguments to broad-based equity incentives have continued to persist since employee ownership gained popularity throughout the 1980's. Hambrick and Crozier (1985) shows that businesses that provide equity to mid-level managers have improved firm performance. The author suggests this is due to the managers' role as a primary translators between ownership and all levels of employees. Therefore, it is not only executives, but the mid-level managers as well who can make significant differences with their decision-making. Bryson and Freeman (2010) contend that ownership effects can have influence throughout a company since all employees have firm-specific knowledge on the production process and are more incentivized to better utilize this knowledge when they have performance-based incentives. Furthermore, Bryson and Freeman (2010) indicate that employee owners tend to receive higher wages, which suggests business owners tend to rely on the efficiency wage theory to provide their employees with extra incentive to avoid shirking and put forth higher effort; the additional compensation gives them more incentive to stay committed. Employers can provide this without having to be weighed down by another fixed operating cost, which stresses cash flow and threaten profitability during slower periods of growth. Coincidentally, employees desire to own stock as well. Even for the most risk averse employees, 66% have a favorable view of employee ownership and almost 80% of all employees uphold this view (Kruse, Blasi, and Park 2010). Thus, there is evidence of a mutually desirable relationship between employers and employees when broad-based

monitoring becomes more difficult as the number of employees grow, larger firms (or groups) tend to have a more significant issue with free riders.

equity incentives are adopted. This indicates that this arrangement should be worth more serious consideration and wider adoption on the part of businesses.

Higher Productivity

The principal agent problem persists not just between managers and ownership, but also between owners and its lower-ranking employees as well. Business owners want workers to put forth high levels of effort with consistency; free rider theory, however, suggests that in the absence of incentives, employees will only work hard enough to remain employed. So, by introducing equity incentives to compensation packages, employees will have incentives to help meet the goals of the owners and will give more diligent effort. Through equity compensation, owners hope to improve worker commitment and reliability with an increased willingness to make sacrifices and work harder for the company's success. Blasi et al. (2010) examine the NBER and GSS survey data and found that workers' perspective on their job and company is more favorable when they participate in shared capitalism. They were more likely to say they were willing to work hard and are proud to work for their employer when equity was part of their pay. Additionally, employees participating in shared capitalism had better views of their colleagues and perceived effort from their coworkers. The NBER and GSS surveys measured each firm's magnitude of shared capitalism and for each firm and in each of these cases, larger the degrees of employee ownership or profit sharing resulted in stronger correlations.

Although it is important for employees to perceive a positive work culture, employers are mostly concerned with actual performance results and if their firm will

improve when new compensation schemes are implemented. A simple way to directly measure employee performance is by examining changes within productivity, or output per worker. Economists began studying this when employee ownership gained popularity in the 1980s. Enough research was conducted to warrant the first meta-analysis performed by Doucouliagos (1995) to answer whether employee ownership improved productivity. The meta-analysis examines the effects from productivity on two types of firms, those that drive decision making from its employees (labor managed firms or LMFs) and firms owned by its employees (participatory capitalist firms or PCFs). In general, the results were strongest for labor managed firms, but also showed that worker ownership is associated with higher productivity. While 30% of the studies showed negative correlation between productivity and ownership, none of these were significant.¹⁷ Based on the meta-analysis results, it is predicted that productivity slightly increases when employees have stake in their outcome.

As more employees have become owners over the past decades, economists have continued to evaluate whether ownership continues to be an effective way to increase productivity. Bryson and Freeman (2010) examine the productivity effects of employee-owned firms in the United Kingdom, which experienced similar growth of ownership as the United States starting in the 1980s. Their study finds that shared capitalism amongst employees is positively associated with labor productivity. In fact, the correlations were stronger for employee ownership than profit or gain sharing. Kurtulus and Kruse (2017)

¹⁷ They find average regression was significant but small enough ($r = .02$) to where the lower bound of a 95% confidence interval was zero.

also examine productivity effects. They find correlations around between 2% to 3% percent higher productivity for employee-owned firms. They also mention this correlation tends to increase during recessionary periods. The employee-owned companies are more likely to retain employees during this time and often suffer through lower productivity rates due to their reluctance to reduce the number of workers while output decreases.

Improved Financial Performance

Higher productivity is desired by all businesses, but it is only symptom of a healthy company and not always indicative of higher profits. The most concrete way to measure the benefits of employee ownership is to evaluate their financial health by looking at profitability over time. Aboody, Johnson, and Kasznik (2010) examine companies that offer stock options as payment. They want to determine if repricing the options when the stock depreciates (and value of original options drop considerably) effectively realigns the incentives between ownership and employees. They find that firms that reprice their options to provide a bigger potential payout show significantly larger increases in operating income and cashflows over a five-year period. The results suggest the agency theory does work as intended, and the goals of ownership and employees are aligned. Therefore, the company is better suited to meet its objectives. In one of the earlier studies examining financial health, Blasi, Conte, and Kruse (1996) find improved firm performance for several different key performance indicators. Their study analyzes 562 employee-owned firms (determined by having at least 5% ownership) and compares them to a sample of 4716 non-employee-owned firms. The results show

substantial differences between the two types of firms. Employee ownership programs result in 15% higher value-added per employee. Additionally, equity-based pay is linked to higher return on assets, return on equity, and profit margins.

Researchers have continued to assess ownership effects on firm performance. More recently, Kraft and Ugarkovic (2006) found that profit sharing's lasting effect on efficiency resulted in higher profitability for German firms. In a similar manner, Ren et al. (2019) examines whether the implementation of employee ownership eventually led to higher firm performance and finds positive results. O'Boyle, Patel, and Gonzalez-Mulé (2016) carried out a meta-analysis to gather the results of 102 different studies which approached this question. The authors were able to pull answers from 56,984 different firms. The results find a correlation of 4% ($r = .04$) of profitability and employee ownership. The results of the meta-analysis suggest that while the correlation is small, a 4% change in profitability for firms can be significant since profit rates vary, and a small increase can provide substantial improvements to a firm's financial performance.

