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Russell Williamson, Student

Dr. Brian Bratten, Major Professor

Dr. Brian Bratten, Director of Graduate Studies

## WAGE DISPARITY IN THE ACCOUNTING PROFESSION AND INFORMATION QUALITY

## DISSERTATION

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Gatton College of Business and Economics at the University of Kentucky

By

Russell Williamson, CPA

Lexington, Kentucky

Director: Dr. Brian Bratten, Clark Material Handling Company Professor of Accounting

Lexington, Kentucky

2019

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## ABSTRACT OF DISSERTATION

## WAGE DISPARITY IN THE ACCOUNTING PROFESSION AND INFORMATION QUALITY

Does wage disparity, measured as the difference between highest and lowest paid workers, affect the quality of reported financial information? I collect accounting professional wage data from an international accounting and finance employment placement firm for the period of 1972 to 2017. I investigate to what degree wage disparity in corporate and public accounting has affected accounting information quality by testing predictions derived from equity theory and tournament theory. I find that vertical wage disparity within, as well as horizontal wage disparity between, corporate and public accounting is associated with measures of the relevance and reliability of accounting information. Specifically, pay disparity within corporate accounting is associated with a significant reduction in earnings persistence, in the earnings-returns relationship, in the accruals-cashflow relationship, and with higher levels of absolute abnormal accruals. In tests of pay disparity within the public accounting profession I find evidence of improved information quality associated with higher pay disparity. These findings are consistent with the different structures of employment and career advancement within the corporate and public accounting professions.

**Keywords**: Pay Disparity, Equity Theory, Tournament Theory, Corporate Accounting, Public Accounting,

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# WAGE DISPARITY IN THE ACCOUNTING PROFESSION AND INFORMATION QUALITY

By

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Date	

First and foremost, I would like to dedicate this to my son,

Wyatt Alden Williamson,

without whom I would be lost and for whom I hope to build a better life.

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## I. Introduction

In this study, I investigate to what degree wage disparity in corporate and public accounting has affected accounting information quality. Public accounting is structured through absolute performance measures where employees who meet satisfactory performance metrics are promoted to the next employment level where corporate accounting is structured as a relative performance tournament in which advancement is not guaranteed. I utilize theses structural differences between employment in corporate and public accounting to test the predictions put forth in both tournament theory and equity theory. Specifically, how the nature of the performance and advancement as absolute or relative and the fair wage-effort hypotheses put forth in Akerlof and Yellen (1990) describe the potential effects of wage disparity on the production of accounting information.

Prior research has shown that wage disparity reduces worker effort and that overall income inequality erodes social capital (Elgar & Aitken, 2011). Tournament theory, however, proposes that pay disparity is a natural outcome of competition for promotion and wages (Connelly, Tihanyi, Cook, & Gangloff, 2014). Considering contemporary research has found that auditor wage levels are associated with audit quality outcomes (Hoopes, Merkley, Pacelli, & Schroeder, 2018; Payne & Williamson, 2019) and that unexplainable portions of higher CEO pay disparity levels are associated with lower firm financial performance (Rouen, 2019) the effect of wage disparity on the production of accounting information is not clear and has important implications for the structure of compensation within the accounting profession. This study hopes to inform public accounting and corporate accounting managers and executives how the structure of

compensation and the perceived fairness of wages may affect accounting information quality.

To investigate the relationship between wage trends in the accounting profession and accounting information quality I collect data from the Robert Half Salary Guide from 1972 to 2017. Robert Half is an employment agency that recruits for and fills temporary, full-time, and executive positions within accounting and finance and issues a yearly report on wages based on their placement data and client surveys. I use this pay data to generate measures of wage disparity as a comparison between corporate and public accounting professionals, and measures of wage disparity within corporate and public accounting. Using these pay disparity measures I examine if pay disparity is associated with accounting information quality and if the potential fairness effects described in equity theory affect workers differently under the condition of relative performance tournaments or absolute performance evaluation as proxied by the corporate and public accounting labor markets.

I regress four measures of information quality on these disparity measures. Information has two primary characteristics of quality; representational faithfulness and relevance (FASB, 2010). I utilize two measures of the faithful representation of accounting information; the mapping of accruals to their related cashflows as measured in Dechow and Dichev (2002) and the absolute value of performance adjusted abnormal accruals as described in Kothari et. al., (2004). I consider these measures aspects of faithful representation because they capture the potential for bias and error within the accounting information system. I utilize two measures of relevance in my tests; earnings persistence and the market's reaction to earnings information. Earnings persistence measures a key aspect of information quality and relevance, specifically that the information provides

predictive value. The market's reaction to earnings information examine the feedback value of accounting information. Both predictive and feedback value are characteristics of the relevance aspect of information quality and both earnings persistence and the market's reaction to earnings information are long standing and common proxies for information quality.

I find that higher levels of pay disparity within corporate accounting are associated with reduced accounting information quality, specifically, with lower earnings persistence, reduced relevance of earnings in explaining returns, higher unexplained variance in the accruals-cashflow relationship, and higher levels of absolute discretionary accruals. This finding suggests that wage disparity reduces fairness perceptions within the participants of a relative performance tournament. Further, I find that pay disparity within the public accounting labor market is associated with greater earnings persistence and lower unexplained variance in the accruals-cashflows relationship; suggesting that pay disparity does not decrease fairness perceptions and incentivizes effort under absolute performance evaluation. These findings are important to our understanding of how relative performance tournaments and absolute performance structures affect production outcomes in the real marketplace.

Additionally, I find that the horizontal pay disparity ratio, which is the ratio of corporate accounting wages to public accounting wages and captures the effect of wage comparison between the two accounting employment markets, is associated with; lower variance in the accruals-cashflow relationship, lower levels of performance adjusted absolute discretionary accruals, and a higher levels of market response to earnings information. This suggests that when corporate accounting wages higher when compared

to public accounting wages either fairness perceptions within the relative performance tournament are increased and/or higher income potential from exiting public accounting and entering corporate accounting motivates auditors.

These findings join a growing national conversation regarding pay disparity and income inequality. Income inequality has grown to a level unseen since the great depression (Kelleher, 2019; Zucman, 2019) and inequality in wages has been found to explain reduced worker effort in a cross section of macroeconomic productivity over 34 OECD nations (Policardo & Carrera, 2018). Although wages have remained stagnate for much of the economy wile earnings at the top of the income distribution have been increasing (Autor, Katz, & Kearney, 2008), it is not known if corporate or public accounting employment has experienced similar wage trends. I report on the descriptive statistics of accounting profession wage levels and disparity levels since 1972 and find that although variation in disparity level exists, and top wages have seen a significant increase in the last 20 years, wages have also been increasing for all wage levels reported within corporate and public accounting over the same time period. I do not find similar wage stagnation, or an always increasing time trend in disparity level within the accounting profession.

This investigation into wages and pay disparity over the last 45 years in the accounting profession, and its differential effect between corporate and public accounting, provides insights into a professional labor market that provides significant oversight to global financial markets and ensures accountability for most advanced economic activity. Wage stagnation and its contribution to growing levels of income and wealth inequality is becoming more contentious for policy makers, regulators, and employers with every

passing year. The accounting profession has long been viewed as a stable profession and a profession that affords a comfortable life to its members. It is important to understand how pay disparity in the accounting profession affects the production of accounting information so that employers, policy makers, and regulators may understand and manage the production of accounting information.

## II. Background

### Economic research in equity, fairness, and tournament theory

To better understand equity theory and tournament theory research within economics I searched for a comprehensive literature review of research utilizing the ideas of tournament theory, equity theory, fairness, and / or reciprocity. Theories of equity and compensation in economics are often traced to the gift exchange model put forth in Akerlof (1982), which describes how labor contracts, when viewed as partial gift exchanges, both influence and are influenced by the workers' social norms and perceptions. Tournament theory is grounded in the work of Lazear & Rosen (1981) who analytically describe how rank order tournaments would elicit the same effort response as piece rate performance evaluation whilst reducing monitoring costs on behalf of the principle. I reviewed four major econ journals (American Economic Review, Quarterly Journal of Economics, Journal of Political Economy, and the Journal of Labor Economics) for articles that expressly mentioned equity theory, tournaments, reciprocity, or fairness within their titles or abstracts published between the years 1980 and 2018. I reviewed these articles and

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<sup>&</sup>lt;sup>1</sup> Being unable to find a comprehensive review of this literature published between 1980 and 2018 related to equity theory, fairness, or reciprocity, I focused on the inclusion of these articles. I was able to identify several reviews of tournament theory research.

eliminated those not directly related, yielded approximately 80 articles, the resulting relevant articles are included in Table 0; I have included a discussion of this research below.

## Early work in theories of equity and employment

Early work within economics regarding equity theory as an explanation of wage levels and worker effort began as a way to explain unemployment. Traditional economic models of labor markets have difficulty explaining unemployment in an efficient market, since the supply-demand equilibrium should be market clearing. The work of Akerlof and others through the 1980s brings sociological theories of equity into the explanation of labor markets. The initial thrust of this work is to explain unemployment as a result of employers paying higher than market clearing wages, which results in extra effort provisioned by employees and therefore, leaves some labor supply unutilized. This is the concept put forth in Akerlof (1982).

Published in the same year as the partial gift exchange model, Baumol (1982) discusses how the concept of fairness may be used by economists; citing a handful of papers that introduced the philosophical concept to the economics literature through the 1960s and 70s, Baumol's work is concerned with the practical application of fairness in the study of economic and public policy. Utilizing a commodity rationing setting, Baumol uses analytical procedures to show that fairness considerations may explain rationing outcomes that, that without such consideration, may be viewed as in-optimal or irrational and that these considerations allow researchers to approach policy issues related to equity that would otherwise me avoided by the application of traditional economics.

In further discussion of the emerging literature, Akerlof (1984) discusses gift exchange and efficiency wages within four paradigms utilized in the economic research

literature to explain premiums paid above market clearing wages; the dual labor market hypothesis, Weberian theory of organizations, work groups; and equity theory. Akerlof presents these paradigms as natural and realistic explanations of the observable reality that buyers often pay higher than market clearing prices for labor. (Akerlof & Yellen, 1987) continues this discussion centered around the prospect that rational economics cannot intuitively explain the reality of both unemployment and efficiency wages by arguing that equity theories of labor provide the most natural explanation of wage premiums whilst remaining reconcilable to the other paradigms.

Kahneman, Knetsch and Thaler (1986) survey a sample of the general population to investigate how profitable, honest, and even expected actions in the market may be viewed as exploitive and unfair. They find that an individual's sense of entitlement affects market exchange outcomes and distorts equilibria unless the analysis includes fairness as a factor. Of particular interest is how cutting wages, or terminating employment in order to do so for new workers, under the condition of decreasing demand is viewed as unfair for currently employed workers (but not necessarily unfair when the current worker leaves voluntarily or when the employer fundamentally alters the nature of the business activity). Gorman and Kehr (1992) re-perform the survey used in Kahneman et. al., 1986, but survey business executives to understand if individuals in control of wage and pricing decisions shared the general sentiment of the populace regarding the fairness of wage and price level changes based on market conditions. Utilizing a sample of 320 CEOs, Gorman and Kehr (1992) ask the same fairness questions Kahneman et. al., 1986 and find that, although CEOs are more accepting of 'unfair' transactions, especially when protecting profits or passing costs to consumers, their overall directional fairness assessments are the

same as the general populace and that fairness norms affect the perceptions of wage and price changes.

Research into fairness norms continues to question the view of workers as absolute rational actors and Akerlof and Yellen (1988) postulate an important human concept in wage determination, "hedonism seems too simplistic" (pg. 44). They show wage fairness perceptions are tied to the worker motivation beyond a hedonistic utility maximizing pay to effort model. Specifically, in scenarios where it is advantageous to pay some employees higher wages, it is fair to pay other employees higher wages as well. The fundamental observation that higher paid workers often 'grumble and shirk' while workers with lower pay are often 'satisfied and hardworking' is a motivating factor. Pointing out that the hedonistic forces of greed may hold well in an impersonal market trading economy but the closeness of contact in an employment setting brings the factors of fairness into effect. These models of fairness explain observed wage disparities between occupations and industries and mitigate the concern of traditional wage models that cannot explain unemployment within a utilitarian, fully maximizing hedonistic world.

A formal model of the effect of fairness perceptions on the relationship between wages and effort is developed be Akerlof and Yellen (1990). This model describes how workers will proportionally withdraw effort when the wage provided falls short of their perception of a fair wage. This withdraw of effort can lead to a withdraw from employment and the pursuit of other options or opportunities and serve as a barrier to full employment as workers are reluctant to accept employment at wages below their fairness perceptions. An important factor in this model how workers adjust their expectations when faced with increasing wages; essentially, a wage increase beyond the fairness threshold adjusts the

worker's fairness threshold; the implication of which explains that wage increases beyond the perceived fair wage cannot produce more than 100% effort over time. Further, Akerlof and Yellen (1990) discuss how non-wage level factors can affect the perception of wage fairness; for example, higher levels of unemployment may lead workers to view their wages as fairer while poor working conditions cause them to view their wages as less fair, ceritus paribus.

### The Inclusion of Fairness and Reciprocity

Rabin (1993) argues that extending a generalized 'kindness function' to economic models under complete or in-complete information is essential to applied economic research and formalizes a model of reciprocity and fairness. Basing this work in the prior equity and fairness research, Rabin (1993) incorporates their model of fairness and reciprocity into game theory, showing how fairness equilibrium exist as mutual min-max conditions when payoffs are small, but when payoffs are large, fairness equilibrium are a set of Nash equilibria. Due to the personal utility derived from fairness, when payoffs are smaller the overall utility level does not become as arbitrarily small as the payoff. A large payoff, on the other hand, generates a bias toward unfair equilibria through both a greater appeal to material self-interest and the fact that and increase in material self-interest may motivate an individual toward unfair actions when other parties are behaving fairly, but till not motivate the individual toward fair action when the other parties behave unfairly. Nelson (2001) goes further in a comment on Rabin (1993) describing the way in which, under the highest payoff scenarios, fairness acts as a normal economic good; meaning, that as the marginal utility of another dollar declines, players will once again indulge in fairness behavior to increase personal utility.

Contemporary work regarding fairness norms in the practice of wage setting provides qualitative and quantitate evidence regarding the efficacy of fairness concerns in the establishment of wages. Rees (1993) while recounting how little rational economics served them in their own roles as board member and presidential advisor, declares that the one factor of overwhelming importance to wage determination was fairness, and primarily, fairness derived from comparisons between groups and hierarchies. A particularly intuitive example is provided in which an employee receives pay on Friday and a raise on Monday, leading to an increased feeling of fairness until such time as they discover, on Tuesday, that others within their group received a higher raise. It is at this time, that their fairness utility may well be lower than it was on Friday, before any increase in wage was known of provided. It is in this way the effect of comparative wage fairness is more powerful than the wage itself.

Levine (1993), examines real evidence of wage adjustments by corporate executives through a survey of 139 compensation executives. These compensation specialists are surveyed regarding wage adjustments in varying fairness contexts. Similar to the anecdotal evidence provided in Rees (1993); Levine (1993) finds that for professional compensation specialists considerations of equity are an important factor in managing a company's internal wage structure in response to market forces. Specially, that within employment groups (those in similar jobs) fairness considerations reduced the compensation executives' recommendations for wage increases to one employment category of the group over others. This effect was not apparent when considering the differential wage recommendations between jobs in different groups or hierarchical paths.

Meaning, fairness and equity considerations effect internal wage levels even to the point of detriment for employees.

As researh utilizing equity theory advanced the concepts of fairness and reciprocity within the economic research literarture, Prasnikar & Roth (1992) address a growing debate concerning how game theory, when used as a descriptive theory of observable behavior must take fairness into account. They are primarily concerned with how several studies reach highly divergent predictions regarding the outcomes of similarly structured games; specifically, the way in which game structure may align both maximizing behavior and fairness, resulting in the appearance of one concern dominating the other when such an observation is the result of the endogenous aspects of common experimental games. They report the results of a sharp experimental test within this class of games and find that both traditional game-theoretic predictions and the effect of fairness considerations remain pertinent to behavioral predictions and experimental designs choices must attenuate to the need to disentangle these effects. Essentially, that concepts of fairness and reciprocity coexist with self-interest, and may at times be aligned.

## The Co-Existence of Fairness and Self-Interest

Bolton and Ockenfels (2000) present a theory of equity, reciprocity, and competition that incorporates both narrow self-interest and relative standing to explain why isolated investigations of equity and reciprocity diverge in their findings. They find that the incorporation of relative payoff concerns (comparisons between groups and participants) explain how investigations of equity or reciprocity-based games find different results. The implication being that even when concerned with equity and reciprocity, fairness comparisons affect outcomes and observable behavior. This model is supported by

the interesting study Heinrich et. al. (2001) who examine cooperation, reciprocity and punishment across 15 tribal societies. A cooperative work between economists and sociologists / anthropologists living within tribal societies, this field study investigates and finds that both fairness and personal interest co-exist within hunter-gather tribes. They find the argument that humans act in pure self-interest is not supported in any of the experimental outcomes and that fairness is a fundamental and universal aspect of human economic and interpersonal action. This notion holds true within in an environment where there is no punishment mechanism for shirking. Specifically, Hannan, Kagel, & Moser (2002) test the Akerlof gift exchange model and conduct experiments utilizing MBA and undergraduate students. They find that participants do provide higher effort when wages are higher and there is no mechanism to punish shirking. Further, the participants level of work experience moderated this association and incrementally increase the amount of effort provided.

Another interpretation, with similar implications, is put forth in Charness and Rabin (2002); they describe how pervasive and fundamental confounds within the experimental procedures used in prior studies give the impression that 'social preferences' for either utility maximization or comparative fairness may be a result the subjects concern for increasing overall social welfare. This arises due to study designs were personal maximization and reciprocity are confounded; i.e. when punishing you benefits me. They find that participants sacrifice value to increase overall welfare by increasing value distribution generally and to low-payoff participants specifically; and less so reduce their specific group and individual differences. Further, they find that participants are motivated by reciprocity to punish unfair behavior or to achieve a fair outcome.

The weight attached to factors beyond the individuals control in fairness considerations varies significantly based upon the different 'ideal' fairness paradigms a person may hold true (Cappelen, Hole, Sørensen, & Tungodden, 2007). Cappelen et. al. (2007) investigate the individual tradeoff between self-interest and egalitarianism when attaching weight to fairness concerns across different scenarios of distributive justice. In a one-shot dictator game where some factors of production outcomes are beyond the individuals' control, they find a pluralism of fairness ideals that interact with the individual and group decisions between altruism and self-interest. They find that although distributive justice matters to all groups those who identify as strict egalitarian; liberal egalitarians' and libertarians' sense of distributive justice is affected by the other players endowment behavior. In all groups, there exists a certain amount of moral 'wiggle room' where players bias self-interest against distributional justice.

Cappelen et. al. (2007) show that individuals with different ideal fairness paradigms react differently to the behavior of others in fairness related games. (Ho & Su, 2009) further this line of investigation to understand the extent to which fairness perceptions depend on an assessment of peer versus hierarchical endowment. Utilizing ultimatum game experiments where one follower interacts with a leader, and then a second follower, interacts with the same leader with variation in the knowledge of the first participants endowment, they find that, when there is a signal of the first follower's payoff the second follower demonstrates behavior that indicates twice the level of preference for peer-induced fairness beyond a preference for distributional fairness. This result suggests that peer wage comparisons will also affect effort provision beyond employer-employee or other forms of hierarchical income disparity. Goerg, Kube, & Zultan (2010), however,

describe how different reward schemes and production technologies may affect effort provisioning within teams; specifically, that the interaction between fairness considerations and reward structures can have positive effects depending on the nature of the production function. They find that unequal rewards increase coordination between recipients, and overall effort, when the workers inputs are designed as compliments and are not substitutable.

These findings show how fairness considerations and self-interest are often both divergent and complimentary. In many cases, although self-interest is often narrowly defined within the individual's preferences, fairness requires comparison between individual outcomes and self-interest expectations. Both what the worker wants for themselves, what they expect to get, and what they observe others receiving generates these perceptions.

## Efficiency Wages and Contextual Fairness: The power of comparison

Contemporary to Rabin (1993), Fehr, Kirchsteiger and Riedl (1993) utilize an experimental setting to investigate the role fairness may play in setting prices. Utilizing an oral auction where sellers determine the quality of the goods provided after buyers set prices, they find that sellers responded to prices substantially above the market-clearing level with higher levels of quality, supporting the fair wage-effort theory. In a similar vein, Fehr and Falk (1999) investigate if workers underbid wages and if employers take advantage of underbidding through four double-auction sessions with incomplete labor contracts and four with complete contracts. They find that, although workers will underbid wages, employers reject underbidding as it is costly if the worker has discretion over effort.

This finding implies that employers are aware of the relationship between wages and efforts and will attempt to avoid the shirking associated with unfair pay.

The findings show that behavior differs between markets and bilateral negotiations, a difference that can be informative to how attribution fairness and reciprocity is assigned. Fehr and Schmidt (1999) propose that a common principle explains differential behavior between markets and bilateral contract negotiations. Using analytical models with experiments including dictator and market games they show that distributional preferences are context dependent and based on the environment in which fairness is considered agents may be altruistic or selfish. This is an important consideration and insightful to our understanding that context is important to fairness norms and considerations.

Another context issue in fairness considerations is the comparison of wages between groups and employees. Galizzi and Lang (1998) examine Italian Social Security records and find wage comparison between workers' wages and the opportunity for future wage growth affect quit decisions for a sample of firms in Turin from 1981 to 1983. They find that workers consider their wages relative to other wages, in both short-term and long-term models. However, an analysis of wage compression and decompression in Sweden does not find that fairness or morale were necessarily linked with the resulting aggregate productivity increase. Hibbs and Locking (2000) who investigate a natural shock to wage compression in Sweden find that although interindustry wage compression obtained through centralized solidarity bargaining is associated with increased productivity, they do not find evidence that specific firm level wage compression increased productivity. These findings provide mixed evidence on context-based fairness-productivity affects.

A primary consideration of contextual fairness concerns relies on the mindset of the individuals making the fairness judgments. Konow (2000) investigates the roles of fairness, self-interest, and self- deception in the allocation of economic rewards and finds fairness concerns may be affected, mitigated, or amplified by the individual's cognitive dissonance regarding distributional outcomes. Rejecting the notion of pure self-interest, Konow (2000) argues that by accepting the genuine value of fairness we can also incorporate the incentives that exist to for changing one's belief about what constitutes fairness in any given situation. This allows for the entrance of both fairness and cognitive dissonance into a model that contains self-interest obtained by material utility. Incorporating the ways self-interest and fairness are reconcilable is an important step to addressing divergent results in wage disparity research.

Other research shows some external wage pressures can have an overall effect on fairness perceptions, even when they are external to employer controls. (Falk, Fehr, & Zehnder, 2006) investigate how fairness perceptions are associated with reservation wages when dealing with minimum wage laws. They create an experimental marketplace where workers and employees are paired over multiple rounds and minimum wage laws are introduced and then removed from the contract setting. They find that the temporary introduction of a minimum wage moves employees reservation wages beyond the minimum level and this increase persists after the minimum requirement is removed. Employers increase wages after the introduction of the minimum to a level beyond the minimum required and do not utilize sub-minimum wages when the requirement is removed because they understand fairness perceptions will lead to shirking in those

circumstances. This external wage setting factor has fairness implications as a comparison point for employees and employers in evaluating fairness expectations.

Intent and context have been shown to affect fairness perceptions and effort allocation across varying wage and compensation structures; (Cappelen, Konow, Sørensen, & Tungodden, 2013) add risk taking to the list of contextual factors that affect fundamental fairness perceptions and behavioral norms. They find that most people focus on the perceivable risks ex-ante, meaning risk taking is a significant factor in their judgements of outcome fairness; however, people also prefer ex-post re-distribution, meaning that, although they recognize that risk taking behavior reduces the perceived unfairness of losses, they still prefer some form of redistribution that alleviates a portion of the risky behavior. People do differ greatly in their re-distributional choices, preferring to redistribute gains and losses viewed to be derived from 'luck' to a significantly greater degree than those perceived to be a result of 'choices.'

Another contextual factor in wage perceptions is the ability to determine wage increases ex-ante; (Sliwka & Werner, 2017) investigate how the difference in the timing of wage increases, and whether or not the worker has knowledge of the distributional pattern affect effort provision. They find that an incremental and balanced distribution of wages across all periods provides an optimal result and attribute this to the perception that a generous wage level or increase will be considered normal and expected in the next; a conclusion that supports the fair wage-effort hypothesis that paying wages at a level higher than the 'fair wage' will provide limited effort allocation beyond the fair wage as people have adaptive reference standards when determining their perception of a fair wage.

One of those adaptive reference standards, as described by the fair wage-effort hypothesis is wage comparisons between workers. (Dube, Giuliano, & Leonard, 2019) examine the impact that unequal raises between employees has on quit behavior. They collect 30 months of proprietary store level worker wage data from a large retail firm with over 700 stores. They find that quit behavior is associated with relative pay concerns, and that when workers of similar rank and function receive differential wage increases, those peer comparisons increase quit behavior. This finding supports the predictions of the fair wage-effort hypothesis that employees compare wages and utilize this peer comparison in their fairness determinations.