Retention

The results mentioned from the section on workers' perspective can translate as benefits for employers as well. Low turnover, for instance, is desirable for both employees and business owners. Looking at both employee's and employers' perspectives, Azfar and Danninger (2001) conclude that profit sharing is negatively correlated with both quits and layoffs. Likewise, Kurtulus and Kruse (2017) find that overall turnover was smaller for employee-owned firms. From the firms' perspective, due to vesting schedules, which defines when an employee owns the shares and can sell them,

Core and Guay (2001) suggest that employee retention is one of the major factors explaining why firms implement equity compensation mechanisms.

Considerations based on retention match the analysis by Becker (1960), in which ‘commitment’ is defined as a function of how much stake one has in their organization. Therefore, when employees are owners, they have less desire to leave their companies. The empirical results tend to agree with these claims. In an early study, Long (1978) examines a trucking company which implemented an employee ownership program and finds that turnover is lowered by 30% after implementing the program. Similarly, using survey data from a single company, Buchko (1992) finds that the financial value of an employee’s equity is correlated with their commitment to the company and less intention to leave. These results suggest that higher ownership levels keep employees retained. More extensively, Blasi et al. (2010) examine employee ownership’s effects on commitment in their study using GSS and NBER survey data. First, they look at the questions that indirectly relate to turnover but are indicative of a satisfied employee. Both the extent to which the employee has interest in company issues and the frequency of employee suggestions are linked to employee ownership. The direct questions - how likely an employee is to search for a new job and how they rank their loyalty to the firm - show a positive relationship with employee ownership. However, it is important to note that employee ownership only decreases turnover when it is combined with other high-performance work practices¹⁸, especially lower supervision.

¹⁸ “High performance work practices” is a concept developed from theoretical human resources management research. Huselid (1995) highlights the practices accepted by the U.S. Department of Labor which includes concepts such as extensive recruitment, training procedures, information sharing, grievance

Better Resistance to Free Riders

One of the most prominent counterarguments against employee ownership for non-executive employees is the opportunity it creates for free riders to take advantage of this arrangement. This will prevent the company from being able to realize the benefits of offering equity incentives. Hardin and Cullity (2020) assimilates this free rider problem to the prisoner's dilemma.¹⁹ If the supply of a collective good is not sufficient, one's individual action will not make it sufficient. Alternatively, as it relates to free riders, if the supply is enough, there is no need for an individual to pay into it as they can still receive it without doing so. Thus, as with the prisoner's dilemma, the dominant strategies of each player result in deferring to work towards the collective benefit and the most optimal outcome is not met. Economists refer to the issue of free riders as the 1/N problem, in which N is the total number of employees who stand to benefit from the group incentive and 1/N is the payout that each individual receives. So, a larger the size of N, can present a larger potential for the free rider problem. However, Kruse, Blasi, and Park (2010) find that shared capitalism methods become more common as firm size increases, which counters this theory and suggests that since large companies cannot rely on close monitoring and micro-management, they should implement the high-

procedures, etc. Blasi et al. (2010) look at employee involvement, formal training, perception of job security, and closeness of supervision

¹⁹ In game theory, the prisoner's dilemma occurs when each player's dominant strategies results in an equilibrium that is not the most optimal outcome. The prisoner's dilemma derives from the concept of two suspects of a crime who can either deny or confess, and they are both enticed by the idea of denying while the other confesses and getting off free. The issue is that both suspects approach the logic similarly and choose to deny, which gives them a harsher sentence than if they would both confess.

performance workplace practices mentioned by Huselid (1995) to achieve optimal decision making and effort from their employees.

To some extent, free riding exists in all firms and is not specific to employee-owned businesses. Wherever there is a shared resource, there is a threat for free riders to take advantage of those who pay their fair share of the cost. For businesses, some workers will always engage in shirking, which is detrimental to productivity. The objective of employee ownership as it relates to effort, is that by giving an additional incentive, in which outcome matters, the employers can discourage shirking. This concept was demonstrated by Hansen (1997) who, similar to studies on productivity, found increased productivity amongst firms which offer group incentives. The author narrowed the focus to changes in individual productivity before and after implementing group incentives. While the top performers were less productive after the incentive, lower performers' productivity increased enough to raise the average by a significant amount. Here, it is shown that having a stake in the outcome can be most encouraging to the workers most likely to become free riders.

Using programs involving employee ownership, companies can create an anti-shirking culture that promotes workers to monitor their colleagues and not be afraid to speak out when team members are not putting forth their fair share of effort. This method is enticing to managers since coworkers performing the same functions work more closely than managers and have a better sense of how the job is being performed. So, it is worth questioning if workplace culture can discourage free riding. Kandel and Lazear (1992) find that workers can dissuade their colleagues from slacking through peer

pressure and holding each other accountable. Freeman, Kruse, and Blasi (2010) investigate the impact employee ownership has on company philosophy as it relates to anti-shirking behavior amongst employees. The authors find that workers are more likely to speak out when they have some investment in the financial outcome of the company. These findings suggest that workers do value their stake in ownership especially when they believe their managers will be proactive in correcting the behavior of other employees.

Benefits of Ownership Culture

Multiple benefits of employee ownership can be interrelated. For instance, employee ownership was linked to lower turnover (as pointed out in the previous section), and in this section it is noted that not looking for jobs is linked to better culture. So, there is a trickling effect to the benefits firms can experience by implementing equity-based compensation programs. Additionally, causational relationships exist within different benefits such as job security which allows employees to feel emboldened to put forth their best work and speak out against others that are not contributing their fair share of effort. Similarly, broad-based equity compensation can create an “ownership” culture that promotes the overall well-being of employees. Kurtulus and Kruse (2017) note that the ownership culture makes employees feel better connected to their firm which makes them more reliable and loyal employees. Ownership culture makes the employees not only less likely to look for another job, but to increase their skillset specific to their current firm. Kruse, Freeman, and Blasi (2010) use the NBER and GSS data to examine workplace culture and find that shared capitalism is positively related to employees’

evaluations of company climate and employee treatment, relationship with managers, and higher levels of training. These results suggest the ownership effect from implementing equity-based pay does bring about positive practices indicative of a healthy firm, both financially and culturally.

Limitations

Research suggests that equity incentives create a mutually beneficial relationship by offering higher pay and in turn reduces agency costs through better decision making and higher productivity. However, employee ownership by itself does not make a substantial improvement and works best when associated with other high-performance work practices (Blair, Kruse, and Blasi, 2000). After noting the linkage with shared capitalism and company performance, Blasi et al. (2010) note that this is only one factor and have a more substantial impact when combined with other high performance policies, such as extensive recruitment, information sharing, and enhanced training. Similarly, Pil and MacDuffie (1996) note the importance of practices that engage their employees through increased decision making, and Handel and Levine (2003) draw a connection between employee ownership and employee involvement. While ownership can incentivize employees to work harder and make better decisions, employee involvement gives employees the necessary tools to make the necessary changes to improve efficiency.

Additionally, the macroeconomic consequences of overfocusing on share prices were mentioned in the section regarding executive managers. While employee ownership in its current state is far away from being a severe issue, there is potential for employees

to become fixated by short-term profit goals and further adding to the issues of corporations becoming aligned with financial markets. These short-term goals can put firm longevity and sustainable wage increases at risk by diverting funds from reinvesting into the company to interest payments and stock buybacks.

3.3: Concluding Remarks

Through employee ownership, business owners can minimize the obstacles and costs derived from the principal-agent problem. Implementing broad-based equity incentives into employee's compensation can alleviate agency costs; employees become more emboldened to put forth a high level of effort and make decisions that align with ownership. In theory, these actions can increase productivity and improve the financial performance of the firm. Employers began offering equity incentives to executive managers to ensure they would drive the company in the direction aligned with the goals of ownership. While executive leaders typically make the most impactful decisions, most employees maintain some level of decision-making and a similar logic can be applied to employees throughout the company. Firms offer company-wide equity incentives to motivate employees to consistently work harder and increase their productivity. Additionally, employee owners are less likely to leave the company.

It is also generally in the workers' best interest to pursue employment opportunities that offer equity incentives. Research shows that equity incentives are additional compensation and employee owners receive above market rates for their work.

Employee-owned firms are also less likely to administer layoffs especially during recessions. Firm stability coincides with a stronger likelihood to invest in their employees' growth and development. These factors help to create an ownership culture in the workplace which improves attitude and worker well-being.

While the reduction of agency costs and increased pay creates a mutually beneficial relationship for employers and employees, equity incentives do bring about challenges to the macroeconomy. Stock options and equity-based pay has been a catalyst to the rapid increase of executive compensation which has been a major factor in driving wealth inequality. Also, the managers' goals become aligned with shareholders which is profit maximization. Oftentimes, to create the most profits, managers need to make decisions that negatively affect workers through lower compensation (or lack of raises). Workers, on the other hand, are less likely to be driven by short-term goals even when they benefit from an increased share price. Workers are likely to still be concerned with keeping their employment and fair wages, which can be achieved through long-term growth measures.

Chapter 4: Broad-Based Employee Ownership in Practice

4.1: Industries Best Suited for Employee Ownership

While the data shows improved performance metrics for firms who adopt equity plans, there remains a significant percentage of corporations that do not offer equity as part of their employees' pay. What is apparent is that certain types of companies are more likely to adopt these programs. Similar to the findings on equity pay for executive employees, companies have different structures and constraints, and it is very difficult to paint a similar picture for all companies and industries. Conventional wisdom asserts employee ownership is more appealing to some industries than others. Core and Guay (2001) hypothesize that firms most likely to utilize equity for all employees are those where workers' skills and knowledge are a comparatively significant factor of production or when the company has cash flow constraints. Their suggestion implies that businesses assert that employees make better decisions when they have a stake in the financial outcome of the firm. Alternatively, Kruse, Blasi, and Park (2010) find that firms utilize equity compensation for cash flow flexibility, but also will implement employee ownership when performance is most sensitive to effort. This perspective suggests that employee effort can affect business performance, and higher effort for some jobs and

industries can lead to more substantial changes in the financial outcome. These companies will then be more incentivized to adopt employee ownership.

Alternative arguments suggest that firms consider equity-based pay when they are concerned about the quality of their product. Firstly, recruiting is a crucial aspect for companies to acquire the necessary talent to ensure quality. Therefore, Hambrick and Crozier (1985) suggests that firms experiencing rapid growth should utilize equity incentives to recruit competitively. Through equity, they can offer potential large future payouts without having to forfeit as much cash while revenues are not considerable enough to pay comparable salaries. Bova and Yang (2017) apply game theory to show that when competition is severe and employees' bargaining power is relatively low, the dominant strategy for both the principal and the agent is to exercise equity-based compensation. This understanding builds on the theory outlined by Weitzman (1984), in which profit sharing is introduced as substitute for base wages to reduce fixed costs and increase stability. Moreover, Bryson and Freeman (2010) contend that firms who compete on the quality of their output should offer group incentives because equity can be used as an additional bonus to incentivize employees to put forth their best work, which will improve the quality of their output.