Prior research in equity theory, fairness, and reciprocity has demonstrated that workers provide varying effort due to the varying utility effects of fairness and reciprocity considerations. At the core of this ideal is the fair wage-effort hypothesis that describes how workers will assess their wages in comparisons to the wages provided to others both within and across similar groups and within the hierarchy of pay levels. When workers perceive their wage as less fair, they will reduce effort allocation or otherwise suffer negative production and performance consequences. This motivation to punish unfair behavior is a foundation of the fair wage-effort hypothesis. Charness (2004) investigate to what degree variation in effort provision is associated with this reciprocity by examining differences in effort provisions when wages can be attributed to an employer, random assignment, or to an external party. They find that both concepts of distributional equity and reciprocity affect effort provision based on variation within both the wage levels and the attribution of wages. This implies that wage levels matter regardless of volition in attribution and that workers will also engage in reciprocity when volition can be attributed

to the employer. Generally speaking, the satisfaction of self-interest through higher pay coexists with the willingness to provide greater effort when this satisfaction comes from the employer.

This consideration of expectations is important on the macro level, but is also applicable on a micro, sub-group level and can help us understand how fairness considerations apply beyond an individual level and how their effect can manifest within group dynamics. An interesting study in this area, (Mas, 2006), examines how pay raises that fail to meet a specific reference point considered fair by the employee group within a collective bargaining setting can reduce performance. They use data on final arbitration regarding police union wage requests to investigate if wage increases that fall below a perceived fair wage are associated with reduced performance. In this setting, the police union and the government submit their wage demand / offers to an arbitrator who is required to select one of the two offers. They find that when union wage requests are not met, several measures of performance decline, and this decline is associated with the level of difference between expected wage and actual wage. These findings support the fair wage-effort hypothesis and provide evidence that external attribution of wage levels does not mitigate the effect of fair wage perceptions on performance.

## Rank Order Tournaments vs Absolute Performance

Comparisons of outcomes in the context of fairness and distributional equity often rely on differential outcomes where measured performance may not differ; however, when if measured performance differs, the resulting effects of fairness may be mitigated. Tournament theory has been used as an explanation for the causes and outcomes of some forms of wage disparity; (Lazear & Rosen (1981) describe the potential differential

outcomes of compensation schemes based on rank order instead of output level. Utilizing analytical models of effort allocation, they show how rank-order compensation generates the same allocation as piece rate when workers are risk-neutral; but when workers are risk adverse, they will prefer one over the other depending on the shape of the utility function. Green & Stokey (1983) further investigate the idea of rank-order compensation by modeling how individual contracts in a setting with a risk-neutral principle and risk-adverse agents allow the principle to filter the idiosyncratic effect of common shocks. They find that rank-order tournaments provide information regarding the amount of an agent's output that is attributable to direct effort and not derived from general 'shocks,' information that assists the principle in establishing compensation without more costly direct monitoring.

Early work in tournament theory shows that incorporating elements from rank order tournaments into compensation schemes may increase efficient allocation while reducing monitoring costs. (Bull, Schotter, & Weigelt, 1987) present an experimental investigation of the fundamental tenants of tournament theory by examining if laboratory participants exhibit the behavior predicted in models of rank order tournaments. They utilize experiments where 225 undergraduates are paired and make cost / effort decisions subject to a random shock and find that mean effort levels for both piece-rate and rank-order tournaments converged toward expected equilibrium, however, rank-order schemes produced higher effort variance, and piece-rate compensation elicited higher effort from disadvantaged participants. These findings support the fundamental aspects of rank-order tournaments but also identify some potential unexpected affects associated with the use of rank order tournaments in compensation schemes. These unexpected effects of the rank-

order or tournament style aspects of compensation schemes may help address the research question raised in (Bhattacharya & Guasch, 1988); paraphrased, 'If tournament models are more efficient and less costly to monitor than piece-rate compensation schemes, why are rank-order tournaments not seen much in practice?' Arguing that, since compensation schemes exist within individual firm hierarchies, compensation schemes differ from the modeled expectations and that comparisons across skill types and across different 'tournaments' are necessary for efficient outcomes when ability-based self-selection occurs. This group-based comparison has other implications for the efficiency of tournament-based compensation schemes. (Lazear, 1989) describes several different practical employment situations and finds that wage compression, meaning lower levels of wage disparity, can increase efficient allocation when compensation outcomes is based on relative comparisons within groups.

To further explain the high variation in effort allocation identified in Bull et. al., 1987 (Drago & Heywood, 1989) take a closer look at the potential unexpected effects of compensation-based tournament structures. Specifically, they examine the possible causes of the high variance in effort allocation reported under the rank-order tournament condition. They replicate and extend the prior experimental procedures utilizing different incentive structures. Their findings do not support the explanation offered in Bull et. al., 1987 that computational difficulties within the tournament experiment explain high variance in effort allocation; they find that the variance is explained by motivation and strategic action in relation to incentive structure. The implications of this finding are that tournament-based incentive structures introduce a strategic factor on the part of the worker into the compensation-effort allocation decision.

Main, O'Reilly, & Wade (1993) introduce tournament theory as a challenge to equity considerations within the pay of top management teams. Citing Lazear & Rosen (1981) who describe how rank-based pay and output based pay are equally efficient when workers are risk neutral, Main et. al., (1993) suggest that the compensation of top executives exceeding the product of their labor may be an economically efficient outcome due to the motivational effect of higher top management pay on employees down the ladder who hope to access that pay level in the future. They investigate the effects of pay dispersion within a firm's top management team in a five-year sample of over 2000 executives per year. This analysis of executive compensation shows that top management team pay appears to follow a sequential tournament structure where increasing rank-based awards motivate employees and equity concerns are secondary. These findings are interesting when considering the functions presented by Rabin (1993) and how payoff levels may affect the utility of fairness considerations.

### Tournament Structures and Disparate Outcomes

Eriksson (1999) provides initial evidence that pay dispersion within the executive structure is associated with higher levels of performance in a regression analysis of 2600 executives from 210 firms over 4 years . This finding is interesting in the context of group-based dynamics of pay disparity as the defined group are executive level employees. They find that in some instances larger pay disparity among executives is associated with higher performance, but these results are not apparent when the executive team is more interdependent. Bognanno (2001) provide further examinations of the structure of executive compensation within the firm and find there are several ways in which tournament theory practically describes the current employment and career advancement

within the corporate firm. Bognanno performs an analysis of personal and job characteristics for 25,000 managers and executives per year from 1981 to 1988 and finds that a tournament environment with promotion incentives seems to characterize the structure of corporations; however, the high predictability of who receives the CEO promotion based on their current pay suggest there is no tournament, or the tournament is already concluded at that stage.

#### Fairness, Selection, and Worker Perceptions of Potential Outcomes

This issue of tournament stages, or more importantly, how players are sorted into tournament groups has implications for the outcomes of tournament-based compensation schemes. Fullerton & McAfee (1999) describe how utilizing an auction process for tournament entry allows potential participants to self-select into the tournament utilizing their own private information. This generates a tournament with lower monitoring costs and higher effort allocation as the restricted number of participants are able to better gauge the outcome of their effort allocation and reduces their perception of risk. Now, the ability to gauge outcomes within a tournament setting has significant impacts on effort allocation; for example, Levy & Vukina (2004) investigate the differential effect of tournament vs. piece-rate pay when participants have different ability and performance levels and find that a 'league effect' exists. Through an archival analysis of broiler chicken contracts from both piece-rate and tournament-based compensation schemes they find that when participants of unequal ability participate in multi-round tournaments against the same players this creates a 'league effect', altering the expectations of the players and making piece rate more efficient as players with no expectation of victory underperform in the tournament setting, and surprisingly, so do those who naturally expect to win.

Self-selection into tournament groups may explain much of the observed efficiency effects of tournament-based compensation structures. (Leuven, Oosterbeek, Sonnemans, & Klaauw, 2011) investigate the degree to which self-selection explains the observed performance outcomes of tournaments with different prize levels. They conduct a field experiment where students select into prize categories for performance levels and find that self-selection in tournaments gives the impression of higher rewards leading to higher performance, but that higher performing students sort into higher prize level games, and therefore, controlling for sorting the effect of tournament prize level is not apparent.

Another issue within the structure of tournament-based compensation structures is the issue of sabotage, (Carpenter, Matthews, & Schirm, 2010) investigate how sabotage behavior manifests itself within a real effort experimental tournament with student participants. They find that when there is ambiguity in the assessment of the performance of a competitor, a worker will engage in sabotage behavior. They create an experiment where the participants where responsible for the count and evaluation of the performance of their contest rivals; and in some conditions, compensation was directly affected by these evaluations and counts. Not only did workers engage in sabotage behavior when they could influence the payoffs of their rivals; the very expectation of sabotage within the tournament setting reduced motivation and effort allocation. In this case, the expectation of sabotage becomes an environmental factor that is increasing with tournament prize levels and decreases the efficiency of tournaments as compensation schemes.

The internal structure of promotion when the firm operates in a tournament setting is another factor in the efficient implementation of tournaments as compensation schemes.

(Altmann, Falk, & Wibral (2012) investigate the potential effects of promotion on effort

and competitive behavior within a tournament setting by comparing behavior between a single stage and two stage elimination-based tournament. They find that participants exert effort beyond the expected equilibrium level in the first stage of a two-stage elimination game than they exert in the single stage game; their findings indicate this is likely due to forward looking behavior. Another consideration on how the structure of promotion will affect effort allocation based in tournament theory is the shape of the reward curve. Delfgaauw, Dur, Non, and Verbeke (2015) examine how convex variation in prize structure and 'noise' based uncertainty effects performance in a multi-stage setting. They conduct a field study within a retail chain by implementing a two-stage elimination tournament across 208 locations. They find that workers with stable levels of performance significantly increase effort in response to convex prize structure; however, workers with volatile, less predictable performance do not. This finding supports the interpretation of prior that employees can identify their likelihood of advancing to the next stage and will adjust effort accordingly. It is important to note that although performance in the second round improves, it appears to do so at a cost to first round performance.

The fact workers can identify and incorporate tournament outcome expectations into their effort allocation decisions does not come as a surprise; however, it has significant implications for understanding effort provision within tournament structures. Workers want to be able to signal their quality within the tournament and employers hope to utilize a tournament structure to identify, reward, and retain high performing workers. Gürtler & Gürtler (2015) describe the information benefit derived by firms when heterogenous employees compete in a tournament setting and how this incentivizes firms to hire heterogenous employees. Utilizing analytical models of the outcomes of tournaments when

participants are homogenous vs. heterogenous they find that in a labor market with homogenous workers, heterogeneous workers have an incentive to outperform other workers and signal their quality to firms; this scenario incentivizes heterogenous workers to provide higher effort and incentivizes firms to select these workers for retention and reward.

Early work in tournament theory research describes the implications of rank-order tournaments as compensation schemes as motivating employees as efficiently as piece rate compensation while providing lower monitoring costs. However, research also shows that fairness perceptions within the tournament structure matter and prior findings support the comparison of regular career advancement and promotion and the likelihood of winning within rank order tournaments. This application of tournament theory to the real labor market also implies that group dynamics, cross group comparisons, and issues related to sub-optimal effort allocation and sabotage are real threats to the ability of compensation schemes that incorporate aspects of rank ordered tournaments to achieve an efficient payelfort equilibrium. Importantly, we see that tournament theory and equity theory are not incompatible, but may co-exist just as self-interest and fairness co-exists within the cultural and economic expectations of the worker.

## III. Hypothesis Development

John C. Bogle, Founder of the Vanguard Group, in a speech to the PCAOB in 2017, described how the "rachet effect" of ever-increasing pay disparity at the executive level creates a self-perpetuating cycle as compensation is determined by comparison to peer compensation and not performance (Bogle, 2017). Although wealth and income inequality have been described by significant policy makers as the "defining challenge of our time"

(Parnass, 2013) and have attracted media attention for decades little research exists examining how wage disparity produces the production and communication of financial information. Wage disparity has been growing steadily since the early 80s, and although research in economics has found that wage disparity has remained stagnate since the mid-90s for below median income levels, the difference between median income levels and the top 10% of income has steadily increased (Autor, Katz, & Kearney, 2008). One source of wage disparity often cited by the press, policy makers, and interests' groups are the increasing levels of CEO compensation; in the 1950s the average CEO to employee wage ratio was 20:1, in 2017 that ratio was 347:1 (AFL-CIO, 2017). These increasing trends in general income inequality, and in the relationship between CEO and employee pay have served as motivation for financial regulations; for example, CEO to employee pay ratio disclosure rules included in the Dodd-Frank Act. This rule, implemented by the Securities and Exchange Commission's (SEC) requires the disclosure of the ratio of CEO to median employee compensation beginning in 2017 and is meant to provide shareholders with information to evaluate CEO pay (SEC, 2015).

Bogle also recognizes the importance of the accountant's role in providing oversight and accountability in this system. Specifically, Bogle calls for greater independence for the accounting function, higher levels of public accounting disclosures around significant issues, and greater oversight regarding non-GAAP measurements (Bogle, 2017). What is not addressed in the speech, or in prior research regarding wage disparity and accounting information quality, is if the accounting function suffers from similar wage disparity and if this disparity itself has a significant impact on accounting information quality. While rightfully concerned with growing disparity in the pay of the

CEO, however, the implications of similar affects and trends within the corporate governance environment could have further implications for shareholder interest, economic stability, and the public trust of the accounting profession.

Although the increasing pay disparity of the CEO receives the greatest attention; wage disparity matters across professions, services, and positions. For example, Policardo & Carrera (2018) examine the how wage inequality affects productivity and find that inequality in wages explains reduced worker effort in a cross section of macroeconomic productivity over 34 OECD nations utilizing an Arellano-Bond GMM estimator to identify the effect of wage inequality as expressed by a national Gini index coefficient. The effect of pay disparity within the accounting profession is its own unique and interesting phenomenon. Accountants have different incentive structures and professional codes of ethics than other professions and other corporate managers. For example, prior research shows that CEOs with an accounting background demonstrate significantly different disclosure behavior than other CEOs, including with greater precision and less bias (Bamber, Jiang, & Wang, 2010) and that accountant CFOs are more risk adverse (Hoitash, Hoitash, & Kurt, 2016). It is not known if accountants as members of a highly paid and respected profession experience the effects of pay disparity at all, and if so, does pay disparity represent an issue of fair wage perceptions or as motivation within a sequential tournament.

#### **Prior Research in Pay Disparity**

Prior research has shown pay disparity demonstrates mixed results when measuring outcomes for both workers and firms (Heyman, 2005; Connelly, Haynes, Tihanyi, Gamache, & Devers, 2016). Pay disparity, a term often a term used interchangeably with

pay dispersion or wage inequality, represents the degree of pay differences either between similar functions in different roles or vertical pay differences within the same production function (Connelly et. al., 2016; Devers et. al., 2007). Pay disparity may increase individual motivation which increases firm performance, an effect predicted through tournament theory, or it may decrease effort and lead to lower productivity, higher employee turnover, and a loss of institutional knowledge, and for these reasons developing stronger contextual and institutional understandings of the differential effects of pay disparity of particular concern to business scholars (Devers et. al., 2007). For this investigation I utilize both the horizontal and vertical measures of pay disparity within two major classes of employment within the accounting profession: corporate accounting and public accounting.

Prior accounting research has hinted at the importance of fair wage perceptions within accounting labor markets and productivity functions. Persellin, Schmidt, & Wilkins (2014) survey 700 auditors and report that when auditors are required to work beyond the level that they believe audit quality suffers that this perception reduces their satisfaction with auditing as a profession. Further, in 2012, PCAOB board member Jay Hanson communicated that this reality of dissatisfaction with employment causes the best and brightest auditors to leave the profession (Hanson, 2012). One driver of job satisfaction is the perception of a fair wage, Hoopes et al (2018) find that higher salaries have a positive effect on audit quality, implying that higher salaries, or in the word of Akerlof and Yellen (1990), a wage perceived to be more fair, is associated with increase audit quality. These findings, however, do not represent a direct test of the fair wage-effort hypothesis and its potential effects on overall financial information quality. Hoopes et al., (2018) cite

anecdotal evidence that wages in the auditing profession have been stagnate over time whilst workloads and required hours have increased as motivation for their hypothesis that higher wages lead to higher quality. They investigate office level variation in pay and office level audit quality from 2004 to 2013 and find that offices that pay auditors more achieve better audit outcomes. This work, however, does not investigate the potential role of pay disparity in these outcomes.

In an experimental setting, Guo, Libby, & Liu (2017) investigate the effect of vertical pay dispersion in a budgeting setting and find a wage disparity effect on both lower-ranked and higher-ranked employees. Consistent with the fair wage-effort hypothesis and equity theory, they find that subordinate employees are more likely to misreport costs when pay disparity is high; further, they find that when pay disparity is high, that supervisors are more lenient towards their subordinates due to the supervisor's sensitivity to fairness perceptions. This evidence supports another channel through which pay disparity may introduce error or incomplete information into financial accounting process.

Hannan (2005) invokes Akerlof's (1982) gift exchange model and investigates the moderating relationship of firm profit on the association between higher wages and increased effort. Hannan reports that increasing wages leads to increased effort and notes that this result is explained by reciprocity as described in Rabin (1993). However, when a firm does not increase wages under the condition of a firm profit increase, workers 'punish' the employer by reducing effort; as predicted by the fair wage-effort hypothesis; further, reciprocity would predict that employees should also act altruistically, however, Hannan (2005) reports that employees punish firms that lower wages in the condition of a profit

reduction. The final condition, steady wages under the condition of profit reduction produces the expected reciprocity effect, employees perform better for the same wage.

This finding can be explained through reciprocity; but when taken together with the unexpected penalty to wage reduction under the condition of profit reduction, we see another possibility arise. Now, reciprocity is a related construct to fairness, and both provide foundations for the fair-wage effort hypothesis; but here, we see employees reacting by increasing effort when they see their own wage as more fair under the condition of steady wage and reduced profit. When the firm reduces their wage, for any reason, employees will perceive their wage as less fair, regardless of reciprocity or justification for the wage decrease, and they will reduce. Now this may seem like a light distinction, but it is certainly an important one with strong implications for pay structures in labor markets which are subject to the fair-wage effort hypothesis.

These nuanced differences between reciprocity and fairness allow me to investigate the effect of wage trends over time. A rational labor market would expect that wages, as a price equilibrium should be a function of the supply and demand for labor and that quality should not vary based on the price of labor, but the price of labor should vary based on the demand for quality. Tournament theory describes how increasing demands for effort should increase quality and wage disparity by requiring more wage disparity in later rounds of the 'sequential tournament' that career advancement through hierarchical organizations represents. In contrast, equity theory generally, and the fair-wage effort hypothesis specifically, predict that increasing wage disparity will reduce the worker's perception of the fairness of their wage, and they will respond through a reduction in effort and

information transfer. I believe that these effects will be discernable and testable in my investigation of pay disparity and accounting information quality.

#### **Equity Theory and Tournament Theory**

Tournament theory describes how competition for higher prizes based on performance level encourages effort and quality in work and generally argues that pay disparity promotes competition and provides positive incentives and promotes performance improvement (Connelly, Tihanyi, Cook, & Gangloff, 2014; Lazear & Rosen, 1981). Tournament theory is proposed to explain pay disparity in that employees compete against one another for promotions and pay, the winner of this competition advances to a higher position with better pay, and due to resource constraints, this imposes pay constraints on those who did not advance; in this way compensation policies resemble a tournament (Connelly, Haynes, Tihanyi, Gamache, & Devers, 2016). These prize structures are commonly used to explain large variation in executive compensation and are focused primarily on how this disparity affects firm performance, employee or CEO turnover, or firm governance (Connelly, Tihanyi, Cook, & Gangloff, 2014). Generally, tournament theory views pay disparity as a natural consequence of motivating individuals to perform across multiple sequential contests with the largest disparity required in the final round of promotion to ensure continued performance.

Equity based theories of compensation generally rely on the idea of fairness and that when workers perceive their wages are not fair, they punish their employer through reduced effort and information transfer. As Akerlof and Yellen (1990, p. 256) states, "The motivation for the fair wage-effort hypothesis is a simple observation concerning human behavior: when people do not get what they deserve, they try to get even." Rabin (1993, p.

1281) describes the relationship between perception and action in a deeper way, essentially that it is the same drive for positive reciprocity that leads to negative reciprocity, "the same people who are altruistic to other altruistic people are also motivated to hurt those who hurt them." These theories are dependent on the workers perception of fairness in that their subjective assessments of their compensation and position may create dissonance that leads to a reduction in effort and information transfer, or the vacation of their position (Fredrickson, Davis-Blake, & Sanders, 2010) and several prior studies support this view (Connelly, Haynes, Tihanyi, Gamache, & Devers, 2016).

Utilizing CEO based measures of pay disparity, Rouen (2017) examines pay disparity ratios between CEOs and median firm employees utilizing a confidential data set from the Bureau of Labor Statistics from 2006 to 2013. Rouen (2017) finds that, adjusting the pay disparity ratios to correct for industry factors and economic performance, firms with higher CEO-employee pay disparity see reduced performance. Specifically that the portion of pay disparity that is not explained by economic performance is negatively associated with future return on assets and that this effect is increasing with lower quality corporate governance and higher employee turnover. This investigation supports the idea that pay disparity has contextually and market based differential effects on performance and quality.

#### Wages, Productivity, and Tournament Theory

Tournament theory describes how competition for higher prizes based on performance level encourages effort and quality in work and generally argues that pay

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<sup>&</sup>lt;sup>2</sup> Although, Rouen (2017) acknowledges the fair wage perception effects exist across similar job comparisons (horizontal disparity), between different wage levels/positions (vertical disparity), and with variation in pay between all employees (overall disparity), the study focuses fully on vertical disparity between the CEO and the median employee.

disparity promotes competition, provides positive incentives and promotes performance improvement (Connelly, Tihanyi, Cook, & Gangloff, 2014). Tournament theory is proposed to explain pay disparity in that employees compete against one another for promotions and pay, the winner of this competition advances to a higher position with better pay, and due to resource constraints, this imposes pay constraints on those who did not advance; in this way compensation policies resemble a tournament (Connelly, Haynes, Tihanyi, Gamache, & Devers, 2016). These prize structures are commonly used to explain large variation in executive compensation.

The two foundational predictions of tournament theory are that (1) the workers investment (i.e. effort or outputs) is fundamentally derived from their perception of how that investment affects the probability of them winning and (2) it is not the overall level of prize won, but the difference between winning and losing that is important; or stated analytically and described in Connelly et. al., 2014:

(1) 
$$\frac{\partial P}{\partial u} (W_1 - W_2) = V$$

Where equation 1 represents an equilibrium where at point V the marginal cost and marginal value of investment in the tournament are equal. In this model, the probability of winning the tournament (P) changes with the change in investment  $(\mu)$ . Therefore, the driving factor in this model at the point of equilibrium is the difference between the winning prize  $(W_I)$  and the non-winning prize  $(W_2)$ . In this model, an increase in the disparity between the two prizes increases the marginal value of investment (V), and therefore, the willingness of the participant to increase their marginal cost. Extending this model to sequential tournaments creates a need for increasing differentials as risk adverse participants require greater incentives for motivation to 'climb higher' and not 'rest on the

laurels' of their prior accomplishments (Rosen, 1986). This predicts a higher level of pay disparity is required to motivate employees, especially employees in the final round of the tournament where there is no incentive for increased risk behavior beyond the final round.

Faleye, Reis, & Venkateswaran (2013) utilize voluntarily reported CEO-employee pay ratios from 1993 to 2006 and investigate the determinants and outcomes of pay disparity and find that firm size, operational performance, stock returns, and risk are all associated with increased pay disparity. Further, supporting a tournament theory approach, they find a positive association between pay disparity and performance, measured as revenue per employee, that is more pronounced when promotions are merit based. Tournament theory studies imply that higher levels of income inequality may drive employees to perform better when they view those higher levels of pay as achievable outcomes; however, in a tournament structure CEOs would no longer have an incentive to compete if there are no more future prizes (promotions) but are motivated by the stark difference between winning and losing at that level (i.e. CEO vs non-CEO pay) that the tournament behaves as though there are never ending levels (Fredrickson, Davis-Blake, & Sanders, 2010).

#### Wages, Productivity, and the Fair Wage-Effort Hypothesis

Traditional economic models of a perfectly competitive labor market describe how wages are determined by the productivity of labor; therefore, in this equilibrium, an increase in productivity should increase demand leading to an increase in wages. In this model, disparity in wages represents the marginal contribution of different wage levels to the final productive output of the firm. However, contemporary theoretical models suggest that the causal relationship may be inverted, meaning that higher wages increase effort and

productivity, where lower wages cause workers to shirk or otherwise penalize management and owners through reduced effort and increased information asymmetry (Akerlof 1982; Akerlof and Yellen 1990; Rabin 1993). The contemporary models are of interest here, as they provide a more informed and nuanced representation of a modern labor market.

Equity based theories of compensation generally rely on the idea of fairness and that when workers perceive their wages are not fair, they punish their employer through reduced effort and information transfer. As Akerlof and Yellen (1990, p. 256) states, "The motivation for the fair wage-effort hypothesis is a simple observation concerning human behavior: when people do not get what they deserve, they try to get even." Rabin (1993, p. 1281) describes the relationship between perception and action in a deeper way, essentially that it is the same drive for positive reciprocity that leads to negative reciprocity, "the same people who are altruistic to other altruistic people are also motivated to hurt those who hurt them." These theories are dependent on the workers perception of fairness in that their subjective assessments of their compensation and position may create dissonance that leads to a reduction in effort, information transfer, or the vacation of their position (Fredrickson, Davis-Blake, & Sanders, 2010) and several prior studies support this view (Connelly, Haynes, Tihanyi, Gamache, & Devers, 2016).

This investigation is concerned with the effects of long run wage stagnation on productivity within a professional service setting. Specifically, this study investigates how wages, and the fair wage perception affect financial information quality. Long run wage stagnation is an issue that is gaining attention as wealth inequality grows and as a consumer driven economy finds itself saddled with sluggish growth during a post crisis recovery period. This trend could have a significant effect on fair wage perceptions as described in

Akerlof and Yellen (1990). The fair wage-effort hypothesis states that workers perceive a fair wage level and adjust their effort accordingly, or stated analytically and described in Akerlof and Yellen, (1990):

$$(2) e = \min(w/w^*, 1)$$

Where e represents the workers effort and w represents the workers wage. In this model, the workers wage is scaled by the workers perceived fair wage represented by  $w^*$ . This model describes how the worker minimizes their effort based upon the relationship between their actual wage and their perceived wage where full normal effort is equal to one. This hypothesis describes a fundamental tenant of human existence often omitted in the consideration of rational economic behavior; specifically, as described in Akerlof and Yellen (1990 pg. 256): "...when people do not get what they deserve, they try to get even." This realization of the economic behavior of workers represents a significant advance in our understanding of how efficiency wages affect productivity (Stiglitz, 2002). Essentially, as the real wage w decreases worker effort is adjusted by the scale difference between the real wage and workers perceived fair wage  $w^*$ .

Gatcher and Thoni (2009) execute three experimental studies to investigate how wage comparisons between employees impact productivity and find evidence consistent with Akerlof and Yellen's (1990) fair wage-effort hypothesis that a wage-disadvantaged worker provides lower effort and a wage-advantaged worker does not. They also find that on an individual level, these reactions to wage discrimination can be attributed to the perceived intent to discriminate and not to the payoff outcome. Cohn, Fehr, & Goette, (2015) perform a field experiment to investigate the role of fairness perceptions and find that workers who perceive being underpaid prior to an increase in wages increase their

effort while workers who do not perceive being underpaid do not increase effort in response to increased wages. Consistent with the fair wage effort hypothesis, the effect of increasing wages is due to a reduction in perceived unfairness and not due to a positive effect of reciprocity. The findings of Cohn et. al., 2015 are important in that they offer some initial, however limited, evidence supporting the fair wage-effort hypothesis in a field experiment and how this may reconcile divergent findings regarding wages, fairness, reciprocity, and effort.

#### Accounting Wage Disparity and Accounting Information Quality

The quality of accounting disclosures is clearly important to financial markets; as a society we have built institutions for the sole purpose of monitoring the quality of financial reporting. For these reasons, a significant portion of accounting research is focused on defining, measuring, and investigating variation within the financial reporting of accounting information. Statement of Financial Accounting Concepts No. 8 (FASB, 2010) defines quality financial accounting information as possessing both relevance and representational faithfulness. Relevance refers to the ability of accounting information to make a difference in the decisions made by the information users; specifically, this refers to the predictive value and confirmation value of the information. Representational faithfulness is a more difficult construct to measure, but information considered to provide faithful representation is at least complete, neutral, and free from error. I examine the relevance and representational faithfulness as aspects of the quality of accounting information.

To measure relevance, I examine the predictive value of accounting information through earnings persistence which represents the ability of current earnings to predict

future earnings, and I examine the confirmation value of accounting information by investigating the earnings-returns relationship which represents the market's assessment of how well earnings information captures the economic reality of the firm. To examine representational faithfulness I rely on the absolute value of discretionary accruals as an inverse measure of neutrality, as higher levels of discretionary accruals increase the likelihood and magnitude of management bias within the accounting information system, and I utilize the quality of the accruals-cashflow relationship as a measure of the information being free from error, as greater unexplained variance in the accruals-cashflow relationship is an indicator of greater error within the accounting information system. Together, all these measures and concepts are components of what the accounting research literature refers to as earnings quality; specifically, that "higher quality earnings provide more information about the features of a firm's financial performance that are relevant to a specific decision made by a specific decision-maker" (Dechow et. al., 2010, p. 344) and is often measured as the investors' response to earnings.

All measures of earnings quality are composed of the economic process of generating earnings and the ability of the accounting process to measure and report earnings. This process is not perfect, and as accountants, it is important for us to understand how and why error enters this process. As accountants the legitimacy of finical reporting and the quality of accounting information is the primary measure of the value of our profession within the capital marketplace. Prior research has shown that measurement error within the accounting system decreases the predictive and feedback value of earnings information and decreases the ability of investors to reliably estimate future changes in the firm's financial position (Bratten, Causholli, & Khan, 2016; Bratten, Jennings, & Schwab.,

2016). This paper focuses primarily on the measurable properties of earnings, as these properties are the most direct result of the accounting production function. I argue that a fundamental and significant factor affecting the quality of earnings through the accounting process is the effect that corporate accounting wages have on the outcome of the quality of accounting information.

Gaynor, Kelton, Mercer, & Yohn (2016) describe the process through which public financial reports are generated and classify determinants of financial reporting quality utilizing the judgment and decision-making frame work presented in Bonner, 2008, which categorizes the causes of quality variation into person factors, task factors, and environmental factors. One primary factor within the accounting production function is the motivation of the corporate accountants who gather, process, and report the underlying financial information and the public accountants who review and assure this information. Corporate accountants are an often over-looked component of the production of financial information within the academic research literature and few studies, beyond studies of characteristics of the CFO, attempt to investigate and explain how this component of the production function affects earnings quality outcomes and a better understanding of these components is needed within the accounting literature (Gaynor et. al., 2016; Dechow et. al., 2010; Gaver & Paterson, 2001). As a primary input to the production of accounting information, I argue that the motivation and effort of corporate accounting and public accounting professionals will be measurable through an examination of pay disparity between and within these groups and will have an observable effect on accounting information quality.

According to the fair wage-effort hypothesis, workers will penalize employers and owners through reduced effort and information transfer when they perceive their wages to be less fair (Akerlof and Yellen, 1990; Rabin, 1993; Akerlof, 2002). If this hypothesis holds within the accounting profession, the association between wage disparity and reduced effort should be detectable in measures of accounting information quality. This reduced level of effort and reduction in information transfer will result in greater variability within the accruals-cashflow relationship as measurement error due to incomplete information entering into the accounting system. Further, higher levels of discretionary accruals will be utilized as employees in the accounting function exert discretion over accrual levels to reduce the effort needed to reconcile accounting irregularities. These factors will reduce the reliability and representational faithfulness of the reported accounting information.

Although equity theory predicts that reduced quality of accounting information is associated with pay disparity, tournament theory predicts that higher levels of pay disparity will motivate employees, increasing effort and quality. Therefore, if accounting professionals view their employment as a series of sequential contests, they will be motivated to improve the quality of accounting information, which should increase its predictive and confirmation value while reducing error and bias. I argue that, due to the differential structures of employment within corporate and public accounting, wage disparity within corporate accounting will be generally associated with reduced information quality. Further, due to the structure of public accounting employment, I suggest that higher wage disparity in public accounting will be generally associated with higher levels of information quality. When considering the differential between the two, a higher ratio of corporate-to-public accounting wage disparity would motivate workers

within the public accounting employment structure who view their ability to access higher wages within the corporate accounting employment structure upon their exit from public accounting should increase motivation and be associated with higher information quality.

The predictions above are supported by theory; however, due to the nature of this investigation and without significant archival evidence to establish strong prior assessments within this environment I propose my hypothesis in the null form and recognize the lack of significant prior research within the accounting field to support my directional expectations. I investigate the association between pay disparity in both corporate and public accounting and the quality of accounting information across four distinct measures of earnings quality associated with the FASB definition of accounting information quality.

Stated formally:

**H1:** Higher levels of pay disparity between the highest and lowest paid corporate accounting positions will not be associated with accounting information quality

**H2:** Higher levels of pay disparity between the highest and lowest paid public accounting positions will not be associated with accounting information quality

**H3:** Higher levels of pay disparity between average corporate and average public accounting wages will not be associated with accounting information quality

### IV. Data and Methodology

#### Accounting Quality: The accruals-cashflows relationship

First, I examine two measures of the reliability and representational faithfulness of accounting information; the accruals-cashflows relationship and the absolute value of abnormal discretionary accruals. To assess the accruals-cashflow relationship, I utilize the accounting quality (AQ) model developed by Dechow and Dichev (2002) which measures how the assumptions and estimates that underlie the creation of accruals lead to errors that must be corrected in future periods. When considering accruals related to the nature and timing of cashflows it is possible to examine the potential measurement error derived by changes in effort within the accounting information production function by utilizing the error in this relationship. Specifically, in how future and prior period cashflows fail to explain the expected mismatched relationship between current period accruals and current period cashflows. Stated formally as described in Dechow and Dichev (2002);

$$AR_{t} = \beta_{0} + \beta_{1}CFO_{t-1} + \beta_{2}CFO_{t} + \beta_{3}CFO_{t+1} + \beta_{n}IndustryFE_{t} + \beta_{n}YearFE_{t} + \varepsilon_{t}$$

$$\tag{3}$$

In this model, the error term of the regression of current period accruals on future, current and prior period cashflows captures a general mismatch between recorded accruals and reported cashflows. This occurs because accruals are used to assign cashflows to specific events and time periods, most of which 'reverse' themselves within one year's time. Therefore, errors in this model create noise in the accrual-cashflow relationship, damaging the beneficial aspects of accrual-based accounting. If wage disparity creates the perception of unfairness within employees charged with aspects of the accounting function this will lead to reduced effort and information transfer; these effects will be observable as

measurement error and will enter into the accounting information system to a higher degree. Stated formally,

$$AQ_{t} = \beta_{0} + \beta_{1}PAYDISP_{t} + \beta_{2}SIZE_{t} + \beta_{3}MTB_{t} + \beta_{4}LEV_{t} + \beta_{5}BIGN_{t} +$$
 
$$\beta_{6}LOSS_{t} + \beta_{n}IndustryFE_{t} + \beta_{n}YearFE_{t} + \varepsilon_{t}$$
 (4)

The AQ measure is defined by measuring how well cashflows in periods t-I, t, and t+I, explain changes in working capital accruals for year t. The residual from this model is utilized to measure accounting quality and as the absolute value of the residual increases, this indicates a less stable relationship between cashflows and accrual changes, indicating lower accounting quality. If increased pay disparity decreases perceived fairness and leads to workers withholding effort and information within the accounting information system, then we would expect a positive coefficient for  $\beta_1$ . In contrast, a significant negative coefficient for  $\beta_1$  would support tournament theory predictions that pay disparity incentivizes effort and increases accounting quality.

Next, I introduce my variables of interest into the earnings persistence model; specifically, the variable term *PAYDISP* is a generic term that represents the inclusion of one of my three pay disparity proxies described above (*CDISP*, *PDISP*, *HDISP*). *CDISP* is pay disparity in corporate wages calculated as the ratio of the highest paid employment level to the lowest paid employment level, *PDISP* is pay disparity in public accounting wages calculated as the ratio of the highest paid employment level to the lowest paid employment level, and *HDISP* is horizontal pay disparity between corporate and public accounting wages calculated as the ratio of the average reported pay in corporate

accounting and the average reported pay in public accounting. All models include year and industry fixed effects and firm clustered standard errors.

#### **Absolute Abnormal Discretionary Accruals**

Accruals have two components, discretionary and non-discretionary. Non-discretionary accruals are accruals that naturally, or mechanically, occur due to accounting regulation and standard aspects of the accounting system. Discretionary accruals are created when accountants apply their discretion in the determination of the nature and timing of recognizing economic events and in the application of accounting principles and these discretionary accruals are often used as a measurement of accounting quality.

The model of accruals regularly employed in the accounting literature is the Jones model (1991) which proposes the assumption that nondiscretionary accruals are a constant factor of the accounting information system; therefore, regressing total accruals on the economic activity that directly affects non-discretionary accruals will yield a measure of discretionary accruals within the error term. This model is further examined by Kothari, Leone, & Wasley, (2005) who find that controlling for prior year performance increases the quality of the measurement. Specifically, higher performance levels between years has a greater effect on non-discretionary accruals. They examine how performance matching greatly increase the reasonableness of the model under extreme performance conditions; but they also find that performance matching greatly reduces sample size within industry and that the inclusion of prior period return-on-assets has a similar effect with less loss of observations. I use the Jones model with the Kothari et. al., identified ROA control to estimate firm variation in discretionary accruals. Stated formally,

$$TA_t = \beta_0 + \beta_1 1/A_{t-1} + \beta_2 \Delta REV_t + \beta_3 PPE_t + \beta_4 ROA_{t-1} + \beta_n Industry FE_t + \beta_n Year FE_t + \varepsilon_t$$

Specifically, if pay disparity reduces employee effort and information transfer, employees charged with maintaining the accounting function will be more likely to utilize their discretion in determining the application of accounting principles to achieve a level of accounting quality that corresponds to their fairness perceptions. However, if pay disparity incentivizes effort and honesty, as in a tournament process, we would expect pay disparity to be associated with lower levels of absolute discretionary accruals (*ABSDA*).

$$ABSDA_{t} = \beta_{0} + \beta_{1}PAYDISP_{t} + \beta_{2}SIZE_{t} + \beta_{3}OCF_{t} + \beta_{4}MTB_{t} + \beta_{5}LEV_{t} +$$
 
$$\beta_{6}BIGN_{t} + \beta_{7}LOSS_{t} + \beta_{8}ROA_{t-1} + \beta_{n}IndustryFE_{t} +$$
 
$$\beta_{n}YearFE_{t} + \varepsilon_{t}$$

Equation 4 regresses the absolute value of discretionary accruals calculated as the residual from the Jones (1991) model of accruals, on pay disparity and common controls for firm complexity, risk, auditor characteristics, and other known determinants of discretionary accruals including the prior year's return on assets as a control for performance ( $EARN_{t-1}$ ) as a control for variance in expected accruals activity (Kothari, Leone, & Wasley, 2005). I include controls for the complexity of the size and complexity of the firm (SIZE), for firm growth (MTB), for firm cashflow (OCF), and for the firm's financial leverage (LEV). Further I control for the size of the firm's auditor (BIGN), if the

(6)

(5)

firm suffered a loss in year t (LOSS). All models include year and industry fixed effects and firm clustered standard errors.

#### **Earnings Persistence**

In addition to reliability or representational faithfulness, I examine if wage disparity within the accounting profession impacts the real or perceived relevance of accounting information. To assess the relevance of accounting information, I examine the relationship between pay disparity in the accounting profession and the ability of current earnings to predict future earnings, a concept known as earnings persistence. The earnings persistence model utilizes the firm's income as a proxy for the quality of the firms accounting information system. Specifically, if the firm's accounting information system collects and communicates useful, relevant information, then current year accounting information will be useful in predicting future accounting income. To investigate the predictive value of current year accounting information I regress current earnings on future earnings:

$$\begin{split} EARN_{t+1} = \ \beta_0 + \ \beta_1 EARN_t + \beta_2 PAYDISP_t + \beta_3 EARN_t \times PAYDISP_t \\ + \beta_n Industry FE_t + \beta_n YearFE_t + \varepsilon_t \end{split}$$

**(7)** 

Equation 5 above describes a basic earnings persistence model including industry and year fixed effects and standard error calculations are clustered by firm. The model above uses return on assets as the primary earnings variable (*EARN*) and is calculated as income before extraordinary items in year t scaled by the company's average assets held during year t. Specifically, a significant and positive coefficient value for  $\beta_1$  demonstrates a predictive relationship between current earnings and future earnings, implying that

accounting information has predictive value. In this earnings persistence model, the coefficient  $\beta_3$  represents the incremental effect of pay disparity on the predictive value of earnings. If  $\beta_3$  is significantly and negatively (positively) associated with earnings in year t+1, then the incremental negative (positive) effect of wage disparity on the predictive power of current earnings, and the predictive power of current earnings is weaker (stronger) in years when pay disparity is higher. All models include industry and fixed effects and firm clustered standard errors.

#### The Earnings-Returns Relationship

An additional way to examine the potential relevance of accounting information is to utilize a market-based proxy for accounting information quality; one such proxy is the is the earnings-return relationship. Markets use accounting information to value equity securities and the value relevance of earnings information is observable in the earnings-return relationship. As a proxy for the overall quality of the firms accounting system, the market's incremental reaction to earnings information along variation in a variable of interest, all else equal, represents the markets differential assessment of accounting information quality and its willingness to rely on that information in its value assessment.

If the effects of pay disparity on the fairness perceptions of employees charged with aspects of the accounting function reduce employee effort or information transfer in a way that introduces variation into the market's perception of the quality of accounting information the market will show variation in willingness to incorporate that information into a valuation of equity securities. If wage disparity causes reduced fairness perceptions, effort, and information transfer, then the quality of earnings will decrease, and the market will be less likely to rely on accounting earnings and other aspects of accounting

information; however, if increased pay disparity acts as an effort inducing incentive, I would expect an increase in reliance on earnings information associated with pay disparity. To investigate the earnings-return relationship, I regress buy and hold earnings for the twelve months preceding the release of the audited financial statements (*RETURN*) on the firm's return on assets (*EARN*):

$$RETURN_{t} = \beta_{0} + \beta_{1}EARN_{t} + \beta_{2}PAYDISP_{t} + \beta_{3}EARN_{t} \times PAYDISP_{t} +$$
 
$$\beta_{4}SIZE_{t} + \beta_{5}OCF_{t} + \beta_{6}MTB_{t} + \beta_{7}LEV_{t} + \beta_{8}LOSS_{t} + \beta_{9}MKTCAP_{t} +$$
 
$$\beta_{10}BIGn_{t} + \beta_{n}IndustryFE_{t} + \beta_{n}YearFE_{t} + \varepsilon_{t}$$
 (8)

Again, in equation 8, as in equation 7, I include measures of pay disparity and interact those measures with earnings to investigate how the ability of accounting information to explain returns varies along dimensions of pay disparity. In this model, a significant negative (positive) coefficient on  $\beta_3$  would be indicative, all else equal, of the market providing less (more) reliance on accounting information, specifically earnings information, in its evaluation of firm equity value. To control for potential other determinants of the earnings-returns relationship I include controls for the complexity of the size and complexity of the firm (SIZE, MKTCAP), for firm growth (MTB), for firm cashflow (OCF), and for the firm's financial leverage (LEV). All models include year and industry fixed effects and firm clustered standard errors.

#### Wage Trends in Corporate and Public Accounting

To investigate long run wage trends, I collect data from the Robert Half company, an accounting and business focused employment agency that has issued yearly reports on

salaries within the accounting profession since 1972. To investigate long run wage trends, I collect data from the Robert Half company, an accounting and business focused employment agency, whom has issued yearly reports on salaries within the accounting profession since 1972. This data set is unique in that its detail providing wage band information from entry level to executive for both corporate and public accounting for over 45 years exceeds data available from public sources like the Bureau of Labor Statistics, which provides only an occupational average for accounting, auditing and bookkeeping since 1988. I join this data with company financial data from Compustat, and capital markets data from CRSP as required for the models discussed below.

The three measures of pay disparity created are overall reported corporate pay disparity (CDISP), overall reported public accounting pay disparity (PDISP), and horizontal pay disparity between corporate and public accounting as measures as measured as the ratio of midpoint of corporate pay reported scaled by the midpoint of public accounting pay reported.<sup>3</sup> These measures of pay disparity between accounting professionals who have a direct impact on reporting quality serve as a measure of potential fairness perceptions and wealth based tournament incentives.

This data collected from 'Robert Half Financial Yearly Salary Guides' includes salary ranges for multiple employment levels across different accounting related functions. I collect data related to corporate and public accounting and employment tiers that are consistent through the reporting years. Although general wage data is available since 1967, industry specific wage data coded to specific occupations was not collected by the US Bureau of Labor Statistics until 1988. Further, variation over time in the composition of

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<sup>&</sup>lt;sup>3</sup> Generating this ratio using the highest or the lowest levels of corporate of public accounting wages reported yields the same results.

occupational categories makes a consistent sample difficult to derive over that time period. The RobertHalf salary guides are generated by utilizing the firm's own internal job placement wage data and data derived form a survey of their current and potential customers. These reports have been created as a guide for hiring processes and comparisons and have also been utilized by job seekers. The combination of proprietary employment data, survey data, and the use of the reports to set market expectations on both sides of the firm's business relationships between employers and job seekers makes these reports a reliable source of wage related data; however, I address supporting evidence for the validity of the data below.

Figure 1 and 2 present the corporate accounting wage data collected from RobertHalf wage reports from 1972 to 2017 (Figure 1) and that data adjusted for Inflation utilizing the Consumer Price Index reported by the Bureau of Labor Statistics, respectively. Figure 1 shows increasing wages from 1972 to 1990; however, when we compare this figure to the same time period in Figure 2 we see that real wages within corporate accounting were in decline over that same time period. This corresponds with the growth of computerized accounting systems and with their standardization and eventual evolution into full ERP systems by the 1990s. Figures 1 and 2 report a stark decline in real wages for new hires across the board in both real and nominal wages in 1991 and 1992, these figures correspond with a significant macroeconomic recession across both years.

The recession of 1990-1991 was a unique event in unlike preceding recessionary events at the time of this recession it did not have a determinable specific cause, but a conflux of credit issues and debt overhangs coming at the end of a long expansion and exacerbated by increasing regulation, imprudence within financial institutions, and a

decrease in both US spending and an increase in global competition (Blanchard, 1993). Growth was also anemic in the quarters surrounding this recessionary event, however regulatory changes in 1992 and 1992 contribute to changes in the structure of executive compensation that contribute to the large spike in CFO earnings observed following this recession event.

The increase in CFO pay starting in 1992 and corresponds to the passage and implementation of section 162(m) of the Internal Revenue Code, which eliminates the tax deductibility for executive non-performance-based compensation in excess of \$1 million dollars, and changes a 1993 SEC executive compensation disclosure rule change that required firms to disclose the compensation of the CEO, CFO, and the three other highest paid company executives.

Although prior research is mixed on its assessment of the contribution that these regulatory changes make towards the increasing executive compensation observed through the 1990s (Shorter & Labonte, 2007), these prior studies document the same recession-based drop in overall income followed by a stark increase in top incomes along this same timeline.

Frydman & Saks (2010) document the same dip and then rise in executive compensation reported in the RobertHalf financial reports over the same time periods; figure 4 and figure 5 show this same wage trend among a sample of top executives which includes CFOs in addition to CEOs, COOs, Treasurers, and other executives. Piketty, Saez, & Stantcheva (2014) model elasticities among three possible responses to changes in executive income, Figure 1 of Piketty et al. (2014) reports income data from the Tax Policy Center and identifies the same patterns of income reported in the RobertHalf accounting wage reports for top 1% incomes levels. Philippon & Reshef (2012) report on wage

premiums in the financial industry over time; figures six and seven of their report document wage patterns for college graduate and post graduate engineers and financiers (occupations with similar educational requirements, professional licensing, and technical skills as accounting) that further support the wage level trends reported by the RobertHalf company. Atkinson, Piketty, & Saez (2011) collect and report data regarding historical top incomes internationally; in their findings, Figure 7a reports the top 1% share of income in English speaking countries and income patterns further support the wage levels reported in the yearly RobertHalf accounting salary guides.

Although these studies are not focused on the accounting profession and do provide mixed evidence on the role of regulatory changes in the increasing executive incomes after the 1990-91 recession; these long run studies of overall wage disparity and specific studies of the 1990-91 recession, the IRS162m expense cap, and the 1993 SEC disclosure rule change do provide support for the reasonableness and validity of the wage levels reported by the RobertHalf organization in their yearly salary guides. To further examine the potential effect of the recessionary drop of wage disparity between 1990 and 1991 I reperform all analysis and drop all observations from 1990, 1991, and 1992 from the sample (untabulated). I find results consistent with the full sample results for all disparity ratio models.

Although general wage data is available from the BLS starting in 1967, industry specific wage data and data coded to specific occupations was not collected by the US Bureau of Labor Statistics until 1988. Further, variation over time in the composition of occupational categories makes a consistent sample difficult to derive over that time period for specific aspects of the accounting function, or for different types of executives. Figure

5 of this study reports CFO compensation tracked against historic wage information collected from the BLS and reported per quintile with an additional category for top 5% income. An examination of this figure shows reasonable agreement between wage trends reported by the BLS and trends in the wage levels reported by RobertHalf. To further assess the validity of this reported data, I extract all CFO wage data from Execucomp, which documents CFO wages since 2006, figure 6 shows a comparison between CFO wages reported in the RobertHalf salary guides and the average of CFO wages reported in Execucomp. Although the average wages reported in Execucomp appear higher than those reported in the RobertHalf salary guides, the trends over the comparable sample period are similar.

I use the hand collected data pulled from RobertHalf salary guides to generate pay disparity ratios within corporate and public accounting wage structures and between the corporate and public accounting professions. Equity theory explains that workers make comparisons between their wages and the wages of those with similar skills in similar, but not necessarily the same job (Akerlof & Yellen, The Fair Wage-Effort Hypothesis and Unemployment, 1990; Rabin, 1993). For this comparison ratio, I utilize the ratio of average corporate accounting wages to average public accounting wages. To further examine the effect of vertical pay disparity I calculate the ratio of the highest to lowest wage bands presented every year in the Robert Half Financial Salary Guides within corporate accounting and within public accounting. Higher level manager compensation takes on a different meaning when measured against the pay of lower level employees and this pay dispersion, operationalized as a ratio, is a primary measure in tournament theory research

and the academic discussion of pay disparity (Devers, Albert A. Cannella, Reilly, & Yoder, 2007; Connelly, Haynes, Tihanyi, Gamache, & Devers, 2016)

Figure 7 presents a visual plot of these ratios over the sample period. The corporate and public wage disparity ratios are generated by dividing the highest reported wage level by the lowest reported wage level in the relevant category. The public-to-corporate ratio is generated by dividing the midpoint between the highest and lowest wages in the corporate accounting category by the midpoint between the highest and lowest wages in the public accounting category. We see another artifact of the 1990-91 recession followed by increased executive wages through stock based compensation reported in prior research in the corporate disparity ratio. Hall & Murphy (2003) examine how the increase in stock option grants since the SEC disclosure rule change have effected income ratios over time and identify the a similar drop in income disparity ratios during the recessionary event of 1990-91 and an increasing ratio level after which supports the validity of the wage data reported in the RobertHalf reports.