In practice, firms adopt employee ownership programs for a variety of reasons. In a survey of early²⁰ employee stock ownership plan (ESOP) adopters, Marsh and McAllister (1981) set out to find the motives for firms who implement an ESOP. The

²⁰ ESOPs became legally recognized business type as part of the Employee Retirement Income Security Act of 1974.

results show that providing a benefit is, by a substantial margin, the most prominent reason for adoption; 84% of firms indicate it is very important for them. The two following reasons, which both see 51% of firms claiming to be very important, are to improve productivity and to take advantage of tax incentives. Also, 35% of firms report that they adopted an ESOP to finance their growth, which is consistent with the assumptions regarding cash flow restraints. Other prominent reasons for adoption include avoiding mergers, unions, and buyouts and providing a private market for shareholders and as a real estate planning tool.

Broad-based equity incentives first gained popularity in the booming technology industry of the late 1980s (Freeman, Blasi, and Kruse 2010). This trend coincided with Hambrick and Crozier's (1985) analysis in which, due to rapid growth, companies needed to find alternative methods of compensation to remain competitive. Anderson, Banker, and Ravindran (2000) explain this and observe the use of stock options to recruit and incentivize high quality workers at all levels before their product materializes into large profits. The successes of companies such as Google have created an enticing offer for less risk averse employees who are able to defer current salary for substantial future payouts.

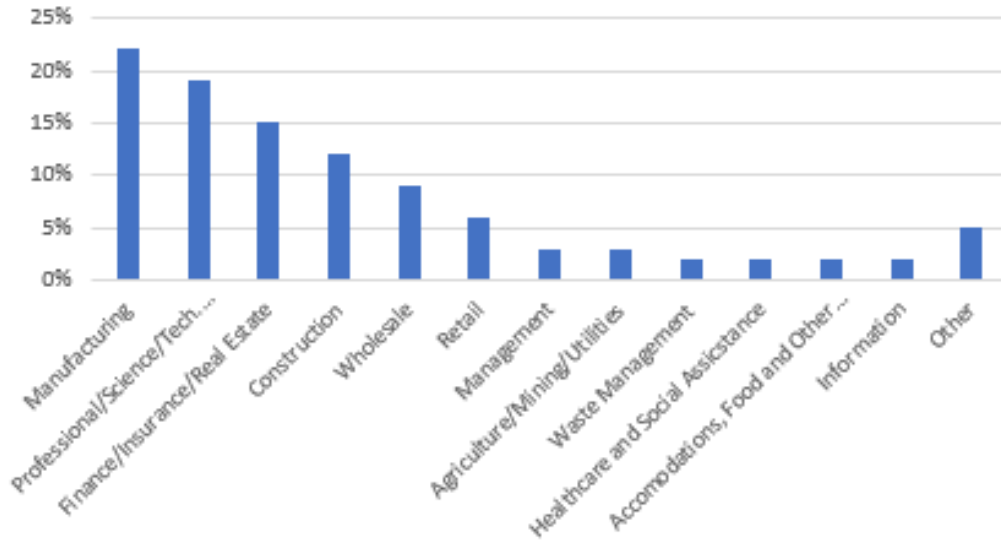
Aside from technology, equity-based compensation gained popularity across all industries in the early 1980s when companies began to take advantage of a series of tax advantages aimed to motivate employers to adopt broad-based employee ownership plans (O'Boyle, Patel, and Gonzalez-Mulé 2016). Some industries, however, are more represented than others. Kruse, Blasi, and Park (2010) use NBER and GSS survey data to

examine the influence of industry type on employee ownership and gain sharing program adoptions. For equity programs, they find one-in-every five employees own stock in their company. The data shows the industry types with more employee ownership programs match the theories stating human capital and sensitivity to effort are more inclined to offer equity. mechanisms, the most popular industries are manufacturing, finance, and computer services. The most common industries are transportation, communication, utilities, and computer services.²¹

By examining current data for all firms who are designated ESOPs, we can examine which industries are best represented for this specific type of employee ownership plan. The National Center for Employee Ownership (NCEO) reveals that manufacturing is the most prominent industry containing ESOPs (National Center for Employee Ownership 2020). Similar to the results from Kruse, Blasi, and Park (2010), professional services, finance, and real estate were popular as well. The percentages in Figure 4.1 only factors total numbers of plans and does not factor in ESOP representation of the industry as a whole. Figure 4.2 compares the number of ESOPs with the total industry to show which industry is more likely adopt employee ownership. This is done by computing the magnitude which is derived from the industry's ESOP representation compared to the industry's representation to the economy as a whole.

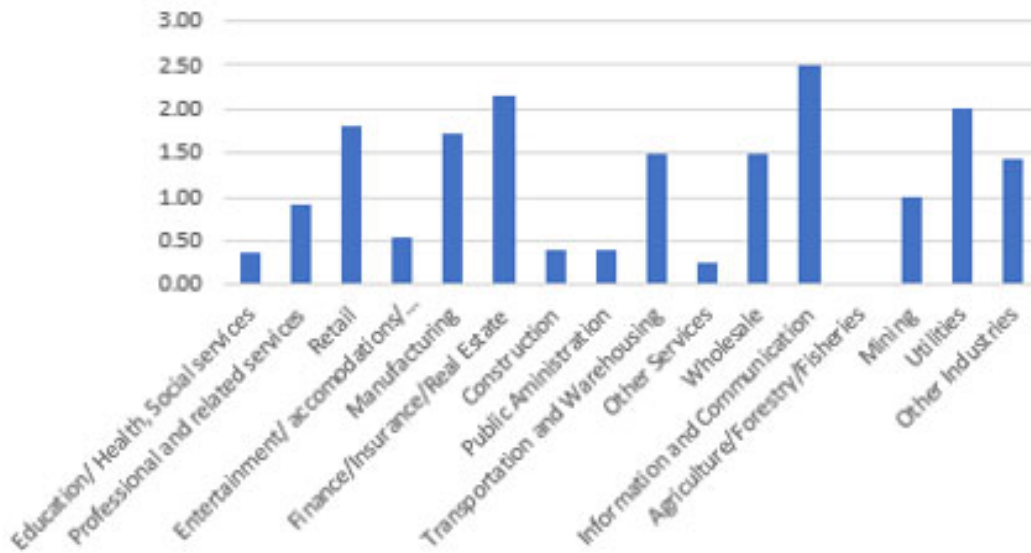
²¹Most common in the computer services industry, companies offer multiple types of shared capitalism. One notable designation not associated with employee ownership is union membership. Kruse, Blasi, and Park (2010) suggest this is partly due to fears that variable pay will increase inequality amongst the employees. The authors note that variable pay based on performance is preferred by about 75% of the employees surveyed, which means one in every four employees would rather have standard wages. The aim of this paper is to present employee ownership as an alternative method to increase employee pay and improve their well-being. Unions may present a better method to achieve these goals for the most risk averse employees, but this paper will only examine employee ownership.

Figure 4.1: Percentage of ESOPs by Industry



Data source: National Center for Employee Ownership (2020)

Figure 4.2: Magnitude of ESOPs by Industry



Data source: Wiefek (2017)

Wiefek (2017) analyzes this data and finds few, smaller industries such as utilities and communication are highly likely to adopt ESOPs as well as some of the industries already

mentioned such as finance, insurance, real estate, and manufacturing. While the industry types do follow conventional theories on equity adoption, Kruse, Blasi, and Park (2010) note that shared capitalism is becoming increasingly popular in traditional blue-collared industries, which could indicate firms are more reliant on human skill and knowledge, or they better understand the benefits of a more engaged workforce. As more industries realize this, the need to implement equity programs becomes more prevalent.

4.2: Employee Stock Ownership Plans

One way to implement broad-based equity sharing is through the use of Employee Stock Ownership Plans (ESOPs). ESOPs arose from the need to incentivize companies to allocate funds to their employee's retirement accounts. The Employee Retirement Income Security Act of 1974 (ERISA) provided tax incentives for firms with significant employee ownership (Freeman 2007). By allocating a fraction of outstanding corporate shares to employees, ESOPs became a designated way for firms to establish themselves as employee-owned. ESOPs are tax-exempt retirement funds, which distributes company shares to its employees. Most plans leverage themselves by establishing a trust that borrows money to purchase company shares. The trust then gradually distributes shares to the employees' retirement account. As the company repays the initial loan, payments are considered compensation expenses and both principle or interest payments are tax deductible as payroll deductions (Kim and Ouimet 2009). To be eligible for an ESOP, firms must distribute shares in a broad-based and non-discriminatory method to include all employees (with minor exceptions for part time workers, etc.) and base distribution

amounts on compensation or seniority (Kim and Ouimet 2014). Shares are distributed progressively to employees according to their vesting schedule, and employees cannot sell shares until they leave the company or retire. At that point, the company is required to purchase back the vested shares at fair market value. By offering company shares, ESOPs establish a retirement plan that encourages employees to work in the best interest of the firm.

ESOPs first came about when Louis Kelso, who founded the first ESOP, noticed a need for more ways to distribute wealth. He worried the concentration of capital ownership would hinder an appropriate division of income between capital and labor. He believed converting employees into owners would broaden the division of capital ownership (Marsh and McAllister 1981). Lawmakers took note of Kelso's analysis and saw this as an opportunity to benefit workers and business owners as well as reduce the public burden on social security. Marsh and McAllister (1981) contend that Congress' launching of ESOP programs through ERISA was based on the following motivations: to enable growth of the economy, broaden the wealth distribution, and improve productivity.

ESOPs gained popularity in the late 1970s and throughout the 1980s after ERISA was enacted and followed by a series of legislations aimed at encouraging ESOP adoption. The Tax Reform Act of 1984 allowed financial institutions to deduct half of the interest income coming from loans for corporations to establish ESOPs (Blasi, Kruse, and Freeman 2017). This encouraged banks to offer favorable interest rates to draw in more ESOP customers and resulted in rapid growth of publicly traded companies establishing

themselves as ESOPs. The number of plans doubled from 1980 to 1990 to over 8,000 plans and topped 9,000 in 1993 but then declined throughout the rest of the decade as changes to accounting rules began to incentivize 401K programs in lieu of employee ownership programs (Freeman 2007). Blasi, Kruse, and Freeman (2017) also attribute the lack of growth to the roll back of legislation. Specifically, George H.W. Bush reverting incentives for publicly traded companies which effectively meant ESOPs were no longer viewed as an attractive plan for large corporations. As indicated in Table 4.1, the number of plans did reach and surpass its 1993 peak in the early 2000s. However, with a lack of substantial favorable legislation for broad-based employee ownership since it was first established in 1974, the number of plans has decreased steadily since the mid-2000s, despite the number of ESOP participants increasing. This trend tells us the size of each ESOP is growing, which indicates that they are high performing firms.

Year	Plans	Participants (thousands)
1975	1600	250
1980	4000	3100
1990	8080	5000
1993	9225	7500
1999	7600	8000
2002	8450	9300
2005	9225	10150
1999	7600	8000
2002	8450	9300
2005	9225	10150
2010	7138	13477
2015	6669	14050
2018	6416	14071

Data Source: National Center for Employee Ownership (2020) and Freeman (2007)

One of the most substantial characteristics of ESOPs is their designation as a retirement plan. Employees earn stock as they work, but they are not able to exercise shares until they leave the company or reach retirement age.²² If the ESOP participant leaves, they can roll their vested stock distribution into another IRA without any tax implications. If they withdraw the disbursement, they are subject to early withdrawal fees similar to all other retirement plans. The beneficial aspect of this is employees do not have to use their own funds to invest in the company. Furthermore, continuing to earn shares of the company fosters an ownership culture and encourages workers to operate in the best interest of the firm.