Figure 8 plots the disparity ratios calculated in this study in comparison to the overall economic disparity ratios over the same time period reported by the BLS. Specifically, the figure 8 includes the ratios of the 95<sup>th</sup> percentile of overall income divided by both the 50<sup>th</sup> percentile and the 20<sup>th</sup> percentile. These trends in overall income disparity have been increasing steadily over time. When compared to the ratios generated for this study we see that corporate accounting pay disparity was declining until the proliferation of top executive stock based compensation in the 1990s, but that after the initial increase in that decade, has slightly reduced and remained stable since the mid-2000s. Pay disparity within the public accounting profession has remained relatively even throughout the

sample period, and the disparity between corporate and public accounting has actually been

decreasing over the sample period. Shown in a slightly different visualization in figure 9,

we are able to see that pay disparity trends in the accounting profession have not followed

overall economic trends of year over year increases in pay disparity.

Descriptive Statistics

Table 1 Panel A presents the descriptive statistics of my sample. I include all

available observations for US firms from CompStat between 1972 and 2017 and join with

this sample with the calculations of wage disparity within corporate accounting, public

accounting, and between corporate and public accounting leaving 172,149 firm-year

observations. This sample is further restricted per the requirements of each specific model.

For the model of the accruals-cashflow relationship the availability of data required to

calculate the AQ measure and the included control variables reduces the sample size to

105,823 firm year observations. The data required to calculate absolute abnormal

discretionary accruals (ABSDA) and the included control variables reduces the sample size

to 95,301 firm year observations for the discretionary accruals model.

parsimonious model presented is the earnings persistence model, in which the requirements

for non-missing earnings and future earnings reduces the sample size to 144,153 firm year

observations and the further requirement for 12 months of buy and hold returns and non-

missing control variables reduces the sample size of the Earnings-Returns relationship

model to 88,332.

V. Results

Accounting Information Quality: The Accruals-Cashflow Relationship

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Table 2 presents the results of my investigation of the effect of wage disparity on accounting information quality, specifically accounting quality (AQ) as measured in Dechow and Dichev (2002) which captures the quality of the accruals-cashflow relationship. Column A reports corporate accounting pay disparity (CDISP,  $\beta_1 = 0.0007$ , p < 0.083) is significantly and positively associated with unexplained variance within the accruals-cashflow relationship, which captures the vertical pay disparity within corporate accounting. This result supports the conclusions of equity theory and fair-wage effort hypothesis and in that higher levels of pay disparity would cause workers to withhold effort, leading to higher degrees of measurement error and uncertainty in accrual estimation. Consistent with my findings in the earnings persistence model estimated above and with the public accounting employment being consistent with tournament theory, the measure of pay disparity within public accounting (PDISP,  $\beta_1 = -0.0628$ , p < 0.001) is reported in column B and shows a significant and negative association with the AQ measure, which indicates less unexplained variance within the accruals-cashflow relationship and therefore, higher accounting quality. This implies that pay disparity within public accounting motivates public accounting incentivizes professionals to detect and correct measurement and estimation error within the accounting information system.

Column C presents the results of the AQ model with the ratio of corporate wages scaled by public accounting wages (HDISP), a model meant to examine if higher corporate to public accounting wage disparity engenders perceived unfairness or motivates individuals in a manner similar to a tournament prize. Column C reports that the coefficient on the measure of horizontal pay disparity is negative and significant (HDISP,  $\beta_1 = -0.3030$ , p < 0.001) supporting the argument that higher disparity between corporate and

public accounting may improve accounting quality. Column D presents the AQ model with both the Corporate and Public accounting ratios included

both the corporate and public accounting pay disparity measures and find the results are directionally and statistically consistent. Further, Column E reports the model with all disparity ratios included and finds that wage disparity in corporate accounting, the measure most easily associated with equity theory, is significantly and positively associated with variation in the accruals-cashflow relationship (*CDISP*,  $\beta_1 = 0.0493$ , p < 0.001) while the measures more easily associated with tournament theory are negatively and significantly associated with variation in the accruals-cashflow relationship (*PDISP*,  $\beta_1 = -0.1099$ , p < 0.001; *HDISP*,  $\beta_1 = -0.3344$ , p < 0.001), findings that support expectations that higher wage disparity within corporate accounting negatively affects quality while disparity within public account and between corporate and public accounting increases motivation due to the tournament style nature of public accounting employment.

#### The Accruals-Cashflow Relationship – Lagged

To address the possibility that wage disparity will require some time lag to induce either fairness perceptions or tournament-based incentive within employees, and to address potential time-based confounding affects I utilize one-year lagged disparity ratios within the model. Table 3 presents the results of the AQ accounting quality model with lagged disparity ratios. The only inconsistency between the lagged and non-lagged models is the coefficient on corporate disparity reported in Table 3 Column A, which is significantly negative, implying an increase in accounting quality when corporate pay disparity is higher, however, the effect of corporate disparity retains its negative effect on accounting quality when public disparity and disparity between corporate and public accounting is

included in the models, as reported in columns D and E. The results of this lagged variable model support the expectations that equity theory better explains the structure of corporate accounting and tournament theory better explains the structure of public accounting, and the comparison between the two serves to motivate employees to exert greater effort and generate greater quality information.

#### The Accruals-Cashflow Relationship – Other Inequality measures

This study also examines the potential overall economy-wide wage disparity may have on accounting information quality. I collect wage data and pay disparity data from the BLS and include three measures of disparity in my accounting quality models. The first measure is the GINI coefficient of income inequality. The GINI coefficient is calculated as ratio from 0 to 1 that measures the area beneath the uniform distribution line and the Lorenzen Curve. Essentially it measures how far from equal distribution the actual distribution of income has skewed and represents a measure of overall income inequality throughout the entire economy. I also utilize two measures of income disparity reported by the BLS on a yearly basis since 1967; the ratio between the 95th percentile of income scaled by the 50th percentile of income and the ratio of the 90th percentile of income to the 10th percentile of income. Table 4 presents the results of this investigation and reports that all measures of overall income inequality are associated with an increase in variation within the accruals-cashflow relationship and decreased accounting information quality.

# The Accruals-Cashflow Relationship – Corporate and Public Acc. to Economy Wide Wages

Next, I scale the highest wage levels in corporate and public accounting by the by the 10<sup>th</sup>, 50<sup>th</sup>, and 95<sup>th</sup> income percentiles. This generates a measure of accounting wages

in comparison to economy-wide wages. As accounting wages increase when compared against economy wide wages accounting quality may improve, however, this comparison, if unfavorable, may have negative effects on fairness perceptions. Table 5 presents the results of the inclusion of these ratios for both corporate and public accounting and finds that comparisons between corporate and public accounting wages and economy-wide income levels are associated with decreased accounting quality. Table 6 reports the results of the AQ model with both corporate and public accounting ratios included and finds that, when considering both measures, higher corporate accounting pay in relation to economy wide wages increases the quality of the accruals cashflow relationship and higher public accounting pay in relation to economy wide income is associated with greater variance in the accruals cashflow relationship.

#### The Accruals-Cashflow Relationship – CFO Specific Inequality

Recognizing the limitations of using economy wide measures and other measures without firm specific variation this study generates a CFO specific measure of disparity. Utilizing the ExecuComp database I scale the firm-year CFO total compensation by the 10<sup>th</sup>, 50<sup>th</sup>, and 95<sup>th</sup> income percentiles. Due to data availability this measure is only available from 2006 to 2017 and reduces the sample size 15,049 firm year observations. This test investigates how firm specific wage disparity of the CFO may generate either negative fairness perceptions or provide a motivational incentive to increase effort. Table 7 reports the results of this investigation and finds that across all three economy wide disparity measures, higher CFO specific pay is associated with increased accounting quality from the period of 2006 to 2017. These results support a tournament theory

explanation of CFO specific pay improving accounting quality through the reduction of variance in the accruals-cashflows relationship.

#### **Accounting Quality: Discretionary Accruals**

Discretionary accruals represent management's ability to exercise discretion in the nature and timing in the recognition of firm cashflows. If wage disparity creates fairness effects, I expect that discretionary accruals will increase as those in the accounting function exercise discretion in accruals behavior instead of reducing measurement error or otherwise increasing reconciliation activity. Tournament theory predicts that higher pay disparity would induce employee effort and improve quality, leading to a lower need for the application of discretionary accruals in response to accounting irregularities. I follow prior research and utilize established methodologies to generate firm specific performance adjusted discretionary accruals; specifically, following Kothari et. al. (2005), I use changes in revenue, inventory, and other accounts to predict the non-discretionary relationship between economic activities and accrual levels while controlling for firm performance. The residual error from this model, representing unexplained variation in discretionary accruals, is utilized as a measure of discretionary accrual levels.

Table 8 reports the result of my regression of the absolute value of discretionary accruals (*ABSDA*) on measures of pay disparity. Column A reports that corporate accounting pay disparity is positively associated with levels of absolute discretionary accruals (*CDISP*,  $\beta_1 = 0.0069$ , p < 0.001) and is consistent with the fair-wage effort hypothesis that employees will apply discretionary accruals to reduce effort in response to pay disparity. In column B, higher levels of pay disparity within public accounting are associated with lower abnormal discretionary accruals (*PDISP*,  $\beta_1 = -0.0101$ , p < 0.001)

as is the ratio or corporate to public wages reported in column C (*PDISP*,  $\beta_1$  = -0.1300, p < 0.001). These findings support the argument that higher pay disparity incentivizes public accounting employees through their year over year promotion employment structure which better replicates a tournament setting. Column D and column E report that these results are robust to including both the corporate and public accounting disparity ratios and all ratios in the models, respectively.

## Discretionary Accruals - Lagged

To address the possibility that wage disparity will require some time lag to induce either fairness perceptions or tournament-based incentive within employees, and to address potential time-based confounding affects I utilize one-year lagged disparity ratios within the model. Table 9 presents the results of the Discretionary Accruals model with lagged disparity ratios. The use of lagged disparity ratios produces fully consistent results across all model specifications. This supports the validity of the investigation by reducing temporal ambiguity between the independent and dependent variables while also reducing the possibility of co-occurrence based alternative explanations.

### Discretionary Accruals – Other Inequality measures

This study also examines the potential overall economy wide wage disparity may have on accounting information quality. Utilizing the three measures of economy-wide disparity discussed above, Table 10 presents the results of this investigation and reports that all measures of overall income inequality are associated with an increase in variation within the accruals-cashflow relationship and decreased accounting information quality. This result implies that wage inequality reduces effort overall, and as employees are

affected by fairness concerns, their general effort and information transfer related to accounting-based tasks is reduced.

## Discretionary Accruals - Corporate and Public Accounting to Economy Wide Wages

To investigate how comparisons between the highest wage levels in corporate and public accounting wages and economy wide wage levels, I again scale the highest wage levels in corporate and public accounting by the by the 10<sup>th</sup>, 50<sup>th</sup>, and 95<sup>th</sup> income percentiles. These tests examine if the increasing wage disparity at the highest income levels of corporate and public accounting, in comparison to economy wide income levels, are associated with variation in accounting quality. Table 11 presents the results of the inclusion of these ratios for both corporate and public accounting and finds that comparisons between corporate and public accounting wages and economy-wide income levels are associated with decreased accounting quality. Table 12 reports the results of the ABSDA model with both corporate and public accounting ratios included and finds that, when considering both measures, higher corporate accounting pay in relation to economy wide wages increases the quality of the accruals cashflow relationship and higher public accounting pay in relation to economy wide income is associated with higher overall discretionary accruals in all cases.

## Discretionary Accruals – CFO Specific Inequality

To examine how CFO specific variation in wage disparity may affect accounting quality I scale the firm-year CFO total compensation by the 10<sup>th</sup>, 50<sup>th</sup>, and 95<sup>th</sup> income percentiles. Due to data availability this measure is only available from 2006 to 2017 and reduces the sample size 17,459 firm year observations. This test investigates how firm specific wage disparity of the CFO may generate either negative fairness perceptions or

provide a motivational incentive to increase effort. Table 13 reports the results of this investigation and finds that across all three economy wide disparity measures, higher CFO specific pay is associated with increased accounting quality from the period of 2006 to 2017. These results support an equity theory interpretation of CFO specific wage disparity, when compared to economy wide wage levels, through an association with higher levels of discretionary accruals.

#### **Accounting Quality: Earnings Persistence**

Now I examine how wage disparity may affect the relevance factor of accounting information quality. Table 14 reports the results of my investigation of the association between wage trends in the accounting profession and earnings persistence. Column B reports the coefficient on the variable of interest  $\beta_3$  is significantly negative for the first measure of pay disparity (EARN×CDISP,  $\beta_3 = -0.0446$ , p < 0.001), which captures the vertical pay disparity within corporate accounting. This result supports the equity theory hypothesis that higher levels of pay disparity would cause workers to withhold effort and information, which would be observable in the output quality of the accounting information system. Column C and Column D report the results from the earnings persistence model when including the pay disparity ratio for public accounting wages and the ratio between corporate and public accounting. Both models report the effect of corporate accounting wages as having a significantly negative association with earnings persistence, a finding that supports the fair wage-effort hypothesis of equity theory that higher wage disparity creates negative fairness perceptions that reduce employee effort and information transfer. In these models, however, both public accounting wage disparity and disparity in the

corporate to public accounting ratios do not show a significant relationship with earnings persistence.

Column E and F report the results of the models including both the corporate and public accounting ratios and al disparity ratios respectively. These models find that higher levels of corporate account wage disparity are associated with lower earnings persistence while the incremental effect of higher wage disparity within public accounting is associated with higher earnings persistence. The results of the corporate to public accounting wage disparity ratio are inconclusive. These results provide some evidence of the differential nature of employment and career structures between corporate and public accounting. Specifically, public accounting employment follows a structure more consistent with tournament theory. Periodic evaluations and set promotion schedules mirror a multi period tournament where participants know providing additional effort will increase their ability to access future rounds of the tournament. Further the effect of corporate accounting wage disparity shows a significant association with reduce accounting quality across all models.

## Earnings Persistence – Lagged

Table 15 reports the results of my examination of lagged wage disparity on the ability of current earnings to predict future earnings. This particular test is of greater importance due to the complex nature of the relevance of accounting information. Specifically, although current period disparity may directly affect current period accrual balances and their relationship with cashflows, earnings persistence is subject to a greater effect of the inertia of the overall business process. In these tests, column B reports a significant negative association between corporate accounting wage disparity and earnings persistence while column C reports a significant positive association between public

accounting wage disparity and earnings persistence. Column D reports the results form including the corporate to public disparity ratio in the earnings persistence model and finds no significant incremental association between the corporate to public accounting disparity ratio and earnings persistence. Column E and F report the results of including both the corporate and public accounting disparity ratios and all accounting disparity ratios, respectively, and finds that both corporate accounting wage disparity remains significantly associated with a reduction in earnings persistence and public accounting wage disparity is associated with higher levels of earnings persistence. These findings support the argument that the structure of employment in corporate accounting supports an equity theory assessment of wage disparity and the structure of public accounting employment resembles a tournament environment.

## Earnings Persistence – Other Inequality measures

This study also examines the potential overall economy wide wage disparity may have on accounting information quality. Table 16 presents the results of including three measures of economy wide disparity within the models of earnings persistence. These models find that the GINI coefficient of overall income inequality and the ratio of the 95<sup>th</sup> to 50<sup>th</sup> percentile measure of overall income inequality are associated with decreased earnings persistence. While the 90<sup>th</sup> to 10<sup>th</sup> percentile measure is insignificant. This result supports the argument that increasing income inequality affects the production of quality accounting information by reducing the effort and information transfer of those involved in the accounting and reporting process who are generally at or above the median income level.

#### Earnings Persistence – Corporate and Public Accounting to Economy Wide Wages

To investigate how comparisons between the highest wage levels in corporate and public accounting wages and economy wide wage levels, I include the corporate and public accounting wages scaled by economy wide wage percentiles as described above. Table 17 presents the results of the inclusion of these ratios for both corporate and public accounting and finds that comparisons between corporate wages and economy-wide income levels are associated with decreased accounting quality through lower earnings persistence, but no such affect is observable for public accounting wages. Table 18 reports the results of the earning persistence model with both corporate and public accounting ratios included and finds that, when considering both measures, higher corporate and public accounting pay in relation to economy wide wages is associated with lower earnings persistence when compared to the bottom 10% of economy wide income, but is associated with improved earnings persistence when compared to the median economy wide income.

## Earnings Persistence – CFO Specific Inequality

To examine how CFO specific variation in wage disparity may affect accounting quality I scale the firm-year CFO total compensation by the 10<sup>th</sup>, 50<sup>th</sup>, and 95<sup>th</sup> income percentiles. Due to data availability this measure is only available from 2006 to 2017 and reduces the sample size 15,735 firm year observations. This test investigates how firm specific wage disparity of the CFO may generate either negative fairness perceptions or provide a motivational incentive to increase effort. Table 19 reports the results of this investigation and finds that across all three economy wide disparity measures, higher CFO specific pay is associated with lower earnings persistence from the period of 2006 to 2017. These results support an equity theory interpretation of CFO specific wage disparity, when

compared to economy wide wage levels, through an association with lower accounting quality.

#### **Earnings-Returns Relationship**

Table 20 presents the results of my investigation of how the effect of pay disparity will be observable within the earnings return relationship. The ability of earnings to explain returns is a common proxy for the quality of accounting information, and as wage disparity either creates fairness perceptions that result in a reduction of employee effort and information transfer or incentives tournament-based behavior, that effect may be observable in this relationship. As reported in column B and C, the coefficient on the interaction of corporate wage disparity and earnings and public accounting wage disparity and earnings are both insignificant whole Column D reports a significant association between corporate to public accounting wage disparity and earnings response (*EARN×HDISP*,  $\beta_3 = 0.2916$ , p < 0.001) indicating the incremental explanatory power of earnings to returns varies in a significant and positive association with pay disparity between corporate and public accounting, essentially, as corporate pay increases over public accounting pay this provides an incentive for accounting employees to exert more effort and generate higher quality information.

Column F reports the results of the including all disparity ratios in the specified earnings-returns relationship model. This model does finds results consistent with the other models of accounting quality; corporate pay disparity is significantly associated with reduced earnings response (*EARN*×*CDISP*,  $\beta_3 = -0.0777$ , p < 0.0103) while the corporate to public disparity ratio is associated with increased earnings response (*EARN*×*HDISP*,  $\beta_7 = 0.1309$ , p < 0.0017). This implies that the fairness effects of corporate accounting

disparity are discernable within the accounting quality related to earnings response and that disparity between the public and corporate accounting areas either increases the fairness perceptions of corporate accountants when their pay is higher than public accounting, or provides public accounting practitioners who expect to move to the corporate accounting function with greater incentives toward effort and quality.

## Earnings-Returns Relationship - Lagged

Table 21 reports the results of my examination of lagged wage disparity on the observable effects of accounting quality on the earnings-returns relationship. This test helps address temporal ambiguity within the measurements and alleviate concerns about the association being a factor of co-occurring events. Column F reports the results of including all accounting disparity ratios, and finds that lagged corporate accounting wage disparity remains significantly associated with a reduction in the earnings return relationship while corporate to public accounting disparity is associated with an increased earnings response. These findings support the argument that the structure of employment in corporate accounting supports an equity theory assessment of wage disparity and the structure of public accounting employment resembles a tournament environment.

#### Earnings-Returns Relationship - Other Inequality measures

This study also examines the potential overall economy wide wage disparity may have on accounting information quality. Table 22 presents the results of including three measures of economy wide disparity within the models of earnings persistence. All three measures of economy wide income inequality are significant and negatively associated with the earnings-returns relationship. This result supports the argument that increasing income inequality affects the production of quality accounting information by reducing the

effort and information transfer of those involved in the accounting and reporting process which is observable through a reduced earnings response.

# Earnings-Returns Relationship - Corporate and Public Accounting to Economy Wide Wages

To investigate how comparisons between the highest wage levels in corporate and public accounting wages and economy wide wage levels, I include the corporate and public accounting wages scaled by economy wide wage percentiles as described above into the models separately. Table 23 presents the results of the inclusion of these ratios for both corporate and public accounting and finds corporate accounting disparity is associated with a reduced earnings response. Table 24 reports the results of the earning persistence model with both corporate and public accounting ratios included together and finds that, when considering both measures, higher corporate accounting disparity is associated with a lower earnings response, but public accounting disparity is not.

## Earnings-Returns Relationship - CFO Specific Disparity

To examine how CFO specific variation in wage disparity may affect accounting quality I scale the firm-year CFO total compensation by the 10<sup>th</sup>, 50<sup>th</sup>, and 95<sup>th</sup> income percentiles. Due to data availability this measure is only available from 2006 to 2017 and reduces the sample size 10,677 firm year observations. This test investigates how firm specific wage disparity of the CFO may generate either negative fairness perceptions or provide a motivational incentive to increase effort. Table 25 reports the results of this investigation and finds that across all three economy wide disparity measures, higher CFO specific pay is not associated with the earnings-return relationship from the period of 2006 to 2017.

#### **Utilization of different Clustered Standard Errors across models**

RobertHalf reports wage levels across different corporate size bands based on the firm's total assets. As a robustness test, I run the tour primary models (AQ, ABSDA, EP, and ERC) and their lagged variants with standard errors clustered around these size bands and include gvkey as a firm specific fixed effect. Utilizing this different approach to clustering standard errors yields the consistent results for the discretionary accruals and accounting quality models. This alternative specification of standard error clustering; however, yields insignificant results for the earnings persistence model and its lagged variant while generating an ERC model with more significant coefficients. Taken together, this variant supports the general findings of the paper in regards to the effect of wage disparity on the relevance and reliability of information.

## VI. CONCLUSIONS AND LIMITATIONS

In this study, I investigate how wage disparity and the nature of advancement as an absolute or relative path has potential effects on the production of accounting information. I analyze 45 years of data regarding the degree or wage disparity in corporate and public accounting and its effect on information quality. Utilizing the differential employment structure of corporate and public accounting; I argue that the relative advancement structure of corporate accounting increases uncertainty and the perception of unfairness in wage structures while the absolute performance measures within public accounting incentivize effort.

These results are robust to an examination of the underlying data and lead-lag examinations of the associations between the measures of wage disparity and information quality. I cannot however, derive fully causal identification of these effects. Further, these

measures represent a time series that spans 45 years and may be subject to forces external to the model that bias both the independent and dependent variables. Due to a lack of granularity within the data itself; these measures produce low variance and although results may be statistically significant; the explanatory power of the model may be small. This study hopes to inform public accounting and corporate accounting managers and executives how the structure of compensation and the perceived fairness of wages may affect accounting information quality. Pay disparity is associated with accounting information quality and if the potential fairness effects described in equity theory affect workers differently under the condition of relative performance tournaments or absolute performance evaluation these results have managerial and regulatory implications for the corporate and public accounting labor markets.

I regress four measures of information quality on these disparity measures; two measures of predictive value and two measures od feedback value. I find that higher levels of pay disparity within corporate accounting are associated with reduced accounting information quality, and that pay disparity within the public accounting labor market is associated with higher accounting quality. Additionally, I find that horizontal pay disparity between corporate accounting and public accounting is associated with higher accounting quality; suggesting that when corporate accounting wage potential is higher, this serves as an incentivizing factor for auditors who have the ability to automatically progress and exit public accounting into corporate accounting at higher wage levels. These findings join a growing national conversation regarding pay disparity and income inequality; and although wage stagnation and increasing income inequality may be an issue economy wide, the

accounting profession has not seen the same levels of wage stagnation or stochastically increasing wage disparity.

This investigation into wages and pay disparity over the last 45 years in the accounting profession, and its differential effect between corporate and public accounting, provides insights into a professional labor market that provides significant oversight to global financial markets and ensures accountability for most advanced economic activity. Wage stagnation and its contribution to growing levels of income and wealth inequality is becoming more contentious for policy makers, regulators, and employers with every passing year. The accounting profession has long been viewed as a stable profession and a profession that affords a comfortable life to its members. It is important to understand how pay disparity in the accounting profession affects the production of accounting information so that employers, policy makers, and regulators may understand and manage the production of accounting information.

Together these results show the importance of pay disparity within corporate accounting as a determinant of accounting quality and how tension exists between the firm's fundamental desire to maximize profitability and their fundamental duty to provide quality accounting information to shareholders. These findings provide insight and fundamental understanding to how the labor market for corporate and public accounting professionals affects the quality of accounting information available to market participants. It raises questions regarding the differential structures of employment and career advancement within corporate accounting and public accounting and how these differences affect information quality. Future research in this area may explore how pay disparity, serving as an incentivizing and rationalizing factor, may affect the likelihood of fraud or

misstatement. Future studies may investigate how the different structures of labor markets within the accounting profession force selection between employment markets and the benefits and detriments associated with this selection process.