4.3: Employee Stock Purchase Plans

Another common broad-based equity plan firms can implement is an Employee Stock Purchase Plan (ESPP), which allows employees to purchase company stock at a discount. For firms wanting to implement a qualified IRS 423 ESPP, firms must adhere to a few regulations. Engelhardt and Madrian (2004) highlight some of these legalities; first, firms must offer the plan with the same parameters to all employees with some exceptions to top earners or significant shareholders. Additionally, the company must limit the employee's stock purchases at \$25,000 per year, and the discount offered cannot be greater than 15%. Typical plans allow employees to defer up to 15% of their after-tax

²² According to the National Center for Employee Ownership (NCEO), when participants reach the age of 55, they are able to diversify up to 25% of their company stock to reduce the risk of an undiversified retirement portfolio.

income throughout the offering period, which is usually six-month intervals. Most plans have a lookback feature, where the employee has the option to buy company stock at the lower of the discounted lock in price determined at the beginning of the offering period or the discounted rate against the fair market value on the purchase date (Babenko and Sen 2014). The employee can then sell on the purchase date or hold the stock as an investment. Holding the stock for longer than a year allows favorable tax treatment for the employee as their profit will be taxed as a long-term capital gain.

Employee Stock Purchase Plans have not received momentous legislation to encourage companies to adopt them. Furthermore, Bhagat, Brickley, and Lease (1985) mention the costs to the firm for selling the stock at a discount and the inability to deduct the discount may deter them from implementing. Engelhardt and Madrian (2004) analyze the tax implications for firms offering ESPP to their employees and do not find any significant corporate tax treatment. The tax benefits are mostly for the employees, who – if they hold their shares long enough – will be taxed at the lower, longer-term capital gains tax. This is defined as a qualifying disposition under IRS 423,²³ and is a disadvantage to the employer because they are not allowed to deduct either the discount or the capital the employee makes when they sell their shares. The authors suggest ESPPs become more attractive to employers when their corporate tax rate is lower, because the

²³ According to Engelhardt and Madrian (2004), for a plan to be considered a qualified employee stock purchase plan (QESPP), the company must adhere to the regulations set forth under IRS 423 when administering the plan. The ability to deduct the spread between purchase price and the discount at the beginning of the offering period depends on when the sale takes place. When the employee both holds the stock one year after purchasing and two years after the beginning of the offering period before selling, it is designated as a qualifying disposition and the spread is not tax deductible. If one of the conditions is not met, this is a disqualifying disposition and the spread is tax deductible for the employer.

opportunity cost of payroll deductions they lose are not as meaningful with a smaller tax burden. Despite these costs, Kapinos, Lopez, and Popowski (2020) show that in 2019, 49% of S&P 500 companies and 38.5% of Russell 3000 companies offered ESPPs making millions of workers eligible for this benefit. Clearly, firms realize the non-tax benefits of implementing these programs. A troubling issue, however, are the low participation rates in ESPPs. Babenko and Sen (2014) find that on average, the participation rate is only 31%. This number is puzzling to economists because the benefits to employees appear obvious since participating is a risk-free way to increase compensation.

When considering what would drive an employee to neglect participation, Babenko and Sen (2014) suggest that it is either due to liquidity constraints or lack of financial and knowledge. They show that ESPP participation is disproportionately larger for the highest earners than employees in a lower socio-economic class, who are more prone to making investing mistakes. Research indicates it is worthwhile for employers to increase participation. For instance, Babenko and Sen (2016) use ESPP purchase history and examine the effects on stock price. They find ESPP purchase history predicts stock price. These results make two suggestions. Purchasing company stock makes changes work habits resulting in changes in stock price or employees have intimate knowledge indicative of company performance. For the latter, if employees hold information vital to the company's well-being, they should be incentivized to align their goals with the shareholders and utilize this knowledge in the best interests of the firm. Additionally, Bryson and Freeman (2019) analyze a single company to compare the participants versus

the non-participating employees. They find that participating employees are significantly more likely to work hard for more hours and less likely to leave the firm. Consistent with the free riding theory, participants are also more likely to encourage others to work harder as well. These results make the low participation rates found by Babenko and Sen (2014) concerning for firms. It is in their best interests to boost participation rates when offering stock purchase plans to gain the biggest advantage.

4.4: Best Practices for Employee Ownership

The evidence on industry representation indicates that certain industries are more likely to adopt broad-based equity programs. This suggests firms are not constructed under a singular umbrella. Therefore, different companies and industries have dissimilar constraints and will not realize the benefits uniformly. For instance, a qualified ESPP will only work for a publicly traded company because a public market guarantees that there is a buyer when the employee is able to trade their shares. A private company can set up a similar program with a guarantee to purchase the shares back, but the flexibility and seamlessness is going to favor publicly traded companies over a private enterprise. Furthermore, the research on employee ownership tends to neglect the sizeable portion of the workforce who are employed by institutions, which do not operate under a profit motive. According to the Bureau of Labor Statistics (2020), over 22 million people, 13.5% of all workers, are employed in the public sector, either at the federal, state, or

local level. Additionally, a growing number of workers falls under the non-profit sector; according to Salamon and Newhouse (2019), the number is over 12 million workers, or around 7% of the working population. The principal-agent problem, which can be minimized by employee ownership, relies on a profit motive for the theory to function. Thus, employee ownership is not feasible to a significant number of workers, and in the case of the public sector, many governments offer generous pensions to safeguard the employee.