Table	Table 0 - Panel A: Review of Equity Theory, Fairness, and Reciprocity Research in Economics											
Year	Author(s)	Title	Journal	Objective	Method / Data	Conclusion						
1982	George A. Akerlof	Labor Contracts as Partial Gift Exchange	The Quarterly Journal of Economics	To explain involuntary unemployment as derived as a response to worker behavior	A model that describes the provision of effort as a 'gift' in response to higher than market clearing wages	Labor contracts, when viewed as partial gift exchanges, both influence and are influenced by the workers' social norms and perceptions.						
1982	William J. Baumol	Applied Fairness Theory and Rationing Policy	The American Economic Review	To offer an understanding of how fairness theory can help economist apply economic theory to public policy analysis	Discussion of prior research and an analytical model of commodity rationing and fairness considerations	A fairness criterion can be applied to concrete problems and through doing so, one can obtain non- obvious results that better describe real activity						
1984	George A. Akerlof	Gift Exchange and Efficiency Wage Theory: Four Views	American Economic Review	Provides commentary on partial gift exchange.	Discussion of four paradigms of efficiency wages / Analytic	Although payments beyond market clearing prices seem counter intuitive to rational economists, evidence exists that this phenomenon are common and naturally occurring						
1986	Kahneman, Knetsch and Thaler	Fairness as a Constraint on Profit Seeking: Entitlements in the Market	The American Economic Review	Are profitable, honest, and even expected actions in the market viewed as exploitive and unfair?	Discussion of prior research and presentation of survey results of 320 CEO business executives	An individual's sense of entitlement affects market exchange outcomes and distorts equilibria unless the analysis includes fairness as a factor						
1987	George A. Akerlof and Janet L. Yellen	Rational Models of Irrational Behavior	American Economic Review	Provides commentary on how fairness explains departure from rational economics	Discussion of rational economics and Keynesian theory	Keynesian economics explain behavioral irregularities known to occur within economic activities and documented in psychological and sociological research.						
1988	George A. Akerlof and Janet L. Yellen	Fairness and Unemployment	American Economic Review	Presents an efficiency wage model based on fairness	Discussion of fairness theories / Analytic	These models of fairness explain observed wage disparities between occupations and industries and mitigate the concern of traditional wage models that cannot explain unemployment within a utilitarian, fully maximizing hedonistic world.						

1990	George A. Akerlof and Janet L. Yellen	The Fair Wage- Effort Hypothesis and Unemployment	Journal of wage-effort fair wage-effort Economics hypothesis and its consequences  hypothesis consequences		Workers proportionately withdraw effort as their actual wage falls short of their fair wage; the fair wage perception is derived from comparisons between wages, between workers and managers, and between workers and firm profitability	
1991	Peter Cappelli and Keith Chauvin	An Interplant Test of the Efficiency Wage Hypothesis	Quarterly	Directly tests the main arguments of efficiency wage models that wage premiums and the risk of losing them prevent shirking	Plant level data from a large auto manufacturer	Greater wage premiums and conditions in the labor market r making it more difficult to find alternative employment are associated with lower levels of shirking
1992	Vesna Prasnikar and Alvin E. Roth		The Quarterly Journal of Economics	To better understand differential outcomes between experiments regarding fairness and game theory	Procedures to differentiate between endogenous aspects of common experimental games	Although game- theoretic predictions remain pertinent, the effect of fairness considerations cannot be ignored
1993	David I. Levine	Fairness, Markets, and Ability to Pay: Evidence from Compensation Executives	American Economic Review	To examine real evidence of wage adjustments by corporate executives	A unique data set based on surveys of 139 compensation executives regarding potential wage adjustments	Considerations of equity are an important factor in managing a company's internal wage structure in response to market forces.
1993	Main, O'Reilly, and Wade	Top Executive Pay: Tournament or Teamwork?	Journal of Labor Economics	Investigate the effects of pay dispersion within a firm's top management team	Data analysis of executive compensation for two thousand executives per year over a 5-year period	Top management team pay appears to follow a sequential tournament structure
1993	Matthew Rabin	Incorporating Fairness into Game Theory and Economics	The American Economic Review	Formal modeling of reciprocity and fairness will help us better understand economic activity	research and analytical modeling to incorporate fairness	Extending a generalized 'kindness function' to economic models under complete or in- complete information is essential to applied economic research
1993	Albert Rees	The Role of Fairness in Wage Determination	Journal of Labor Economics	To present anecdotal evidence that wage	Discussion / Essay	Neoclassical wage theory is not necessarily wrong,

				comparisons are a powerful determinant of satisfaction		but without a consideration of the effect of wage comparisons, it is incomplete
1993	Ernst Fehr, Georg Kirchsteiger and Arno Riedl	Does Fairness Prevent Market Clearing? An Experimental Investigation	The Quarterly Journal of Economics	To investigate how fairness affects market prices	Experiments designed how minimum wage impacts fairness perceptions and labor prices	Sellers responded to prices substantially above the market- clearing level higher levels of quality, supporting the fair wage-effort theory
1995	Teck-Hua Ho and Xuanming Su	Fairness in	ss in American exte		Experiments involving Two independent ultimatum games	Peer induced fairness perceptions are twice as strong as those between leader and follower; 50% of subjects are fairness minded
1998	Monica Galizzi and Kevin Lang	Relative Wages, Wage Growth, and Quit Behavior	Vage Growth, Labor between workers' Secur wages and the for more opportunity for from future wage growth firms affect quit decisions		Security records for male workers from a sample of	Workers consider their wages relative to other wages, in both short-term and long-term models. when making employment decisions
1999	Ernst Fehr and Armin Falk	Wage Rigidity in a Competitive Incomplete Contract Market	Journal of Labor Economics	To understand if workers underbid wages and if employers take advantage of underbidding	Four double- auction sessions with incomplete labor contracts and four with complete contracts	Although workers will underbid wages, employers reject underbidding as it is costly if the worker has discretion over effort, when performance incentives exist
1999	Ernst Fehr and Klaus M. Schmidt	A Theory of Fairness, Competition and Cooperation	The Quarterly Journal of Economics	Does a common principle explain differential behavior between markets and bilateral contract negotiations	Analytical models with experiments including dictator and market games	Distributional preferences are context dependent, and based on the environment in which fairness is considered agents may be altruistic or selfish
2000	Douglas A. Hibbs Jr. and Håkan Locking	lbbs Jr. and and Productive åkan Efficiency:		Investigate a natural shock to wage compression in Sweden and the effect of wage compression on macroeconomic productivity	Regression models utilizing Swedish macroeconomic wage and output data from 1964 to 1993	Evidence suggests that wage dispersion effects are detectable between industries and firms, but not within industries and firms
2000	James Konow	Fair Shares: Accountability and Cognitive Dissonance in Allocation Decisions	The American Economic Review	This paper investigates the roles of fairness, self-interest, and self- deception in	Analytical models to describe and experimental procedures to measure	Fairness concerns may be affected, mitigated, or amplified by the individual's cognitive dissonance

				the allocation of economic rewards		regarding distributional outcomes
2000	Gary E Bolton and Axel Ockenfels	A Theory of Equity, Reciprocity, and Competition	The American Economic Review	To describe why isolated investigations of equity and reciprocity diverge in their findings	A model that combines self interest and group standing to explain disparate observations	The ERC model (equity, reciprocity, and competition) describes laboratory behavior in a simple and intuitive way
2001	Henrich, Boyd, Bowles, Camerer Fehr, Gintis, and McElreath	Cooperation, Reciprocity and Punishment in Fifteen Small- scale Societies	ciprocity and American fairne hishment in Economic person teen Small- Review are un		Field experiments performed within hunter-gather tribes	The argument that humans act in pure self-interest is not supported in any of the experimental outcomes; these findings are consistent with economic patterns
2002	Hannan, Kagel and Moser	el and Exchange in an		To test the Akerlof gift exchange model in an environment where there is no punishment for providing minimum effort	Experiments with undergraduate and experienced MBA students	Workers provide higher effort for higher wages in the absence of an enforcement mechanism for shirking, work experience increases these effects
2002	Gary Charness and Matthew Rabin	Understanding Social Preferences with Simple Tests	The Quarterly Journal of Economics	An attempt to address pervasive and fundamental confounds within the experimental procedures used in prior studies	Experimental games designed to address prior research where personal maximization and reciprocity are confounded	Participants sacrifice value to increase overall welfare more so than to reduce differences and are motivated by reciprocity to punish unfair behavior or to achieve a fair outcome
2004	Dirk Engelmann and Martin Strobel	Inequality Aversion, Efficiency, and Maximin Preferences in Simple Distribution Experiments	The American Economic Review	To compare the relative importance of inequality aversion, concerns for efficiency, and maximin preferences.	Thirteen experimental treatments in three session examining allocation decisions between participants	Concerns about efficiency, preferences, and basic human selfishness rationalize allocation decisions as well as inequality concerns
2004	Gary Charness	Attribution and Reciprocity in an Experimental Labor Market	Journal of Labor Economics	To investigate variation in effort provision when wages can be attributed to an employer or to an external party	An experiment with participants paired between 10 employees and employers over 10 rounds	Both distributional equity and reciprocity affect effort provision based on variation within both the wage levels and the attribution of wages
2005	Alberto Alesina and George-	Fairness and Redistribution	The American Economic Review	To describe how tax policies affect beliefs about the fairness of social	Analytical modeling of multiple 'self-	The demand for fairness creates persistence in social and political beliefs

	Marios Angeletos			competition and income inequality	fulfilling' equilibria	that can lead to complimentary but divergent outcomes
2006	Alexandre Mas	Pay, Reference Points, and Police Performance	The Quarterly Journal of Economics	Utilizing police union arbitration to examine differential performance based on wage differentials and expectations	Examination of New Jersey Police Union wage requests and actuals	When wage requests are not met several measures of performance decline, and this decline is associated with the level of difference between expected wage and actual wage
2006	Armin Falk, Ernst Fehr, Christian Zehnder	Fairness perceptions and reservation wages— The behavioral effects of minimum Wage laws	The Quarterly Journal of Economics	To understand the effect that minimum wage levels has on workers reservation wages	Experiment where workers initial reservation wages are rejected if they are higher than the offer the worker receives	The presence of a minimum wage has positive employment outcomes; workers do not reduce reservation wages when the minimum wage is removed
2007	Cappelen, Hole, Sørensen, and Tungodden	The Pluralism of Fairness Ideals: An Experimental Approach	American Economic Review	Estimate the weight people attach fairness across different 'ideal' fairness paradigms	One-shot 'dictator game' experiment where production depend on factors within and beyond individual control	Individuals tradeoff between self-interest and egalitarianism when attaching weight to fairness concerns across different scenarios of distributive justice
2007	Francis Bloch, Garance Genicot, And Debra Ray	Reciprocity in Groups and the Limits to Social	The American Economic Review	To describe the way the fragility of subgroups limits reciprocity within groups	A model of self- enforcing reciprocity in groups that stresses the importance of subgroups and introduces a concept of fragility	The limit of social capital occurs when the fragility of subgroups increases the value of coordinated deviation from the norm of mutual aid
2010	Goerg, Kube and Zultan	Treating Equals Unequally: Incentives in Teams, Workers' Motivation, and Production Technology	Journal of Labor Economics	How different reward schemes and production technologies affect effort provisioning within teams	Experiment designed to interact equity considerations and reward schemes with the production function	Unequal rewards have the potential to increase productivity and coordination and this effect varies with the characteristics of the production function
2011	Pamela Jakiela	Social Preferences and Fairness Norms as Informal Institutions: Experimental Evidence	The American Economic Review	To investigate how the effects of institutional norms vary with the reach of governmental power	Experiments utilizing dictator games and variance in status across conditions and between US and Kenyan participants	The way relative status and fairness perceptions affect allocation decisions differs substantially across cultures
2012	Sebastian Kube, Michel André Maréchal,	The Currency of Reciprocity: Gift Exchange in the Workplace	The American Economic Review	How do non- monetary vs monetary 'gifts' affect worker effort	Field experiment where workers either payed a bonus, given a gift,	Pay only showed no increase in effort while the gift did; when allowed the choice, most workers

	and Clemens Puppe				or can choose between the two	chose the money, but provided extra effort	
2013	Cappelen, Konow, Sørensen and Tungodden	Just Luck: An Experimental Study of Risk- Taking and Fairness	The Investigate fairness An experiment with a risk-taking perceptions with a risk-taking phase and a distributional phase with pooled earnings between unlucky risk-takers pairs of participants		People consider fairness in context and seek to alleviate unfair distributions but disagree considerably on the fair allocation of gains and losses		
2017	Dirk Sliwka and Peter Werner	Wage Increases and the Dynamics of Reciprocity	Journal of Labor Economics	To understand if the timing and knowledge of wage in increases affect the provisioning of labor	Employee / employer pairs over 8 periods with random pairing and blind performance	Employees work harder when wages are increasing, but they do not know the increase structure in advance	
2019	Dube, Giuliano, and Leonard	Fairness and Frictions: The Impact of Unequal Raises on Quit Behavior	The American Economic Review	How do unequal raises affect quit behavior and do workers rely on peer comparisons or market comparisons	Regression discontinuity using 30 months of data from a large retail firm (700+ stores)	Quit behavior is highly sensitive to relative-pay concerns as demonstrated by differential pay increases; peer comparisons are concerned primarily with fairness	

	Author(s)	Title	Journal	Search in Economic Objective	Method / Data	Conclusion
	Edward P. Lazear and Sherwin Rosen	Rank-Order Tournaments as Optimum Labor Contracts	The Journal of Political Economy		Analytical Models	Rank-order compensation generates the same allocation as piece rate when workers are risk-neutral; when workers are risk adverse, they prefer one over the other depending on the utility function
1983	Jerry R. Green and Nancy L. Stokey	A Comparison of Tournaments and Contracts		To compare rank- order compensation to individual contracts in a setting with a risk- neutral principle and risk-adverse agents	Analytical Models	Rank-order tournaments allow the principle to filter the idiosyncratic effect of common shocks and provides information regarding the agents output that is attributable to effort; but, are otherwise less efficient than direct measurement
1987	Bull, Schotter and Weigelt	Tournaments and Piece Rates: An Experimental Study	Journal of Political Economy	To examine if laboratory participants exhibit the behavior predicted in models of rank order tournaments	Experiments where 225 undergraduates are paired and make cost / effort decisions subject to a random shock	Mean effort levels for both piece-rate and rank-order tournaments converged toward expected equilibrium, however, rank-order schemes produced higher effort variance and piece-rate elicited higher effort from disadvantaged participants
1988	Sudipto Bhattacharya and J. Luis Guasch	Heterogeneity, Tournaments, and Hierarchies		If tournament models are more efficient and less costly to monitor than piece-rate, why are they no seen in practice?	Analytical Models	Compensation schemes differ from the modeled expectation, they commonly exist within organizations and hierarchies; comparisons across skill types and tournaments are necessary for efficient outcomes when self- selection occurs
1989	Robert Drago and John S. Heywood	Tournaments, Piece Rates, and the Shape of the Payoff Function	The Journal of Political Economy	To further explain the high variation in effort allocation identified in Bull et. al., 1987	Replication and extension of prior experimental work utilizing different incentive structures	Bull et. al., 1987 report that computational difficulties within the tournament experiment explain high variance in effort allocation; this study

						finds that the variance is explained by motivation and strategic action in relation to incentive structure
1989	Edward P. Lazear	Pay Equality and Industrial Politics	The Journal of Political Economy	Does wage compression increase efficiency, or will it reduce the motivation of skilled / high performing workers?	Analytical models of different practical employment situations	When outcomes are based on relative comparisons within groups, wage compression can create efficiency
1999	Tor Eriksson	Executive Compensation and Tournament Theory: Empirical Tests on Danish Data	Journal of Labor Economics	To provide observational investigation of the empirical predictions made within the tournament theory literature	Regression analysis of 2600 executives from 210 firms over 4 years	Provides initial evidence that pay dispersion within the executive structure is associated with higher levels of performance
1999	Richard L. Fullerton and R. Preston McAfee	Auctioning Entry into Tournaments		To describe how Auctioning entrance into a two-player contest increases efficiency and effort allocation	Analytical Models	Auctioning entrance to a two-player contest allows contestants to sort themselves based on their private knowledge, allowing the most qualified to enter; after which the restricted contest has lower monitoring costs and higher effort allocation
2001	Michael L. Bognanno	Corporate Tournaments	Journal of Labor Economics	Does tournament theory practically describe the current employment and career advancement within the corporate firm?	Analysis of personal and job characteristics for 25,000 managers and executives per year from 1981 to 1988	A tournament environment with promotion incentives seems to characterize the structure of corporations; however, the high predictability of who receives the CEO promotion based on their current pay suggest there is no tournament, or the tournament is already concluded at that stage.
2004	Armando Levy and Tomislav Vukina	The League Composition Effect in Tournaments with Heterogeneous Players: An Empirical	Journal of Labor Economics	To investigate the differential effect of tournament vs. piece-rate pay when participants have different ability and performance levels	Analysis of broiler chicken contracts from both piece-rate and tournament- based compensation schemes	When participants of unequal ability participate in multi- round tournaments against the same players this creates a 'league' affect, altering the

		Analysis of Broiler Contracts				expectations of the players and making piece rate more efficient
2010	Carpenter, Matthews and Schirm	Tournaments and Office Politics: Evidence from a Real Effort Experiment	The Quarterly Journal of Economics	To investigate how sabotage behavior manifests itself within a real effort tournament	effort' experimental	Findings suggest that when there is ambiguity in the assessment of the performance of a competitor, a worker will engage in sabotage behavior
2011	Leuven, Oosterbeek, Sonnemans, and Van der Klaauw	Incentives versus Sorting in Tournaments: Evidence from a Field Experiment	Journal of Labor Economics	To investigate the degree to which self-selection explains the observed performance outcomes of tournaments with different prize levels	Field experiment where students select into prize categories for performance	Self-selection in tournaments gives the impression of higher rewards leading to higher performance, but controls for sorting show there is no effect
2012	Steffen Altmann, Armin Falk and Matthias Wibral	Promotions and Incentives: The Case of Multistage Elimination Tournaments	Journal of Labor Economics	To investigate the potential effects of promotion on effort and competitive behavior within a tournament setting	Experiments to compare behavior between a single stage and two stage elimination- based tournament setting	amount expected in a single stage game in a two-stage elimination
2015	Delfgaauw, Dur, Non, and Verbeke	The Effects of Prize Spread and Noise in Elimination Tournaments: A Natural Field Experiment	Journal of Labor Economics	To examine how convex variation in prize structure and 'noise' based uncertainty effects performance in a multi-stage setting		Workers with stable levels of performance response significantly to convex structure where workers with volatile performance do not, second round performance improves at a cost to first round performance
2015	Marc Gürtler and Oliver Gürtler	The Optimality of Heterogeneous Tournaments	Journal of Labor Economics	To describe the information benefit derived by firms when heterogenous employees compete in a tournament setting and how this incentivizes firms to hire heterogenous employees	Analytical models of the outcomes of tournaments when participants are homogenous vs. heterogenous	In a labor market, workers have an incentive to outperform other workers and signal their quality to firms; this scenario incentivizes heterogenous workers to provide higher effort

**Figure 1:Corporate Accounting Wages Since 1972** 

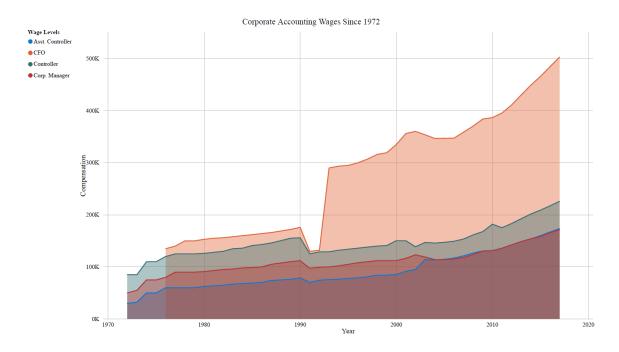


Figure 2: Corporate Accounting Wages Since 1972 (Constant 2017 Dollars)

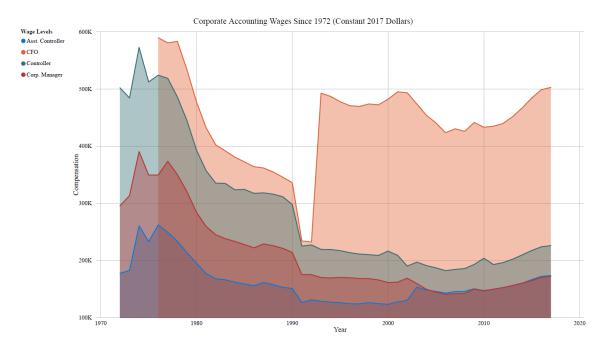


Figure 4: Public Accounting Wages Since 1972

Public Accounting Wages Since 1972

Title Director Manager New Hire Senior Staff

200K

150K

50K

Year

**Figure 3: Public Accounting Wages Since 1972 (Constant 2017 Dollars)** 

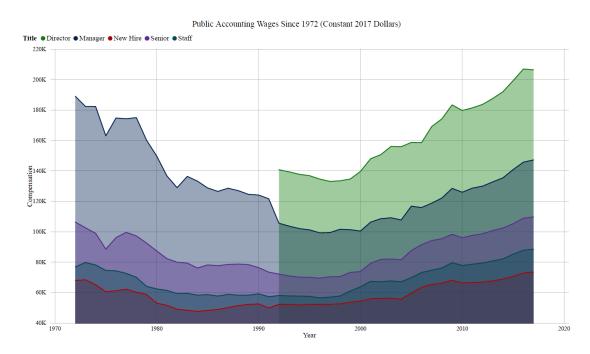


Figure 6: CFO and Director Earnings Compared to Mean US Earnings by Quintile Group

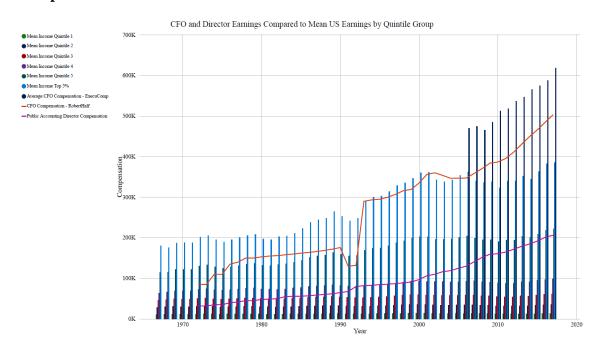


Figure 5: Comparison of RobertHalf Reported CFO wages and Average CFO Wages from ExecuComp

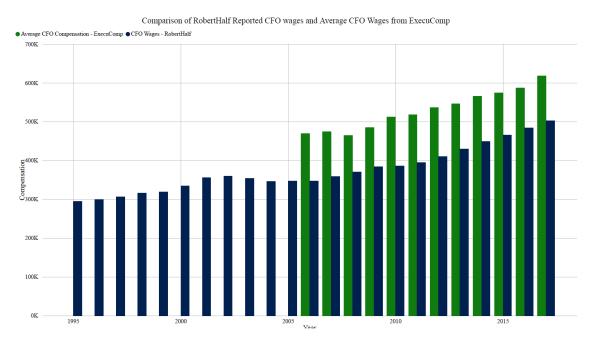


Figure 7: Disparity Ratios in corporate and public accounting

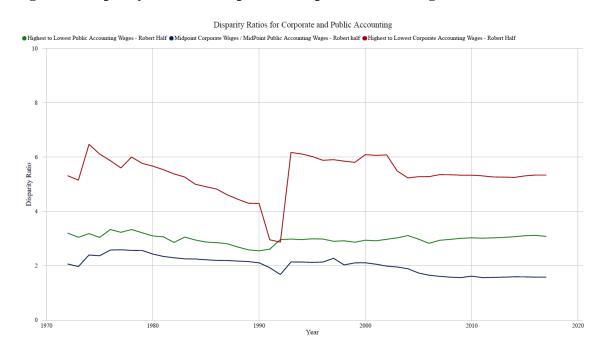


Figure 8: Comparison of Disparity Between Accounting and General Wages

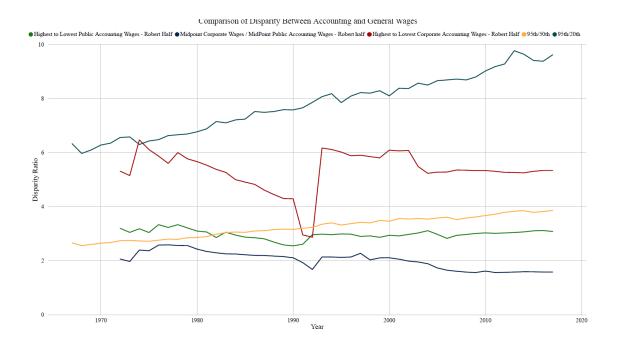
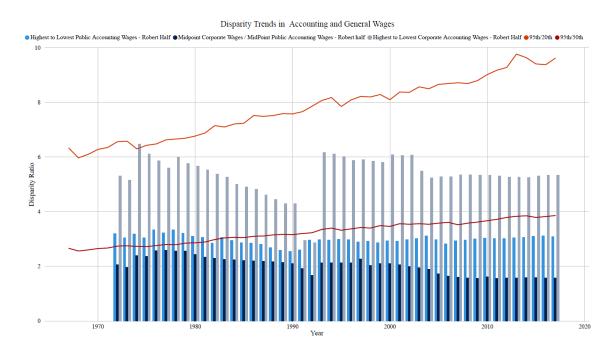


Figure 9 Disparity Trends in Accounting and General Wages



**Table 1: Descriptive Statistics** 

## Panel A: Primary Analysis Sample

For variable definitions, see Appendix A.