The vast majority of employers and workers, however, can benefit from employee ownership. The two common broad-based programs, ESOPs and ESPPs, have noticeable advantages and disadvantages. ESPPs require employees to use payroll deductions, which defers a portion of their paycheck. Many workers cannot afford to give up the liquidity required to participate. Babenko and Sen (2014) find that low participation rates for a riskless opportunity increases compensation. The liquidity burden disproportionately affects the lowest paid workers because the amount of compensation to give up is a more substantial percentage of their overall wealth. Correspondingly, lower paid workers are less likely to have the financial education necessary to understand the benefit they are foregoing. ESOPs, on the other hand, do not require employees to use their income to acquire equity. Shares are granted to an employee through a defined vesting schedule. However, since the retirement plan approach acts as a pension and employees are not able to exercise their shares, it does little to assist current needs and liquidity constraints of lower paid workers. Furthermore, it creates a highly undiversified portfolio. The risk of price crash became a widely criticized talking point in the early 2000s when high-

profile bankruptcies of Enron and Polaroid resulted in the losses of thousands of employees' ESOP investments (Freeman 2007). Alternatively, ESPPs do allow employees to increase their current income by allowing employees to sell their shares on the purchase date, which also allows them to diversify their assets.

From a policy perspective, the goal should be to encourage firm sustainability and increase average wages. It is useful to consider the differences in contracts and what approaches can be made to consider the limitations and shortfalls for equity-based incentives for managers versus workers. Since the results of using equity incentives are different for these two roles, the best scenario is to approach their contracts differently. Although it had been asserted that managers are more likely avoid risk, the incentive of large future equity payouts has substantially reduced this concern and turned their focus towards short term goals. So, policies that encourage companies to reduce the amount of equity pay for managers would be beneficial towards aligning managers' goals with workers. On the other hand, while the threat of compulsive focus on share price exists when presenting workers with equity incentives, a broad-based approach can alleviate these concerns. A more even spread of equity throughout the workforce can keep the interests between all levels of workers more similar. Furthermore, eliminating the outside shareholder and shifting the firm to 100% employee-owned (which many ESOPs fall under) is likely the best approach to align incentives of all the workers. In this scenario outside interests do not dominate the goals and direction of the company and the firm is more likely to operate in the best interests of the workers.

4.5: Can Employee Ownership Address the Need to Increase Wealth?

Research has found that wide-spread employee ownership has potential to increase compensation and job stability. These benefits have the potential to help alleviate the macroeconomic issues that resulted from an era of neoliberalism and financialization addressed in Chapter 2. However, the current state of employee ownership is not sufficient to confront the inequality between the highest and lowest earners which has challenging the economy. While almost 20% of employees in the United States own stock in their company, Kruse, Freeman, and Blasi (2010) mention that the lowest paid employees are least likely to be offered equity. There is a need to distribute capital assets more equitably across the workforce. Stiglitz (2013) reveals that wealth inequality is more substantial than income inequality so much that the top 1% of Americans own 35% of the wealth. Therefore, the need to distribute wealth more equitably is crucial, and employee ownership can assist in building wealth across a broad range of households. To highlight the threat of inequality, Causa, de Serres, and Ruiz (2014) note that countries with growing inequality show slower growth rates and are more prone to recessions. Thus, raising the incomes of workers across the earnings spectrum can help reduce the burdens on lower income workers.

Broad-based employee ownership has the potential to reduce the inequality of wealth through increased average earnings. In one aspect, Bernstein (2016) contends that since the number of shares that are distributed are typically based on salary, the income gap is narrower than the wealth gap. So, by basing equity considerations on salary, this slightly reduces the wealth inequality between the highest and lowest paid workers of a

firm. Additionally (and more effectively), it was noted that both ESPPs and ESOPs often have salary ceilings for participation. The wealthiest earners are likely to not benefit (at least under the same construct) as the average worker. Additionally, Bernstein (2016) finds that ESOP firms are more likely to have a smaller income distribution between the highest and lowest earners than non-ESOP firms. Amongst the reasons for reducing the wealth gap, the most prominent is that distributing stock in a broad-based manner provides wealth to those less likely to own capital. Employee ownership provides a method to distribute equity to those who are solely dependent on income (Bernstein 2016). Although there is potential to reduce inequality, there is not enough research to predict to what degree. Moreover, the problems mentioned in Chapter 2 are quite drastic, and a wide range of solutions will be required to reverse many of the trends affecting the economy since the 1980's. Foremost, union membership or a similar construct will need to become prevalent again. While there currently is not a lot of overlap between unions and employee ownership, worker representation is crucial to ensuring contracts remain efficient and the goals of managers are kept closer to workers than shareholders.

Allocating resources to benefit employees has been difficult, as neoliberalism and financialization's influence on policy makers have incentivized short-term profits over sustainable growth. Lazonick (2017) discusses this trend and its negative effect on middle class jobs. Because of financialization's impact on corporations, money has been diverted to interest payments and stock buybacks instead of investing in capacities to increased compensation and employee development. These behaviors combined with a decline in union membership has continued to keep wages suppressed. Moreover, although one-in-

five employees carry some degree of equity in the company they work for, the average holding is only around \$10,000 (Blasi, Kruse, and Freeman 2017). Thus, there is a need to promote the benefits of offering equity broadly across the economic spectrum. From a policy perspective, Kruse, Freeman, and Blasi (2017) mention that legislators have not only failed to create legislation to promote employee ownership, but they have also reversed prior regulations which incentivized firms to offer equity as part of employee compensation. However, Bernstein (2016) contends that the current tax advantages are sufficient for ESOPs, but it could be beneficial to make other tax advantages (such as deduction of interest costs) contingent on adopting employee ownership programs.