			Std		Lower		Upper	
	N	Mean	Dev	Minimum	Quartile	Median	Quartile	Maximum
CDISP	174149	5.377	0.732	2.870	5.263	5.350	5.882	6.471
PDISP	174149	2.971	0.157	2.549	2.900	2.976	3.056	3.333
HDISP	174149	2.018	0.300	1.564	1.675	2.104	2.197	2.587
ABSDA	174149	0.097	0.135	0.001	0.015	0.046	0.121	0.783
BIGN	174149	0.791	0.407	0.000	1.000	1.000	1.000	1.000
<b>EARN</b>	174149	-0.010	0.187	-0.921	-0.020	0.037	0.079	0.283
LEV	174149	0.256	0.228	0.000	0.056	0.224	0.385	1.050
LOSS	174149	0.298	0.457	0.000	0.000	0.000	1.000	1.000
MKTCAP	174149	4.888	2.160	0.403	3.284	4.726	6.380	10.347
MTB	174149	1.734	1.328	0.530	0.983	1.281	1.927	8.481
OCF	174149	0.055	0.155	-0.650	0.017	0.080	0.135	0.363
SIZE	174149	5.228	1.897	2.313	3.717	4.936	6.484	10.351
AQ	105823	0.112	0.548	0.001	0.012	0.031	0.063	4.943
RETURN	88332	0.151	0.627	-0.824	-0.233	0.051	0.377	3.000

Panel B: Public Accounting Wages Descriptive

Public Accounting								
Wages			Std		Lower		Upper	
(adj. 2017 Dollars)	N	Mean	Dev	Minimum	Quartile	Median	Quartile	Maximum
Overall Wages	230	95246	38408	47600	66360	80885	121680	207030
Director	26	162431	24525	133110	139400	157355	183425	207030
Manager	46	130517	24995	99303	108573	127781	140920	189120
Senior	46	86538	12319	69473	76400	82190	97625	109750
Staff	46	68046	9843	56520	58310	67134	76830	88500
New hire	46	58296	7672	47600	52203	56059	66125	73500

**Panel C: Corporate Accounting Descriptive** 

Corporate Wages (adj. 2017 Dollars)	N	Mean	Std Dev	Minimum	Lower Quartile	Median	Upper Quartile	Maximum
Overall Wages	180	271863	131681	123120	163258	218240	373050	589950
CFO	42	442747	76440	232320	402480	453003	484380	589950
Controller	46	287700	115751	182085	203840	221534	334800	573100
Director	46	210098	71538	140605	160160	170283	238080	390750
Assist. Cont.	46	161767	36518	123120	131120	152928	172010	262200

**Panel C: Pearson Correlation Table** 

	1 LEV	2 SIZE	3 EARN	oCF	5 LOSS	6 MKTCAP	7 <b>MTB</b>	8 ABS_DA	9 <b>RETURN</b>	10 <b>BIGN</b>	11 HDISP	12 CDISP	13 <b>PDISP</b>	14 <b>AQ</b>
1 <i>LEV</i>	1													
2 <i>SIZE</i>	0.11	1												
	<.0001													
3 EARN	-0.11	0.17	1											
	<.0001	<.0001												
4 <i>OCF</i>	-0.08	0.20	0.72	1										
	<.0001	<.0001	<.0001											
5 <b>LOSS</b>	0.12	-0.19	-0.59	-0.49	1									
	<.0001	<.0001	<.0001	<.0001										
6 MKTCAP	-0.11	0.86	0.15	0.17	-0.22	1								
	<.0001	<.0001	<.0001	<.0001	<.0001									
7 <b>MTB</b>	-0.08	-0.04	-0.13	-0.11	0.06	0.26	1							
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001								
8 <i>ABS_DA</i>	-0.02	-0.04	-0.25	-0.21	0.14	0.03	0.15	1						
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001							
9 <b>RETURN</b>	-0.04	-0.02	0.09	0.08	-0.09	0.07	0.22	0.02	1					
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001						
10 <b>BIGN</b>	0.01	0.29	0.06	0.07	-0.06	0.28	0.02	-0.07	0.03	1				
	0.0403	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001					
11 <b>HDISP</b>	0.06	-0.26	0.14	0.12	-0.16	-0.33	-0.12	-0.20	0.03	0.17	1			
10 CDVCD	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.20			
12 <i>CDISP</i>	-0.02	0.00	-0.03	-0.03	0.01	0.00	0.02	0.03	0.00	0.01	0.29	1		
13 <b>ADISP</b>	< <b>.0001</b> -0.02	0.3886	< <b>.0001</b> 0.03	<.0001 0.04	<b>0.0028</b> -0.08	0.1080 -0.03	< <b>.0001</b> -0.04	<.0001 -0.02	0.4984	<.0001	<.0001	0.51	1	
13 ADISF	-0.02 <.0001	0.6274	<.0001	<.0001	-0.08 <.0001	-0.03 <.0001	-0.04 < <b>.0001</b>	-0.02 <.0001	0.00	-0.12 < <b>.0001</b>	0.13 < <b>.0001</b>	<.0001	1	
14 <b>AQ</b>	-0.04	-0.03	-0.05	-0.04	0.06	-0.01	0.01	0.04	-0.01	-0.08	-0.17	0.00	-0.01	1
14 AQ	<.0001		<.0001		<.0001	0.0247	<.0001	<.0001	0.0139	<.0001	<.0001	0.4243	<.0001	1

Table 2: Pay Disparity in Corporate and Public Accounting and the Accruals-Cashflow Relationship

	(A)	(B)	(C)	(D)	(E)
	Corporate	Public Disparity	Public to Corp	Corp and Public	All Disparity
	Disparity Ratio	Ratio	Disparity Ratio	Disparity Ratio	Ratios
$CDISP_t$	$AQ_t$	$AQ_t$	$AQ_t$	AQt	0.046
CDIST	0.0007			0.0100	0.049
	2.78			12.15	23.5
$PDISP_t$	0.0828	0.0629		<.0001	<.000
I DISI t		-0.0628 -12.37		-0.0857	-0.109
				-13.60	-15.9
$HDISP_t$		<.0001	0.2020	<.0001	<.00
HDISI t			-0.3030		-0.33
			-20.45		-20.
$SIZE_t$	0.0262	0.0261	<.0001	0.0260	<.00
SIZE	-0.0263	-0.0261	-0.0227	-0.0260	-0.02
	-9.68	-9.61	-8.62	-9.56	-8.
$OCF_t$	<.0001	<.0001	<.0001	<.0001	<.00
$OCF_t$	-0.0487	-0.0494	0.0087	-0.0487	0.01
	-2.59	-2.63	0.46	-2.59	0.
MTD	0.0095	0.0085	0.6489	0.0096	0.33
$MTB_t$	0.0001	0.0001	0.0001	0.0001	0.00
	0.42	0.44	0.30	0.44	0.
7.777	0.6722	0.6594	0.7653	0.6581	0.77
$LEV_t$	0.0159	0.0157	0.0170	0.0158	0.01
	2.73	2.67	3.34	2.69	3.
p.c.v	0.0063	0.0075	0.0008	0.0072	0.00
$BIGN_t$	0.0264	0.0264	0.0047	0.0263	0.00
	11.08	11.10	2.07	11.04	0.
	<.0001	<.0001	0.0385	<.0001	0.45
$MKTCAP_t$	0.0743	0.0730	0.0288	0.0726	0.02
	10.47	10.27	4.24	10.21	3.
	<.0001	<.0001	<.0001	<.0001	0.00
$LOSS_t$	-0.1086	-0.1112	-0.1086	-0.1086	-0.03
	-8.71	-8.71	-8.71	-8.71	-2.
	<.0001	<.0001	<.0001	<.0001	0.00
Intercept	0.1870	0.3786	-0.3030	0.3941	0.96
	12.82	15.00	-20.45	15.20	22.
	<.0001	<.0001	<.0001	<.0001	<.00
Industry FE	YES	YES	YES	YES	Y
Year FE	YES	YES	YES	YES	Y
Firm Clustered					
SE SE	YES	YES	YES	YES	Y
No. of Obs.	105878	105878	105878	105878	1058
No. of clusters	9999	9999	9999	9999	99
Adjusted R2	0.013	0.013	0.035	0.013	0.0

Table 3: Lagged Pay Disparity in Corporate and Public Accounting and the Accruals-Cashflow Relationship

Table 3: Lagged Pay Disparity in Corporate and Public Accounting and the Accruals-Cashflow Relationship

	(A)	(B)	(C)	(D)	(E)
	Corporate	Public Disparity	Public to Corp	Corp and Public	All Disparity Ratios
	Disparity Ratio $AQ_t$	Ratio <b>AQ</b> t	Disparity Ratio  AQt	Disparity Ratio  AQt	Kanos
CDISP <sub>t-1</sub>	-0.0030			0.0114	0.04
	-5.31			14.93	22.
	<.0001			<.0001	<.00
$PDISP_{t-1}$		-0.1049		-0.1323	-0.14
		-19.99		-21.06	-20.
		<.0001		<.0001	<.00
$HDISP_{t-1}$			-0.3050		-0.33
			-20.31		-20.
			<.0001		<.00
$SIZE_t$	-0.0264	-0.0262	-0.0224	-0.0261	-0.02
	-9.67	-9.58	-8.45	-9.58	-8.
	<.0001	<.0001	<.0001	<.0001	<.00
$OCF_t$	-0.0489	-0.0499	0.0093	-0.0495	0.01
	-2.59	-2.64	0.48	-2.62	0.
	0.0096	0.0082	0.6282	0.0088	0.39
$MTB_t$	0.0001	0.0001	0.0001	0.0001	0.00
	0.42	0.44	0.31	0.44	0.
	0.6732	0.6586	0.7601	0.6604	0.78
$LEV_t$	0.0159	0.0156	0.0173	0.0157	0.01
	2.74	2.66	3.36	2.69	3.
	0.0062	0.0078	0.0008	0.0073	0.00
$BIGN_t$	0.0265	0.0265	0.0044	0.0265	0.00
	11.08	11.08	1.95	11.09	0.
	<.0001	<.0001	0.0507	<.0001	0.32
$MKTCAP_t$	0.0744	0.0718	0.0307	0.0712	0.02
	10.44	10.07	4.51	9.98	3.
	<.0001	<.0001	<.0001	<.0001	0.00
$LOSS_t$	-0.1088	-0.1127	-0.1086	-0.1086	-0.03
	-8.70	-8.92	-8.71	-8.71	-3.
	<.0001	<.0001	<.0001	<.0001	0.00
Intercept	0.2071	0.5047	-0.3050	0.5259	1.06
	14.06	19.24	-20.31	19.50	23.
	<.0001	<.0001	<.0001	<.0001	<.00
Industry FE	YES	YES	YES	YES	Y
Year FE	YES	YES	YES	YES	Y
Firm Clustered SE	YES	YES	YES	YES	Y
No. of Obs.	105610	105610	105610	105610	1056
No. of clusters	9996	9996	9996	9996	99
Adjusted R2	0.013	0.014 ** ** Denote signi	0.035	0.014	0.0

Table 4: Economy Wide Pay Disparity and the Accruals-Cashflow Relationship

	(A)	(B)	(C)
	GINI Coefficient	95th to 50th Percentile	90 <sup>th</sup> to 10 <sup>th</sup> Percentile
	$AQ_t$	$AQ_t$	$AQ_t$
$GINI_t$	2.3475		
	23.44		
	<.0001		
$95/50_{t}$		0.1923	
		22.38	
		<.0001	
$90/10_{t}$			0.050
			20.0
			<.000
$SIZE_t$	-0.0219	-0.0226	-0.023
	-8.28	-8.54	-8.9
	<.0001	<.0001	<.000
$OCF_t$	-0.0051	-0.0063	-0.012
	-0.27	-0.33	-0.6
	0.7887	0.7408	0.51
$MTB_t$	0.0001	0.0001	0.000
	0.33	0.31	0.3
	0.7437	0.7548	0.748
$LEV_t$	0.0168	0.0168	0.016
	3.04	3.04	2.9
	0.0024	0.0024	0.003
$BIGN_t$	0.0108	0.0112	0.013
	4.60	4.77	5.7
	<.0001	<.0001	<.000
$MKTCAP_t$	0.0433	0.0436	0.049
	6.16	6.18	6.9
	<.0001	<.0001	<.000
$LOSS_t$	-0.0712	-0.0689	-0.070
	-5.87	-5.65	-5.7
	<.0001	<.0001	<.000
Intercept	-0.8314	-0.4277	-0.319
	-20.13	-15.82	-12.3
	<.0001	<.0001	<.000
Industry FE	YES	YES	YE
Year FE	YES	YES	YE
Firm Clustered SE	YES	YES	YE
No. of Obs.	105878	105878	10587
No. of clusters	9999	9999	999
Adjusted R2	0.022	0.021 icance at p. 0.10, 0.05, and 0.01.	0.01

**Table 5: Corporate and Public Accounting to Overall Wages and the Accruals-Cashflow Relationship** 

	(A)	(B)	(C)		(D)	(E)	(F)
		Corporate Accoi	ınting Wages			Public Accoun	ting Wages
	$AQ_t$	$AQ_t$	$AQ_t$		$AQ_t$	$AQ_t$	$AQ_t$
$Corp/10_t$	0.0068			Public/10t	0.0193		
	20.33				19.10		
	<.0001				<.0001		
$Corp/50_t$		0.0309		Public/50t		0.0917	
		21.00				19.44	
		<.0001				<.0001	
$Corp/95_t$			0.1348	Public/95t			0.423
			21.14				19.3
			<.0001				<.000
$SIZE_t$	-0.0239	-0.0237	-0.0237		-0.0246	-0.0244	-0.024
	-9.00	-8.91	-8.92		-9.28	-9.20	-9.2
	<.0001	<.0001	<.0001		<.0001	<.0001	<.000
$OCF_t$	-0.0116	-0.0099	-0.0114		-0.0042	-0.0002	0.002
	-0.61	-0.52	-0.60		-0.22	-0.01	0.1
	0.5438	0.6015	0.549		0.8274	0.9904	0.89
$MTB_t$	0.0001	0.0001	0.0001		0.0001	0.0001	0.000
	0.30	0.30	0.31		0.26	0.25	0.2
	0.7635	0.7634	0.7566		0.7973	0.8044	0.810
$LEV_t$	0.0170	0.0171	0.0172		0.0170	0.0172	0.017
	3.07	3.11	3.13		3.17	3.25	3.3
	0.0022	0.0019	0.0018		0.0015	0.0012	0.000
$BIGN_t$	0.0138	0.0132	0.0138		0.0111	0.0096	0.008
	5.91	5.69	5.96		4.84	4.22	3.7
	<.0001	<.0001	<.0001		<.0001	<.0001	0.000
$MKTCAP_t$	0.0507	0.0493	0.0508		0.0451	0.0420	0.039
	7.22	7.05	7.28		6.53	6.10	5.8
	<.0001	<.0001	<.0001		<.0001	<.0001	<.000
$LOSS_t$	-0.0708	-0.0703	-0.0724		-0.0534	-0.0490	-0.043
	-5.76	-5.75	-5.94		-4.38	-4.04	-3.6
	<.0001	<.0001	<.0001		<.0001	<.0001	0.0003
Intercept	0.0728	0.0575	0.0140		0.0752	0.0553	0.001
-	5.25	4.15	0.98		5.43	3.97	0.1
	<.0001	<.0001	0.3260		<.0001	<.0001	0.905
Industry FE	YES	YES	YES		YES	YES	YE
Year FE	YES	YES	YES		YES	YES	YE
Firm Clustered SE	YES	YES	YES		YES	YES	YE
No. of Obs. No. of	105878	105878	105878		105878	105878	10587
clusters	9999	9999	9999		9999	9999	9999
Adjusted R2	0.020	0.020	0.021		0.024	0.026	0.023

**Table 6: Corporate and Public Accounting to Overall Wages and the Accruals-Cashflow Relationship** 

	(A)	(B)	(C)
	CFO to 10 <sup>th</sup> Percentile	CFO to 10 <sup>th</sup> Percentile	CFO to 10 <sup>th</sup> Percentile
	$AQ_t$	$AQ_t$	$AQ_t$
$Corp/10_t$	-0.0062		
	-10.54		
	<.0001		
$Public/10_t$	0.0321		
	15.23		
C /50	<.0001	0.0245	
$Corp/50_t$		-0.0245	
		-10.62	
Derblic/50		<.0001	
Public/50 <sub>t</sub>		0.1420 15.72	
		<.0001	
Corp/95t		<.0001	-0.070
C01p/33t			-10.10
			<.000
Public/95t			0.556
1 uouc/>5t			16.6
			<.000
$SIZE_t$	-0.0257	-0.0254	-0.025
~	-9.58	-9.49	-9.4
	<.0001	<.0001	<.000
$OCF_t$	-0.0087	-0.0044	-0.001
	-0.46	-0.23	-0.0
	0.6479	0.8194	0.958
$MTB_t$	0.0001	0.0001	0.000
	0.26	0.25	0.2
	0.7930	0.8007	0.806
$LEV_t$	0.0168	0.0170	0.017
	3.15	3.22	3.3
	0.0017	0.0013	0.00
$BIGN_t$	0.0125	0.0109	0.009
	5.36	4.71	4.1
LAW CAR	<.0001	<.0001	<.000
$MKTCAP_t$	0.0474	0.0441	0.041
	6.80	6.35	6.0
LOSS	<.0001	<.0001	<.000
$LOSS_t$	-0.0515 -4.23	-0.0466	-0.0422 -3.49
		-3.85	
Intercent	<.0001 0.1068	<b>0.0001</b> 0.0867	<b>0.000</b> 0.035
Intercept	7.76	6.36	2.5
	<.0001	<.0001	0.011
	***************************************	30001	3.011
Industry FE	YES	YES	YE
Year FE	YES	YES	YE
Firm Clustered SE	YES	YES	YE
No. of Obs.	105878	105878	10587
No. of clusters	9999	9999	999
Adjusted R2	0.025	0.026	0.023

Table 7: CFO Specific Pay Disparity and the Accruals-Cashflow Relationship

	(A)	(B)	(C)
	CFO to 10 <sup>th</sup> Percentile	CFO to 10th Percentile	CFO to 10 <sup>th</sup> Percentile
	$AQ_t$	$AQ_t$	$AQ_t$
$CFO/10_t$	-1.1787		
	-2.26		
	0.0240		
$CFO/50_t$		-4.5152	
		-2.27	
		0.0234	
CFO/95t			-14.192
			-2.2
			0.024
$SIZE_t$	-0.0942	-0.0949	-0.096
	-5.23	-5.29	-5.3
	<.0001	<.0001	<.000
$OCF_t$	0.0559	0.0585	0.062
	0.50	0.53	0.5
	0.6143	0.598	0.57
$MTB_t$	-0.0578	-0.0579	-0.058
	-5.64	-5.65	-5.6
	<.0001	<.0001	<.000
$LEV_t$	-0.1790	-0.1793	-0.179
	-2.61	-2.61	-2.6
	0.0092	0.0092	0.009
$BIGN_t$	0.0436	0.0433	0.043
	2.94	2.92	2.9
	0.0033	0.0035	0.003
$MKTCAP_t$	0.1499	0.1497	0.149
	4.11	4.10	4.0
	<.0001	<.0001	<.000
$LOSS_t$	0.0703	0.0710	0.072
	1.14	1.15	1.1
	0.2563	0.2517	0.245
Intercept	0.7341	0.7374	0.742
	8.06	8.10	8.1
	<.0001	<.0001	<.000
Industry FE	YES	YES	YE
Year FE	YES	YES	YE
Firm Clustered SE	YES	YES	YE
No. of Obs.	15049	15049	1504
No. of clusters	1755	1755	175
Adjusted R2	0.023	0.022	0.02

Table 8: Discretionary Accruals and Pay Disparity in Corporate and Public Accounting

	(A)	(B)	(C)	(D)	(E)
	Corporate	Public Disparity	Public-to-Corp	Corp & Public	All Disparity
	Disparity Ratio	Ratio	Disparity Ratio	Disparity Ratio	Ratios
CDICD	ABSDA <sub>t</sub>	ABSDA <sub>t</sub>	ABSDA <sub>t</sub>	ABSDA <sub>t</sub>	ABSD
$CDISP_t$	0.0069			0.0109	0.030
	12.48			14.75	35.3
$PDISP_t$	<.0001	0.0101		<.0001	<.000
$IDISI_t$		-0.0101		-0.0363	-0.047
		-3.13		-8.81	-12.0
$HDISP_t$		0.0018	0.1200	<.0001	<.000
$IIDISI_{i}$			-0.1300		-0.154
			-36.44		-38.0
CIZE	0.0010	0.0010	<.0001	0.004.5	<.000
$SIZE_t$	-0.0219	-0.0218	-0.0220	-0.0216	-0.02
	-16.63	-16.36	-17.38	-16.25	-17.
OCE	<.0001	<.0001	<.0001	<.0001	<.000
$OCF_t$	-0.1901	-0.1912	-0.1741	-0.1895	-0.16
	-5.11	-5.13	-4.83	-5.09	-4.0
MTD	<.0001	<.0001	<.0001	<.0001	<.00
$MTB_t$	0.0000	0.0000	0.0000	0.0000	0.00
	0.82	0.83	0.74	0.83	0.0
	0.4134	0.4042	0.4605	0.4053	0.49
$LEV_t$	-0.0004	-0.0004	-0.0003	-0.0004	-0.00
	-0.65	-0.69	-0.59	-0.67	-0.4
	0.5129	0.4928	0.5574	0.5010	0.62
$MKTCAP_t$	0.0260	0.0259	0.0176	0.0258	0.01
	22.89	22.63	16.51	22.58	15.
	<.0001	<.0001	<.0001	<.0001	<.00
$LOSS_t$	0.0363	0.0358	0.0176	0.0352	0.01
	7.64	7.46	4.02	7.35	3.0
	<.0001	<.0001	<.0001	<.0001	0.002
$BIGN_t$	-0.0457	-0.0460	-0.0176	-0.0477	-0.01
	-17.69	-17.97	-7.52	-18.75	-6.5
	<.0001	<.0001	<.0001	<.0001	<.00
$ROA_{t-1}$	-0.0515	-0.0516	-0.0500	-0.0516	-0.04
	-1.15	-1.15	-1.14	-1.15	-1.
	0.2509	0.2507	0.2530	0.2509	0.25
Intercept	0.0899	0.1576	0.4136	0.1779	0.44
	19.88	18.13	38.01	19.26	47.
	<.0001	<.0001	<.0001	<.0001	<.00
Industry FE	YES	YES	YES	YES	YI
Year FE	YES	YES	YES	YES	YI
Firm Clustered SE	YES	YES	YES	YES	YI
No. of Obs.	174134	174134	174134	174134	1741
No. of clusters	16428	16428	16428	16428	164
Adjusted R2	0.073	0.073	0.091	0.074	0.09

Table 9: Discretionary Accruals and Lagged Pay Disparity in Corporate and Public Accounting

	(A)	(B)	(C)	(D)	(E)
	Corporate	Public	Public-to-Corp	Corp & Public	All Disparity
	Disparity Ratio	Disparity Ratio	Disparity Ratio	Disparity Ratio	Ratios
	$ABSDA_t$	$ABSDA_t$	$ABSDA_t$	$ABSDA_t$	ABSDA
$CDISP_{t-1}$	0.0048			0.0105	0.028
	10.60			16.69	40.1
	<.0001			<.0001	<.000
$PDISP_{t-1}$		-0.0259		-0.0516	-0.057
		-11.11		-16.38	-19.8
		<.0001		<.0001	<.000
$HDISP_{t-1}$			-0.1291		-0.151
			-49.01		-50.8
			<.0001		<.000
$SIZE_t$	-0.0158	-0.0156	-0.0157	-0.0155	-0.015
	-16.01	-15.72	-16.89	-15.65	-16.7
	<.0001	<.0001	<.0001	<.0001	<.000
$OCF_t$	-0.1590	-0.1595	-0.1400	-0.1586	-0.134
	-8.52	-8.52	-7.93	-8.51	-7.7
	<.0001	<.0001	<.0001	<.0001	<.000
$MTB_t$	0.0000	0.0000	0.0000	0.0000	0.000
	0.67	0.72	0.34	0.71	0.1
	0.5037	0.4737	0.7311	0.4798	0.890
$LEV_t$	0.0000	0.0000	0.0001	0.0000	0.000
	-0.02	-0.11	0.38	-0.07	0.6
	0.9817	0.9133	0.7071	0.9463	0.498
$MKTCAP_t$	0.0198	0.0196	0.0117	0.0195	0.010
	23.68	23.36	14.50	23.32	12.7
	<.0001	<.0001	<.0001	<.0001	<.000
$LOSS_t$	0.0332	0.0322	0.0163	0.0314	0.011
	11.52	11.12	6.00	10.91	4.3
	<.0001	<.0001	<.0001	<.0001	<.000
$BIGN_t$	-0.0440	-0.0452	-0.0162	-0.0466	-0.014
	-19.88	-20.39	-8.08	-21.08	-7.4
	<.0001	<.0001	<.0001	<.0001	<.000
$ROA_{t-1}$	-0.0139	-0.0140	-0.0124	-0.0138	-0.011
	-0.59	-0.60	-0.56	-0.59	-0.5
	0.5523	0.5509	0.5750	0.5541	0.589
Intercept	0.0915	0.1955	0.4000	0.2164	0.466
	24.95	26.30	54.52	27.37	55.2
	<.0001	<.0001	<.0001	<.0001	<.000
Industry FE	YES	YES	YES	YES	YE
Year FE	YES	YES	YES	YES	YE
Firm Clustered SE	YES	YES	YES	YES	YE
No. of Obs.	159174	159174	159174	159174	15917
No. of clusters	15403	15403	15403	15403	1540
Adjusted R2	0.065	0.065	0.098	0.066	0.10
	ee Appendix A. *, **, **				

**Table 10: Discretionary Accruals and Economy Wide Pay Disparity in Corporate and Public Accounting** 

	(A)	(B)	(C)
	GINI Coefficient	95th to 50th Percentile	90th to 10th Percentile
	$ABSDA_t$	$ABSDA_t$	ABSD
$GINI_t$	1.9174		
	47.19		
	<.0001		
$95/50_t$		0.1633	
		44.99	
		<.0001	
$90/10_{t}$			0.04
			41.
			<.00
$SIZE_t$	-0.0190	-0.0195	-0.02
	-15.49	-15.91	-16.
	<.0001	<.0001	<.00
$OCF_t$	-0.1574	-0.1581	-0.16
	-4.44	-4.48	-4.
	<.0001	<.0001	<.00
$MTB_t$	0.0000	0.0000	0.00
	0.73	0.70	0.
	0.4660	0.4865	0.51
$LEV_t$	-0.0003	-0.0002	-0.00
	-0.51	-0.48	-0
	0.6110	0.6286	0.64
$MKTCAP_t$	0.0124	0.0122	0.01
	11.84	11.84	12
	<.0001	<.0001	<.00
$LOSS_t$	0.0058	0.0046	0.00
	1.38	1.10	2
	0.1681	0.2725	0.04
$BIGN_t$	-0.0293	-0.0278	-0.02
	-12.39	-11.92	-10
	<.0001	<.0001	<.00
$ROA_{t-1}$	-0.0493	-0.0491	-0.04
	-1.14	-1.14	-1.
	0.2538	0.2538	0.25
Intercept	-0.6806	-0.3684	-0.32
	-46.00	-41.51	-35.
	<.0001	<.0001	<.00
Industry FE	YES	YES	Y
Year FE	YES	YES	Y
Firm Clustered SE	YES	YES	Y
No. of Obs.	174162	174162	1741
No. of clusters	16429	16429	164
Adjusted R2	0.105	0.106	0.1

Table 11: Discretionary Accruals and Corporate and Public Accounting to Overall Wages

	(A)	(B)	(C)		(E)	(F)	(G)
	Corpora	te Accounting W	ages		Public	Accounting Was	ges
	$ABSDA_t$	$ABSDA_t$	ABSDA <sub>t</sub>		$ABSDA_t$		
$Corp/10_t$	0.0063			$Public/10_t$	0.0139		
	41.10				36.46		
	<.0001				<.0001		
$Corp/50_t$		0.0270		$Public/50_t$		0.0614	
		41.97				37.18	
		<.0001				<.0001	
$Corp/95_t$			0.1098	$Public/95_t$			0.253
			42.20				36.6
			<.0001				<.000
$SIZE_t$	-0.0208	-0.0205	-0.0204		-0.0223	-0.0221	-0.022
	-16.81	-16.66	-16.51		-17.74	-17.69	-17.7
	<.0001	<.0001	<.0001		<.0001	<.0001	<.000
$OCF_t$	-0.1598	-0.1599	-0.1622		-0.1657	-0.1650	-0.166
	-4.53	-4.53	-4.57		-4.67	-4.66	-4.7
	<.0001	<.0001	<.0001		<.0001	<.0001	<.000
$MTB_t$	0.0000	0.0000	0.0000		0.0000	0.0000	0.000
	0.62	0.65	0.68		0.60	0.61	0.6
	0.5333	0.5171	0.4995		0.5480	0.5405	0.530
$LEV_t$	-0.0002	-0.0002	-0.0002		-0.0002	-0.0002	-0.000
	-0.38	-0.39	-0.42		-0.40	-0.41	-0.4
	0.7075	0.6934	0.6762		0.6905	0.6849	0.672
$MKTCAP_t$	0.0141	0.0142	0.0152		0.0155	0.0152	0.015
	13.76	13.83	14.69		15.05	14.78	15.1
	<.0001	<.0001	<.0001		<.0001	<.0001	<.000
$LOSS_t$	0.0099	0.0098	0.0120		0.0127	0.0118	0.012
	2.34	2.31	2.82		2.99	2.78	2.9
	0.0194	0.0207	0.0047		0.0028	0.0054	0.002
$BIGN_t$	-0.0257	-0.0277	-0.0317		-0.0191	-0.0194	-0.020
	-11.11	-11.89	-13.45		-8.45	-8.58	-9.0
	<.0001	<.0001	<.0001		<.0001	<.0001	<.000
$ROA_{t-1}$	-0.0492	-0.0492	-0.0494		-0.0494	-0.0493	-0.049
	-1.14	-1.14	-1.14		-1.14	-1.14	-1.1
	0.2532	0.2535	0.2534		0.2527	0.2530	0.253
Intercept	0.0437	0.0375	0.0093		0.0670	0.0604	0.037
	13.11	11.44	2.88		19.13	17.58	11.2
	<.0001	<.0001	0.0039		<.0001	<.0001	<.000
	*****	*****	*****		*****	<b></b>	•
Industry FE	YES	YES	YES		YES	YES	YE
Year FE	YES	YES	YES		YES	YES	YE
Firm Clustered SE	YES	YES	YES		YES	YES	YE
No. of Obs.	174162	174162	174162		174162	174162	17416
No. of clusters	16429	16429	16429		16429	16429	1642
Adjusted R2	0.103	0.103	0.100		0.100	0.101	0.09

Table 12: Corporate and Public to Economy Wide Pay Disparity and the Accruals-Cashflow Relationship

	(A)	(B)	(C)
	CFO to 10 <sup>th</sup> Percentile	CFO to 10 <sup>th</sup> Percentile	CFO to 10 <sup>th</sup> Percentile
	$ABSDA_t$	$ABSDA_t$	<b>ABSD</b> A
$Corp/10_t$	0.0053		
	26.37		
	<.0001		
$Public/10_t$	0.0027		
	4.72		
	<.0001		
$Corp/50_t$		0.0192	
		24.07	
		<.0001	
$Public/50_t$		0.0204	
		8.54	
		<.0001	
$Corp/95_t$			0.065
			25.0
			<.000
Public/95 <sub>t</sub>			0.122
			14.1
CVAT	0.0210	0.0210	<.000
$SIZE_t$	-0.0210	-0.0210	-0.021
	-16.90	-16.91	-16.9
OCE	<.0001	<.0001	<.000
$OCF_t$	-0.1602	-0.1602	-0.162
	-4.54	-4.54	-4.5 < <b>.00</b> 0
MTD	<.0001	<.0001	
$MTB_t$	0.0000 0.61	0.0000 0.63	0.000 0.6
	0.5403	0.5314	0.524
$LEV_t$	-0.0002	-0.0002	-0.000
LEV	-0.002	-0.38	-0.000
	0.7108	0.7014	0.692
$MKTCAP_t$	0.0141	0.0140	0.014
marchi į	13.73	13.67	14.1
	<.0001	<.0001	<.000
$LOSS_t$	0.0097	0.0093	0.010
Lossi	2.31	2.21	2.4
	0.0208	0.0275	0.013
$BIGN_t$	-0.0239	-0.0241	-0.025
	-10.63	-10.74	-11.1
	<.0001	<.0001	<.000
$ROA_{t-1}$	-0.0492	-0.0491	-0.049
	-1.14	-1.14	-1.1
	0.2532	0.2535	0.253
Intercept	0.0460	0.0412	0.013
	13.63	12.38	4.2
	<.0001	<.0001	<.000
Industry FE	YES	YES	YE
Year FE	YES	YES	YI
Firm Clustered SE	YES	YES	YE
No. of Obs.	174162	174162	17416
No. of clusters	16429	16429	1642
Adjusted R2	0.103	0.104	0.10

Table 13: CFO Specific Pay Disparity and Discretionary Accruals

	(A)	(B)	(C)
	CFO to 10th Percentile	CFO to 10 <sup>th</sup> Percentile	CFO to 10 <sup>th</sup> Percentile
	$ABSDA_t$	$ABSDA_t$	ABSD
$CFO/10_t$	0.2862		
	2.34		
	0.0192		
$CFO/50_t$		1.0808	
		2.30	
		0.0215	
$CFO/95_t$			3.460
			2.5
			0.02
$SIZE_t$	-0.0135	-0.0133	-0.013
	-4.24	-4.20	-4.
	<.0001	<.0001	<.00
$OCF_t$	-0.1700	-0.1707	-0.17
	-4.77	-4.79	-4.5
	<.0001	<.0001	<.00
$MTB_t$	0.0135	0.0135	0.01
	5.93	5.94	5.9
	<.0001	<.0001	<.00
$LEV_t$	-0.0019	-0.0018	-0.00
	-0.16	-0.16	-0.
	0.8710	0.8752	0.87
$MKTCAP_t$	0.0087	0.0088	0.00
	3.10	3.13	3.
	0.0019	0.0018	0.00
$LOSS_t$	-0.0067	-0.0067	-0.00
	-1.31	-1.30	-1.
	0.1910	0.1938	0.19
$BIGN_t$	-0.0226	-0.0227	-0.02
	-2.82	-2.84	-2.
	0.0049	0.0046	0.00
$ROA_{t-1}$	-0.0597	-0.0598	-0.06
	-1.90	-1.91	-1.
	0.0570	0.0567	0.05
Intercept	0.1710	0.1701	0.16
	12.94	12.91	12.
	<.0001	<.0001	<.00
Industry FE	YES	YES	YI
Year FE	YES	YES	YI
Firm Clustered SE	YES	YES	YI
No. of Obs.	17459	17459	174.
No. of clusters	1977	1977	19
Adjusted R2	0.038	0.037	0.03

Table 14: Earnings Persistence and Pay Disparity in Corporate and Public Accounting

	(A)	(B)	(C)	(D)	(E)	(F)
	Earnings	Corporate Disp. Ratio	Public Disp. Ratio	Corpto-Pub. Disp. Ratio	Corp. & Pub. Disp. Ratio	All Disp. Rati
	$EARN_{t+1}$	$EARN_{t+1}$	$EARN_{t+1}$	$EARN_{t+1}$	$EARN_{t+1}$	$EARN_{t+1}$
EADY						
$EARN_t$	0.6571	0.9028	0.7693	0.6401	0.8904	0.9242
	44.100	9.010	3.180	7.710	4.010	2.930
	<.0001	<.0001	0.0015	<.0001	<.0001	0.0034
$CDISP_t$		-0.0009			-0.0071	-0.0110
		-1.610			-10.590	-12.180
		0.1069			<.0001	<.0001
$EARN_t \times$						
$CDISP_t$		-0.0446			-0.0510	-0.0552
		-2.320			-2.450	-2.510
		0.0204			0.0143	0.0122
$PDISP_t$			0.0379		0.0576	0.0587
			10.830		14.170	10.020
			<.0001		<.0001	<.0001
$EARN_t \times$						
$PDISP_t$			-0.0380		0.0152	-0.0102
			-0.460		0.170	-0.090
			0.6425		0.8679	0.9250
$HDISP_t$				0.0285		0.0326
				11.690		9.990
				<.0001		<.0001
$EARN_t \times$						
$HDISP_t$				0.0061		0.0313
				0.140		0.620
				0.8895		0.5383
Intercept	0.6571	-0.0044	-0.1214	-0.0667	-0.1418	-0.1907
	44.100	-1.540	-11.680	-13.500	-13.690	-10.280
	<.0001	0.1242	<.0001	<.0001	<.0001	<.0001
Industry FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
irm Clustered SE	YES	YES	YES	YES	YES	YES
No. of Obs.	157970	157970	157970	157970	157970	157970
lo. of clusters	15203	15203	15203	15203	15203	15203
Adjusted R2	0.324	0.325	0.325	0.325	0.326	0.327

Table 15: Lagged Pay Disparity in Corporate and Public Accounting and Earnings Persistence

	(A)	(B)	(C)	(D)	(E)	(F)
	Earnings	Corporate Disp. Ratio	Public Disp. Ratio	Corpto-Pub. Disp. Ratio	Corp. & Pub. Disp. Ratio	All Disp. Ratio
	$EARN_{t+1}$	$EARN_{t+1}$	$EARN_{t+1}$	$EARN_{t+1}$	$EARN_{t+1}$	$EARN_{t+1}$
$EARN_t$	0.6571	0.9828	0.1315	0.7335	0.2617	0.2607
	44.100	9.000	0.400	8.020	0.870	0.680
	<.0001	<.0001	0.6872	<.0001	0.3819	0.4996
CDISP <sub>t-1</sub>		-0.0001			-0.0062	-0.0093
		-0.230			-9.410	-10.780
		0.8184			<.0001	<.0001
$EARN_t \times$		0.0502			0.0504	0.0510
$CDISP_{t-1}$		-0.0582			-0.0734	0.2548
		-2.730			-3.040	1.810
		0.0064			0.0024	0.0704
$PDISP_{t-1}$			0.0293		0.0474	-0.0795
			6.760		10.160	-3.210
			<.0001		<.0001	0.0013
$EARN_t \times$						
$PDISP_{t-1}$			0.1789		0.2709	0.0285
			1.650		2.150	9.390
			0.0987		0.0316	<.0001
HDISP <sub>t-1</sub>				0.0294		0.0456
				11.800		7.130
				<.0001		<.0001
$EARN_t \times HDISP_{t-1}$				-0.0402		0.0402
110151 1-1				-0.820		0.800
				0.4110		0.4226
Intercept	0.6571	-0.0066	-0.0943	-0.0666	-0.1149	-0.1513
•	44.100	-2.290	-7.320	-13.270	-9.210	-7.440
	<.0001	0.0220	<.0001	<.0001	<.0001	<.0001
Industry FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Firm Clustered SE	YES	YES	YES	YES	YES	YES
No. of Obs.	144153	144153	144153	144153	144153	144153
No. of clusters	13952	13952	13952	13952	13952	13952
Adjusted R2	0.318	0.318	0.318	0.319	0.320	0.318

Table 16: Earnings Persistence and Economy Wide Pay Disparity in Corporate and Public Accounting

	(A)		(B)		(C)	
	GINI		95 <sup>th</sup> to 50 <sup>th</sup>		90 <sup>th</sup> to 10 <sup>th</sup>	
	Coefficient		Percentile		Percentile	
	$EARN_{t+1}$		$EARN_{t+1}$		$EARN_{t+1}$	
$EARN_t$	1.1747	$EARN_t$	0.9795	$EARN_t$	0.8193	
	5.910		7.420		5.740	
	<.0001		<.0001		<.0001	
$GINI_t$	-0.4299	95/50 <sub>t</sub>	-0.0356	90/10 <sub>t</sub>	-0.0103	
	-15.950		-15.250		-14.400	
	<.0001		<.0001		<.0001	
$EARN_t \times$		$EARN_t \times$		$EARN_t \times$		
$GINI_t$	-1.1424	$95/50_t$	-0.0941	$90/10_{t}$	-0.0154	
	-2.600		-2.460		-1.200	
	0.0094		0.0139		0.2292	
Intercept	0.1809	Intercept	0.1080	Intercept	0.0980	
	15.110		13.860		12.940	
	<.0001		<.0001		<.0001	
Industry FE	YES		YES		YES	
Year FE	YES		YES		YES	
Firm Clustered SE	YES		YES		YES	
No. of Obs.	157970		157970		157970	
No. of clusters	15203		15203		15203	
Adjusted R2	0.327		0.327		0.326	

Table 17: Earnings Persistence and Corporate Wages to Overall Wages

EARN, 0.7265 0.7462 0.7772 EARN, 0.6741 0.6786 0 20.010 21.240 19.370 19.470 18.990 1 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001		(A)	(B)	(C)		(E)	(F)	(G)
EARN,   0.7265   0.7462   0.7772   EARN,   0.6741   0.6786   0.7261   0.001   0.00		Corpor	ate Accounting	Wages		Public	Accounting W	ages
20.010   21.240   19.370   19.470   18.990   1		$EARN_{t+1}$	$EARN_{t+1}$	$EARN_{t+1}$		$EARN_{t+1}$	$EARN_{t+1}$	$EARN_{t+1}$
C/10 <sub>1</sub>   -0.0013   -0.001     -0.0027     -13.530     -14.870     -13.530     -13.530     -14.870     -13.530     -13.530     -13.530     -13.530     -13.530     -13.530     -13.530     -13.530     -13.530     -13.530     -13.560     -0.780     -0.780     -0.780     -13.560     -15.190     -13.560     -13.560     -13.560     -10.0011     -2.690     -0.0011     -2.690     -0.0011     -2.690     -0.890     -0.890     -0.3719     -2.690     -0.0072     -2.690     -2.690     -2.690     -2.690     -2.690     -3.719     -2.690     -3.719     -2.690     -3.719     -3.71	$EARN_t$	0.7265	0.7462	0.7772	$EARN_t$	0.6741	0.6786	0.6803
C/10 <sub>t</sub> -0.0013		20.010	21.240	19.370		19.470	18.990	16.430
-14.870		<.0001	<.0001	<.0001		<.0001	<.0001	<.0001
-14.870	$C/10_t$	-0.0013			$P/10_t$	-0.0027		
Company   Comp								
-2.160 0.0306 -0.0306 -0.0306 -0.0306 -0.0306 -0.0306 -0.0306 -0.0306 -0.0306 -0.0306 -0.0306 -0.0011 -15.190 -13.560 -0.0001 -15.190 -13.560 -0.0001 -0.0011 -0.0012 -0.00131 -0.0890 -0.0972 -0.0232 -0.890 -0.3719 -0.0757 -0.0232 -0.0011 -0.0001								
-2.160 0.0306 -0.0306 -0.0306 -0.0306 -0.0306 -0.0306 -0.0306 -0.0011 -15.190 -13.560 -0.0001 -15.190 -13.560 -0.0001  EARNi *C/50i -0.0162 -2.690 -0.0072 -2.690 -0.0072 -15.260 -15.260 -15.260 -10.0232 -15.260 -10.0001 -0.0001	$EARN_t *C/10_t$	-0.0031			$EARN_t*P/10_t$	-0.0026		
C/50t       -0.0056       P/50t       -0.0121         -15.190       -13.560       -0.001         <.0001								
-15.190								
-15.190	C/50t		-0.0056		P/50 <sub>t</sub>		-0.0121	
C/95t					_,,,,,			
EARNi *C/50i								
-2.690 0.0072  -0.890 0.3719  C/95 <sub>t</sub> -0.0232 P/95 <sub>t</sub> -0.0232 P/95 <sub>t</sub> -15.260 -1 -10.0001  EARN <sub>t</sub> *C/95 <sub>t</sub> -0.0757 EARN <sub>t</sub> *P/95 <sub>t</sub> -2.980 0.0029  Intercept 0.0161 0.0173 0.0229 0.0097 0.0113 0.0229 0.0097 0.0113 0.0229 0.0097 0.0113 0.0229 0.0001 -0.0001			40001				40002	
C/95t       -0.0232       P/95t       -0.0232         -15,260       -1       -1         <.0001	$EARN_t *C/50_t$		-0.0162		$EARN_t *P/50_t$		-0.0131	
C/95 <sub>t</sub> -0.0232 P/95 <sub>t</sub> -0.0232 -15.260 -1.5.260 -1.0001  EARN <sub>t</sub> *C/95 <sub>t</sub> -0.0757 EARN <sub>t</sub> *P/95 <sub>t</sub> -0.0757 -2.980 0.0029  Intercept 0.0161 0.0173 0.0229 0.0097 0.0113 0.0229 8.900 9.470 10.730 6.510 7.040000100010001  Industry FE YES			-2.690				-0.890	
-15.260 -1 <-0001			0.0072				0.3719	
\$\sqrt{EARN_i *C/95_t}\$       \$\sqrt{-0.0757}\$ \$\sqrt{EARN_i *P/95_t}\$       \$\sqrt{-0.0029}\$         \$\sqrt{10.0029}\$       \$\sqrt{0.0029}\$       \$\sqrt{0.0097}\$ \$\sqrt{0.0113}\$ \$\sqrt{0.0229}\$         \$\sqrt{10.0097}\$ \$\sqrt{0.0161}\$ \$\sqrt{0.0173}\$ \$\sqrt{0.0229}\$       \$\sqrt{0.0097}\$ \$\sqrt{0.0113}\$ \$\sqrt{0.0229}\$         \$\sqrt{8.900}\$ \$\sqrt{9.470}\$ \$\sqrt{10.730}\$ \$\sqrt{6.510}\$ \$\sqrt{7.040}\$         \$\sqrt{0.001}\$ \$\sqrt{0.001}\$ \$\sqrt{0.001}\$       \$\sqrt{0.001}\$ \$\sqrt{0.001}\$ \$\sqrt{0.001}\$         \$\sqrt{10.001}\$ \$\sqrt{9.85}\$ \$\sqrt{9.85}\$ \$\sqrt{9.85}\$ \$\sqrt{9.85}\$ \$\sqrt{9.85}\$ \$\sqrt{9.85}\$ \$\sqrt{9.85}\$	$C/95_t$			-0.0232	$P/95_t$			-0.0497
FARNi *C/95i				-15.260				-13.220
-2.980 -2				<.0001				<.0001
Intercept         0.0161         0.0173         0.0229         0.0097         0.0113         0.0229           8.900         9.470         10.730         6.510         7.040           <.0001	$EARN_t *C/95_t$			-0.0757	$EARN_t *P/95_t$			-0.0491
Intercept         0.0161         0.0173         0.0229         0.0097         0.0113         0           8.900         9.470         10.730         6.510         7.040           <.0001				-2.980				-0.790
8.900 9.470 10.730 6.510 7.040 <.0001 <.0001 <.0001 <.0001 <  Industry FE YES YES YES YES YES YES YES YES YES YE				0.0029				0.4321
8.900       9.470       10.730       6.510       7.040         <.0001	Intercept	0.0161	0.0173	0.0229		0.0097	0.0113	0.0154
Industry FEYESYESYESYESYESYear FEYESYESYESYESYES		8.900	9.470	10.730		6.510	7.040	8.020
Year FE YES YES YES YES YES		<.0001	<.0001	<.0001		<.0001	<.0001	<.0001
	Industry FE	YES	YES	YES		YES	YES	YES
	Year FE	YES	YES	YES		YES	YES	YES
	Firm Clustered SE	YES	YES	YES		YES	YES	YES
No. of Obs. 157970 157970 157970 157970 157970 1	No. of Obs.	157970	157970	157970		157970	157970	157970
								15203
10200								0.326

Table 18: Earnings Persistence and Corporate and Public Accounting Wages to Overall Wages

1.0th	(A) Percentile of	50	(B)  h Percentile of	05#	(C) Percentil
10	Wages	50	Wages		of Wages
	$EARN_{t+1}$		$EARN_{t+1}$	-	EARN <sub>t+1</sub>
$EARN_t$	0.9828	$EARN_t$	0.1315	$EARN_t$	0.7335
	9.000		0.400		8.020
	<.0001		0.6872		<.0001
$C/10_t$	-0.0001	$C/50_t$	0.0293	$C/95_t$	0.0294
	-0.230		6.760		11.800
	0.8184		<.0001		<.0001
$EARN_t \times C/10_t$	-0.0582	$EARN_t \times C/50_t$	0.1789	$EARN_t \times C/95_t$	-0.0402
	-2.730		1.650		-0.820
	0.0064		0.0987		0.4110
$P/10_t$	-0.0001	$P/50_t$	0.0293	$P/95_t$	0.0294
	-0.230		6.760		11.800
	0.8184		<.0001		<.0001
$EARN_t \times P/10_t$	-0.0582	$EARN_t \times P/50_t$	0.1789	$EARN_t \times P/95_t$	-0.0402
	-2.730		1.650		-0.820
	0.0064		0.0987		0.4110
Intercept	-0.0066	Intercept	-0.0943	Intercept	-0.0666
	-2.290		-7.320		-13.270
	0.0220		<.0001		<.0001
Industry FE	YES		YES		YES
Year FE	YES		YES		YES
Firm Clustered SE	YES		YES		YES
No. of Obs.	144153		144153		144153
No. of clusters	13952		13952		13952
Adjusted R2	0.318		0.318		0.318

Table 19: Earnings Persistence and CFO Specific Disparity in Corporate and Public Accounting

	(A)		(B)		(C)	
	CFO pay to 10 <sup>th</sup> Percentile Pay		CFO pay to 50 <sup>th</sup> Percentile Pay		CFO pay to 95 <sup>th</sup> Percentile Pay	
	$EARN_{t+1}$		$EARN_{t+1}$		$EARN_{t+1}$	
$EARN_t$	0.5571	$EARN_t$	0.5567	$EARN_t$	0.5556	
	11.900		11.630		11.290	
	<.0001		<.0001		<.0001	
$CFO/10_t$	0.1548	$CFO/50_t$	0.6482	$CFO/95_t$	2.2922	
	2.860		2.840		2.740	
	0.0043		0.0046		0.0061	
$EARN_t \times CFO/10_t$	-1.7534	$EARN_t \times CFO/50_t$	-7.3021	$EARN_t \times CFO/95_t$	-26.3549	
	-2.370		-2.340		-2.270	
	0.0180		0.0196		0.0235	
Intercept	0.0126	Intercept	0.0126	Intercept	0.0128	
	4.560		4.520		4.560	
	<.0001		<.0001		<.0001	
Industry FE	YES		YES		YES	
Year FE	YES		YES		YES	
Firm Clustered SE	YES		YES		YES	
No. of Obs.	15735		15735		15735	
No. of clusters	1887		1887		1887	
Adjusted R2	0.255		0.255		0.255	