4.6: Concluding Remarks

In this chapter we notice a need for more equitable distribution of company ownership. When analyzing industry types, we find that while some industries are more suitable for employee ownership, all companies operate with a profit motive and can utilize the benefits of broad-based ownership plans. We examine two established plans, ESOPs and ESPPs, companies can adopt. Due to the disadvantages of both ESPPs and ESOPs, the best system to offer equity incentives arguably is a hybrid model of both methods. Bryson and Freeman (2010) explain complementary mechanisms and find that shared capitalism is best utilized the techniques are combined. A hybrid approach combining aspects of ESPPs and ESOPs could rectify the disadvantages from each program. A retirement fund, a purchase program, and a grant offering could alleviate the drawbacks from a singular approach. Automatically offering stock through a grant would

not only disregard the need to give up liquidity but can educate employees on the benefits of owning shares as they are able to see their ownership value grow. This could encourage more workers to participate in a purchase program. These methods, along with an ESOP for safeguarding future needs, could benefit the employee and be an efficient way to reduce inequality. To achieve the most optimal arrangement for the employee, companies should consider adopting multiple approaches of employee ownership. Also, while employee ownership can assist in reducing the wealth gap, it is only one of many solutions that will be needed to reverse the growing inequality trends seen during neoliberalism.

Chapter 5: Conclusion

Throughout this thesis we have examined macroeconomic implications of stagnant real wages and addressed the need to put upward pressure on average compensation by exploring alternative mechanisms firms can implement to spread wealth more equitably. Due to reasons such as union decline, a widening gap between productivity growth and compensation, and wealth inequality, wages have not been able to sustain current standards of living across many U.S. households. These factors have increased the average consumers reliance on debt and has been a feature of financialization. Moreover, the neoliberal policies and that encouraged the financialization of the economy has encouraged households and businesses to increase their debt-to-equity ratios to unsustainable levels. The increased leverage abetted the financial industries prevalence amongst our economy and shifted portions of the nation income from compensation to profits. This reliance on capital asset growth has created instability and left the economy susceptible to severe recessions caused by an overleveraged economy as we saw during the 2008 credit crisis.

With many of the issues facing our economy in recent decades as a result from stunted wage growth, this paper analyzes compensation structure. At the executive level,

agency costs occur when managers make decisions in their own interests which do not align with ownership's. It is shown that offering executives equity-based compensation incentivizes them to make decisions which focus on metrics that increase shareholder value. This mechanism is widely used in today's economy and has been an efficient way for owners to reduce agency costs. Since Jensen and Meckling (1976) introduced their theory on managerial behavior, equity has become an extremely popular way to compensate executive employees. The rising CEO compensation over the last four decades is mostly a result of 75% of the average CEO's compensation comprising in company equity (Larker and Tayan 2019). However, critics question the effectiveness of being overly focused on shareholder value and contend these incentives do not encourage firms to reinvest their profits into the firm which would serve to better benefit the employees. By basing large portions of executive compensation on equity, managerial interests have become an extension of financial markets, and they have become fixated on short term profitability. The decisions necessary to maximize profits and shareholder value are contrast to the workers who have seen their wages suppressed while managers divert funds to financial transactions such as stock buybacks and interest payments.

Since the 1980s, wages have remained stagnant for average workers and while executives have received generous ownership stakes in their companies, most workers have not. During this time, however, a small portion of companies have implemented broad-based equity sharing programs. For non-executive employees, business owners believe they can reduce agency costs by basing a percentage of their pay on the financial performance of the firm and encourage workers to be more productive. Vast research has

been conducted and found that firms benefit when sharing equity across the company. To examine a broad set of data, O'Boyle, Patel, and Gonzalez-Mulé (2016) performed a meta-analysis. They looked at 102 different studies measuring the effectiveness of employee ownership and analyzed results from 56,984 different firms. The authors find a 4% increase in profitability associated with Employee Ownership. Aside from profitability, multiple researchers find increased productivity and lower turnover for employee-owned firms. Additionally, these programs establish an ownership culture which improves the well-being and employee satisfaction. In turn, the workers are more likely discourage their peers from shirking which reduces the costs associated with the free rider problem.

Further, this paper supports the research which contends that broad-based equity sharing can increase wages and wealth for their employees. While early proponents such as Weitzman (1984) promote gain sharing as a substitute, more recent findings show that the equity sharing portion of increased salary is an addition to their regular wages. Employee owners also enjoy better job security and better career development. Thus, there is a need for more companies to adopt employee ownership, which can spread wealth more equitably and reduce the problems our economy faces from decades of neoliberal policies. It is found that employee-owned firms have a smaller gap between the highest and lowest paid workers, so broad-based equity plans can drive down wealth inequality by distributing equity to those most dependent on compensation as their sole source of income.

Currently, two common plans firms can implement are Employee Stock Ownership Plans (ESOPs) and Employee Stock Purchase Plans (ESPPs). However, due to liquidity constraints some individuals face, these plans by themselves may not be ideal and can discourage participation. As suggested by Bryson and Freeman (2010), different methods of equity sharing are most effective when combined. This thesis supports the notion that while any form of equity sharing, on average, is beneficial for the firm and employee, the most effective method of broad-based employee ownership is to implement multiple mechanisms to distribute equity throughout the company. Although a mutually beneficial arrangement can be made through employee ownership, equity considerations alone are not sufficient to significantly address the consequences our economy has faced after several decades of neoliberal influence. Moreover, alternative actions need to take place within the current state of employee ownership for it to be best utilized. First, a reduction of equity needs to take place for executive managers to realign their interests closer to the average worker than the average shareholder. Second, more legislative policy is needed to encourage multiple mechanisms of broad-based employee ownership. Further, there is room for legislation to encourage companies to become fully owned by its employees. By removing outsider interests, the goals of managers and workers will become more closely aligned. It is shown that these plans can have an impact on lowering inequality, but currently firms operating as employee-owned.

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