Table 20: Earnings Response and Pay Disparity in Corporate and Public Accounting

	(A)	(B)	(C)	(D)	(E)	(F)
	Earnings	Corporate	Public Disp.	Corpto-Pub.	Corp. & Pub.	All Disp. Ratios
		Disp. Ratio	Ratio	Disp. Ratio	Disp. Ratio	
	$RETURN_t$	$RETURN_t$	$RETURN_t$	$RETURN_t$	$RETURN_t$	$RETURN_t$
$EARN_t$	0.2889	0.3795	0.8344	-0.2626	0.8546	0.0119
E21KiVi	5.21	2.13	1.21	-1.07	1.31	0.02
	<.0001	0.0336	0.2249	0.2836	0.1904	0.9846
$CDISP_t$		0.0017			-0.0024	-0.0187
-		0.65			-0.72	-5.36
		0.5138			0.4706	<.0001
$EARN_t \times$						
$CDISP_t$		-0.0163			-0.0150	-0.0777
		-0.59			-0.46	-2.57
		0.5534			0.6489	0.0103
$PDISP_t$			0.0401		0.0475	0.0487
			2.48		2.46	2.63
EADM			0.0132		0.0138	0.0087
$EARN_t \times PDISP_t$			-0.1833		-0.1622	0.0174
$IDISP_t$			-0.1833 -0.77		-0.1622 -0.62	0.0174
			-0.77 0.4417		0.5372	0.9398
$HDISP_t$			0.4417	0.1138	0.3372	0.1309
IIDISI t				10.36		11.10
				<.0001		<.0001
$EARN_t \times$				<.0001		<.0001
HDISP <sub>t</sub>				0.2916		0.3460
				2.52		3.14
				0.0117		0.0017
$SIZE_t$	-0.0667	-0.0666	-0.0672	-0.0679	-0.0671	-0.0674
	-5.77	-5.77	-5.78	-5.85	-5.79	-5.80
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
$OCF_t$	0.1872	0.1868	0.1893	0.1745	0.1883	0.1685
	4.06	4.05	4.04	3.78	4.00	3.61
	<.0001	<.0001	<.0001	0.0002	<.0001	0.0003
$MTB_t$	0.0985	0.0985	0.0984	0.0970	0.0984	0.0971
	9.89	9.90	9.86	9.69	9.87	9.69
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
$LEV_t$	0.0531	0.0535	0.0543	0.0514	0.0543	0.0508
	1.14	1.14	1.16	1.11	1.15	1.09
	0.2561	0.2539	0.2477	0.2669	0.2482	0.2749
$MKTCAP_t$	0.0461	0.0460	0.0463	0.0558	0.0462	0.0565
	4.15	4.14	4.15	4.96	4.15	5.03
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
$LOSS_t$	-0.1046	-0.1042	-0.1030	-0.0841	-0.1026	-0.0785
	-9.11	-8.88	-9.13	-7.71	-8.91	-7.12
DIGN	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
$BIGN_t$	0.0633	0.0632	0.0654	0.0425	0.0657	0.0416
	8.95	8.94	9.14	5.65	9.12	5.47
T4	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
Intercept	0.0767	0.0673	-0.0432	-0.1826	-0.0526	-0.2694
	3.81	2.72	-0.83	-6.28	-1.00	-5.09
	0.0001	0.0065	0.4076	<.0001	0.3176	<.0001
Industry FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
irm Clustered						
SE	YES	YES	YES	YES	YES	YES
No. of Obs.	88332	88332	88332	88332	88332	88332
No. of clusters	11759	11759	11759	11759	11759	11759
· · · · · · · · · · · · · · · · · · ·	1110)	11107	1110)	1110)	11137	11137

Table 21: Earnings Response and Lagged Pay Disparity in Corporate and Public Accounting

	(A)	(B)	(C)	(D)	(E)	(F)
	Earnings	Corporate	Public Disp.	Corpto-Pub.	Corp. & Pub.	All Disp. Ratios
		Disp. Ratio	Ratio	Disp. Ratio	Disp. Ratio	
	$RETURN_t$	$RETURN_t$	$RETURN_t$	$RETURN_t$	$RETURN_t$	$RETURN_t$
$EARN_t$	0.2889	0.6648	0.8986	-0.6380	0.8638	-1.8199
Diff. (i	5.21	3.40	1.51	-2.30	1.43	-3.49
	<.0001	0.0007	0.1303	0.0213	0.1521	0.0005
$CDISP_{t-1}$	<.0001	0.0524	0.1303	0.0213	0.0438	0.0473
CD151 [-]		18.86			12.50	12.88
		<.0001			<.0001	<.0001
$EARN_t \times CDISP_{t-1}$		-0.0636			-0.0662	-0.2442
ZIKU ( × CDISI [-]		-2.07			-1.59	-6.84
		0.0384			0.1112	<.0001
PDISP t-1		0.0304	0.1960		0.0751	0.0213
1 DISI 1-1			13.82		4.16	1.31
			<.0001		<.0001	0.1892
$EARN_t \times PDISP_{t-1}$						0.6870
EARIN × I DISI 1-1			-0.2007		-0.0625	
			-0.95		-0.23	3.08
IIDICD			0.3421	0.0754	0.8166	0.0021
HDISP t-1				0.0754		0.0102
				7.07		0.89
$EARN_t \times HDISP_{t-}$				<.0001		0.3719
LAKIN A HDISI I-				0.4951		0.7758
				3.89		6.67
				0.0001		<.0001
$SIZE_t$	-0.0667	-0.0675	-0.0698	-0.0663	-0.0684	-0.0653
	-5.77	-5.59	-5.76	-5.42	-5.66	-5.35
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
$OCF_t$	0.1872	0.1649	0.1654	0.1643	0.1638	0.1531
•	4.06	3.43	3.36	3.38	3.30	3.09
	<.0001	0.0006	0.0008	0.0007	0.0010	0.0020
$MTB_t$	0.0985	0.0960	0.0960	0.0955	0.0958	0.0952
	9.89	9.30	9.24	9.09	9.27	9.11
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
$LEV_t$	0.0531	0.0579	0.0559	0.0528	0.0586	0.0657
EEV	1.14	1.20	1.17	1.11	1.21	1.34
	0.2561	0.2304	0.2438	0.2665	0.2256	0.1814
$MKTCAP_t$	0.0461	0.0458	0.0485	0.0511	0.0468	0.0463
min chi i	4.15	3.97	4.17	4.36	4.05	3.97
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
$LOSS_t$	-0.1046	-0.0997	-0.0943	-0.0843	-0.0968	-0.0795
LOSSI	-9.11	-8.19	-0.0943 -7.95	-7.39	-8.02	-6.92
DICN	<.0001 0.0633	<.0001	<.0001	<.0001	<.0001	<.0001
$BIGN_t$		0.0621	0.0729	0.0513	0.0659	0.0641
	8.95	8.90	10.24	6.96	9.25	8.59
<b>T</b> , ,	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
Intercept	0.0767	-0.1921	-0.5021	-0.0940	-0.3723	-0.2778
	3.81	-7.56	-10.80	-3.15	-7.76 - 0001	-5.78
	0.0001	<.0001	<.0001	0.0016	<.0001	<.0001
Industry FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Firm Clustered SE	YES	YES	YES	YES	YES	YES
No. of Obs.	00222	05150	05150	05150	05150	05150
	88332	85152	85152	85152	85152	85152
No. of clusters	11759	11311	11311	11311	11311	11311

Table 22: Earnings Response and Economy Wide Pay Disparity in Corporate and Public Accounting

	(A)		(B)		(C)	
GINI		95 <sup>th</sup> to 50 <sup>th</sup>		90 <sup>th</sup> to 10 <sup>th</sup>		
	Coefficient		Percentile		Percentile	
	$RETURN_t$		$RETURN_t$		$RETURN_t$	
$EARN_t$	2.0607	$EARN_t$	2.5550	$EARN_t$	1.5072	
EARIV	3.9697	EARIV	2.5559	EARIVE	1.5273	
	5.10		5.01		3.01	
$GINI_t$	<.0001	$95/50_{t}$	<.0001	90/10 <sub>t</sub>	0.0026	
GIIVI	0.1439	93/30 <sub>t</sub>	0.0317	90/10 <sub>t</sub>	-0.0073	
	1.07		2.79		-2.14	
$EARN_t \times$	0.2851	$EARN_t \times$	0.0053	$EARN_t \times$	0.0326	
$GINI_t$	-7.9125	$95/50_t$	-0.6341	$90/10_t$	-0.1109	
	-4.57		-4.21		-2.31	
	<.0001		<.0001		0.0207	
$SIZE_t$	-0.0633		-0.0630		-0.0669	
	-5.33		-5.27		-5.65	
	<.0001		<.0001		<.0001	
$OCF_t$	0.1717		0.1804		0.1818	
	3.72		3.90		3.91	
	0.0002		<.0001		<.0001	
$MTB_t$	0.0983		0.0983		0.0975	
	9.72		9.67		9.63	
	<.0001		<.0001		<.0001	
$LEV_t$	0.0622		0.0628		0.0577	
	1.30		1.31		1.23	
	0.1938		0.1895		0.2204	
$MKTCAP_t$	0.0438		0.0419		0.0492	
	3.79		3.59		4.25	
	0.0002		0.0003		<.0001	
$LOSS_t$	-0.0876		-0.0910		-0.0904	
	-8.19		-8.62		-8.67	
	<.0001		<.0001		<.0001	
$BIGN_t$	0.0676		0.0703		0.0636	
	9.30		9.56		8.41	
	<.0001		<.0001		<.0001	
Intercept	-0.0113	Intercept	-0.0461	Intercept	0.1322	
	-0.17		-1.00		3.03	
	0.8639		0.3176		0.0024	
	MEG		ATT C		ATE O	
Industry FE	YES		YES		YES	
Year FE	YES		YES		YES	
Firm Clustered SE	YES		YES		YES	
No. of Obs.	88332		88332		88332	
No. of clusters	11759		11759		11759	
Adjusted R2	0.068		0.068		0.067	

Table 23: Earnings Response and Corporate Wages to Overall Wages

	(A)	(B)	(C)		(E)	(F)	(G)
		Corporate Acco				Public Accoun	
	$RETURN_t$	$RETURN_t$	$RETURN_t$		$RETURN_t$	$RETURN_t$	$RETURN_t$
$EARN_t$	0.6095	0.6549	0.6842	$EARN_t$	0.4574	0.4744	0.4770
	5.12	5.57	5.14		5.07	5.04	4.41
	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001
$C/10_t$	-0.0003			$P/10_t$	-0.0020		
	-0.63				-2.05		
	0.5287				0.0403		
$EARN_t *C/10_t$	-0.0125			$EARN_t *P/10_t$	-0.0186		
	-2.34				-1.62		
	0.0195				0.1051		
$C/50_t$		0.0008		$P/50_t$		-0.0051	
		0.47				-1.21	
		0.6414				0.2277	
$EARN_t *C/50_t$		-0.0586		$EARN_t *P/50_t$		-0.0839	
		-2.73				-1.72	
		0.0064				0.0857	
$C/95_t$			0.0055	$P/95_t$			-0.0211
			0.78				-1.16
			0.4342				0.2479
$EARN_t *C/95_t$			-0.2270	$EARN_t *P/95_t$			-0.3066
			-2.66				-1.53
			0.0079				0.1249
$SIZE_t$	-0.0658	-0.0652	-0.0651		-0.0667	-0.0664	-0.0665
	-5.59	-5.55	-5.56		-5.71	-5.69	-5.71
	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001
$OCF_t$	0.1836	0.1837	0.1842		0.1856	0.1861	0.1862
	3.96	3.97	3.99		4.00	4.01	4.02
	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001
$MTB_t$	0.0980	0.0982	0.0984		0.0979	0.0980	0.0981
	9.73	9.76	9.79		9.76	9.77	9.79
	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001
$LEV_t$	0.0572	0.0580	0.0575		0.0549	0.0553	0.0549
	1.21	1.22	1.21		1.17	1.18	1.17
	0.2256	0.2208	0.2249		0.2416	0.2390	0.2425
$MKTCAP_t$	0.0464	0.0451	0.0447		0.0481	0.0473	0.0472
	4.07	3.96	3.94		4.26	4.18	4.19
	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001
$LOSS_t$	-0.0942	-0.0950	-0.0967		-0.0961	-0.0969	-0.0979
20551	-9.04	-9.01	-9.04		-9.17	-9.20	-9.22
	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001
$BIGN_t$	0.0652	0.0664	0.0663		0.0622	0.0636	0.0634
Digiti	8.88	9.13	9.20		8.34	8.56	8.56
	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001
Intercept	0.0672	0.0603	0.0587		0.0773	0.0740	0.0770
Тистсері	2.94	2.63	2.49		3.53	3.35	3.40
	0.0033	<b>0.0086</b>	0.0126		0.0004	0.0008	0.0007
Industry FE	YES	YES	YES		YES	YES	YES
Year FE	YES	YES	YES		YES	YES	YES
Firm Clustered	YES	YES	YES		YES	YES	YES
SE	1 E3	1 E3	I ES		IES	IES	I ES
No. of Obs.	157970	157970	157970		157970	157970	157970
No. of clusters	15203	15203	15203		15203	15203	15203
	0.326	0.327	0.327		0.326	0.326	0.326

Table 24: Earnings Response and Corporate and Public Accounting Wages to Overall Wages

	(A)		(B)		(C)	
	10 <sup>th</sup> Percentile		50 <sup>th</sup> Percentile		95 <sup>th</sup> Percentile	
	of Wages		of Wages		of Wages	
	$RETURN_t$		$RETURN_t$		$RETURN_t$	
$EARN_t$	0.6914	$EARN_t$	0.7093	$EARN_t$	0.7010	
	6.96		7.30		6.29	
	<.0001		<.0001		<.0001	
$C/10_t$	0.0020	$C/50_t$	0.0091	$C/95_t$	0.0308	
	2.55		2.90		2.93	
	0.0109		0.0037		0.0034	
$EARN_t \times C/10_t$	-0.0245	$EARN_t \times C/50_t$	-0.0927	$EARN_t \times C/95_t$	-0.2647	
	-3.52		-3.33		-2.79	
	0.0004		0.0009		0.0053	
$P/10_t$	-0.0055	$P/50_t$	-0.0214	$P/95_t$	-0.0720	
	-2.78		-2.59		-2.48	
	0.0055		0.0096		0.0133	
$EARN_t \times P/10_t$	0.0243	$EARN_t \times P/50_t$	0.0706	$EARN_t \times P/95_t$	0.0760	
	1.29		0.88		0.27	
	0.1960		0.3776		0.7900	
$SIZE_t$	-0.0645		-0.0642		-0.0647	
	-5.51		-5.49		-5.55	
	<.0001		<.0001		<.0001	
$OCF_t$	0.1816		0.1821		0.1840	
	3.89		3.90		3.95	
	<.0001		<.0001		<.0001	
$MTB_t$	0.0981		0.0982		0.0983	
	9.76		9.78		9.80	
	<.0001		<.0001		<.0001	
$LEV_t$	0.0575		0.0580		0.0570	
	1.22		1.22		1.21	
	0.2235		0.2211		0.2280	
$MKTCAP_t$	0.0458		0.0448		0.0451	
	4.03		3.96		4.00	
	<.0001		<.0001		<.0001	
$LOSS_t$	-0.0927		-0.0938		-0.0956	
	-8.77		-8.76		-8.86	
	<.0001		<.0001		<.0001	
$BIGN_t$	0.0619		0.0629		0.0628	
	8.29		8.45		8.45	
	<.0001		<.0001		<.0001	
Intercept	0.0597	Intercept	0.0552	Intercept	0.0569	
	2.66		2.46		2.47	
	0.0078		0.0140		0.0137	
Industry FE	YES		YES		YES	
Year FE	YES		YES		YES	
Firm Clustered						
SE	YES		YES		YES	
No. of Obs.	88332		88332		88332	
No. of clusters	11759		11759		11759	
Adjusted R2	0.067		0.067		0.067	

Table 25: Earnings Response and CFO Specific Pay Disparity in Corporate and Public Accounting

	(A)		(B)		(C)
	CFO pay to 10 <sup>th</sup>		CFO pay to 10 <sup>th</sup>		CFO pay to 10
	Percentile Pay		Percentile Pay		Percentile Pay
	$RETURN_t$		$RETURN_t$		$RETURN_t$
EADN		EADM		EADM	
$EARN_t$	0.3123	$EARN_t$	0.3173	$EARN_t$	0.3157
	2.25		2.27		2.25
G=0.44	0.0244	a= 0.1=0	0.0234	~~~ · · · ·	0.0247
$CFO/10_t$	0.8150	$CFO/50_t$	3.7065	$CFO/95_t$	13.4021
	2.19		2.27		2.26
	0.0285		0.0233		0.0242
$EARN_t \times CFO/10_t$	-2.3443	$EARN_t \times CFO/50_t$	-10.5466	$EARN_t \times CFO/95_t$	-37.7187
	-0.79		-0.82		-0.79
	0.4281		0.4102		0.4319
$SIZE_t$	-0.1036		-0.1043		-0.1044
	-5.51		-5.54		-5.54
	<.0001		<.0001		<.0001
$OCF_t$	0.1819		0.1812		0.1798
	1.66		1.66		1.64
	0.0968		0.0980		0.1005
$MTB_t$	0.0110		0.0109		0.0109
	1.03		1.02		1.02
	0.3047		0.3079		0.3095
$LEV_t$	0.1371		0.1376		0.1380
	2.75		2.76		2.76
	0.0060		0.0059		0.0058
$MKTCAP_t$	0.0920		0.0923		0.0925
	5.07		5.08		5.09
	<.0001		<.0001		<.0001
$LOSS_t$	0.0571		0.0569		0.0570
	1.78		1.77		1.78
	0.0754		0.0761		0.0755
$BIGN_t$	0.0195		0.0196		0.0195
	0.95		0.95		0.94
	0.3438		0.3408		0.3453
Intercept	0.1054	Intercept	0.1065	Intercept	0.1058
z.mer cept	2.74	z	2.77	Zc. vopi	2.75
	0.0062		0.0057		0.0059
	0.0002		0.0037		0.0039
Industry FE	YES		YES		YES
Year FE	YES		YES		YES
Firm Clustered SE	YES		YES		YES
No. of Obs.	10677		10677		10677
No. of clusters	1728		1728		1728
Adjusted R2	0.021		0.021		0.021

# APPENDIX A: Variable Definitions

Variable		Definition
CDISP	=	The ratio of the highest pay level within corporate accounting scaled by the lowest pay level reported within corporate accounting reported by the 'RobertHalf Accounting and Finance Salary Guide' in year <i>t</i> ;
PDISP	=	The ratio of the highest pay level within public accounting scaled by the lowest pay level reported within corporate accounting reported by the 'RobertHalf Accounting and Finance Salary Guide' in year <i>t</i> ;
HDISP	=	The ratio of the midpoint between the highest and lowest pay levels within corporate accounting scaled by the midpoint between the highest and lowest pay levels within public accounting reported by the 'RobertHalf Accounting and Finance Salary Guide' in year <i>t</i> ;
ABSDA	=	The residual from the standard Jones 1991 discretionary accrual model including current return on assets to adjust for performance effects on accruals behavior in year $t$ ;
BIGN	=	An indicator variable equal 1 if the firm's auditor was a Big N auditor in year t;
EARN	=	Income before extraordinary items scaled by the average total assets in year t;
LEV	=	(long-term debt (DLTT) + short-term debt (DLC) / average total assets in year $t$ ;
LOSS	=	An indicator variable equal to 1 if the firm reported negative income in year t;
MKTCAP	=	Market value of equity calculates as the year end share price multiplied by the shares outstanding (PRCC_F $\times$ SHOUT) in year $t$ ;
MTB	=	Book value of equity (CEQ) / market value of equity in year t;
OCF	=	Firm cashflows scaled by average total assets reported in year t;
SIZE	=	The average level of total assets over year <i>t</i> ;
AQ	=	The standard deviation of the residuals from the Dechow and Dichev (2002) regression of accruals on cashflows in year $t$ ;
RETURN	=	The buy and hold return less the value weighted market return in year $t$ ;

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## II. VITA: Russell Williamson, CPA, PhD. Candidate

### **EDUCATION**

2012 - MS in Accountancy, University of Kentucky, *Summa Cum Laude* 2011 - BS in Accountancy, University of Kentucky, *Summa Cum Laude* 

## RESEARCH INTERESTS

Auditing and Capital Markets, Economic Geography, Non-Financial Risk, Voluntary Disclosure, Linguistics and Text Analysis, Network Analysis

## WORKING PAPERS

'Non-Financial Amenities and Audit Production: The effect of livability on audit fees, effort, and quality' (with Jeff Payne) – *Responding to reviewer comments* 

'An Examination of the Influence of Joint CFO / Audit Firm Tenure on Audit Quality' (with Jeff Payne) – *Revise and Resubmit to AJPT* –  $2^{nd}$  *Round* 

'The Effect of Mandated Performance Measurement on Voluntary Disclosure and Market Responses: Evidence from the EPA 2009 Reporting Expansion' – (with Brian Bratten) Responding to workshop and conference feedback – Journal submission planned Fall 2018

## **RESEARCH IN PROGRESS**

'Accounting Wages and Accounting Quality: The implications of the fair wage-effort hypothesis' - (*Dissertation research in progress*)

'Agglomeration Economies and Financial Information Quality: The effect of geospatial clustering on the financial information environment and the role of auditors as special information intermediaries.' – (*Data Analysis Phase*)

'And not a drop to drink: Market Valuations of Efficiency and Risk – Evidence from voluntary water impact disclosures' – (*Initial analysis and draft complete, needs additional analysis and revision*)

## RESEARCH SUPPORT

Institute for the Study of Free Enterprise Fellowship: granted for work on 'An Examination of the Influence of Joint CFO / Audit Firm Tenure on Audit Quality' - Date: July 2018 - Amount: \$5,000

Institute for the Study of Free Enterprise Fellowship: granted for work on 'The Effect of Mandated Performance Measurement on Voluntary Disclosure and Market Responses' - Date: May 2017 - Amount: \$3,000

UK Student Sustainability Council Research Grant – To obtain access to the Carbon Disclosure Project Database for multiple projects. - Date: February 2015 - Amount: \$5,000.

## WORKSHOP AND CONFERENCE PRESENTATIONS

## **Workshop Presentations**

University of Louisville (October 2018) - 'Non-Financial Amenities and Audit Production: The effect of livability on audit fees, effort, and quality'

University of Louisville (January 2018) - 'The Effect of Mandated Performance Measurement on Voluntary Disclosure and Market Responses: Evidence from the EPA 2009 Reporting Expansion'

Emory University GRACE Conference (2017) - 'The Effect of Mandated Performance Measurement on Voluntary Disclosure and Market Responses: Evidence from the EPA 2009 Reporting Expansion'

University of Kentucky (2017) - 'The Effect of Mandated Performance Measurement on Voluntary Disclosure and Market Responses: Evidence from the EPA 2009 Reporting Expansion'

University of Kentucky (2016) - 'Non-Financial Amenities and Audit Production: The effect of livability on audit fees, effort, and quality'

## **Conference Research Presentations**

AAA Auditing Mid-Year Meeting (2016) - 'Audit pricing and audit quality: The Influence of Livability'

AAA Managerial Mid-Year Meeting (2016) - 'The Effect of Management Style on Risky Reporting Choices: A Motivational Focus Perspective'

Deloitte Foundation/ Michael J Cook Doctoral Consortium (2018) – 'Agglomeration Economies and Financial Information Quality: The effect of geospatial clustering on the financial information environment and the role of auditors as special information intermediaries.'

## **Discussant Presentations**

American Accounting Association Annual Meeting (2018) American Accounting Association Annual Meeting (2017) American Accounting Association Annual Meeting (2015) AAA Auditing Mid-Year Meeting (2018)

## **Session Moderation**

American Accounting Association Annual Meeting (2017) AAA Auditing Mid-Year Meeting (2018)

## **Paper Reviewer**

AAA Annual Meeting (2018, 2017, 2016, 2015) AAA Auditing Mid-Year Meeting (2018)

### CONFERENCE ATTENDANCE \*Presented/discussed

Deloitte Foundation/ Michael J Cook Doctoral Consortium (2018\*)

AAA Annual Meeting (2018\*, 2017\*, 2016, 2015\*)

Emory University GRACE Conference (2018, 2017\*, 2016)

AAA Financial Mid-Year Meeting (2018, 2017) and Doctoral Consortium (2017)

AAA Auditing Mid-Year Meeting (2018\*, 2017\*)

AAA Managerial Mid-Year Meeting (2017\*)

AAA Public Interest Mid-Year Meeting (2016) and Doctoral Consortium (2016)

### HONORS AND AWARDS

North American Regions KAKEHASHI Project (March 2018) – Selected as one of 48 business graduate students to participate in a diplomatic exchange program between Japan and the US to "promote mutual trust and understanding among the peoples of Japan, the US and Canada, and to build a basis for future friendship and cooperation"

University of Kentucky, Luckett Fellowship (2014 – 2018) University of Kentucky, Von Allmen Fellowship (2014 – 2018) University of Kentucky, Reedy Fellowship (2014 – 2018)

## **TEACHING INTERESTS**

Accounting Information Systems, Internal Control, Risk Management, Auditing

### TEACHING EXPERIENCE

## **Instructor, Gatton College of Business & Economics**

## PROFESSIONAL EMPLOYMENT

2012-2014 Ernst & Young LLP 2011-2012 University of Kentucky