7-16-2021

Budget Gaming: Politics, Ethics, and Compensation

Gretchen Decker
University of Missouri-St. Louis, gadecker@mail.umsl.edu

Budget Gaming: Politics, Ethics, and Compensation

Gretchen Decker

Masters of Business Administration, University of Hawaii, 2005

Bachelor of Science, Chemistry, Lincoln University, 1996

A Dissertation Submitted to The Graduate School at the University of Missouri–St. Louis
in partial fulfillment of the requirements for the degree
Doctor of Business Administration with an Emphasis in Accounting

December 2021

Advisory Committee

John Meriac, Ph.D., Chairperson

James Hesford, Ph.D.

James Breaugh, Ph.D.

Abstract

Practitioners are frustrated with the budgeting process, frequently complaining that budgets cause undesirable and political behaviors in the organization (Jensen, 2001). One of the most frequent problems is budget gaming, which critics consider non-value added and frustrating. In a 2010 survey, over 95% of respondents acknowledged that budget gaming exists at least "occasionally" (Libby & Lindsay, 2010). Previous studies indicate budget gaming is frustrating, prevalent, and wasteful (Hansen et al., 2003; Libby & Lindsay, 2007; Neely et al., 2003).

I conducted an experiment to investigate organizational influences (organizational politics, compensation condition, ethics attestation) and their impact on budget gaming. The experiment results indicated that the political environment and compensation condition do not make a difference in the level of budget gaming. Results showed that 76% of participants gamed the budget. Half of the experiment participants were in an ethics condition (signed an ethics attestation). Of the participants in the ethics condition, 39% who signed the ethics attestation also gamed.

Interestingly, the political condition did not make a significant difference because the budgeting process (a division of resources) was found to make a difference in political behavior (Allen et al., 1979; Kacmar & Baron, 1999). The compensation condition did not make a difference. This finding is inconsistent with the claims of Jensen (2003) that severing the link between the budget and individual compensation will reduce budget gaming. The ethics attestation made a significant difference in budget gaming but not in the expected direction. Participants signing an ethics attestation gamed more than participants who did not sign an ethics attestation. Qualitative comments indicated that

many participants felt that gaming the budget was not an ethical issue. Only 24% of participant comments indicated gaming was a moral hazard. This study reviewed budget games in two categories: (1) accelerating or delaying revenues and expenses and (2) under committing to revenue, fixed expenses, and long-term project expenses.

Keywords: Budgeting, Budget gaming, Organizational politics, Contingency Pay, Ethics

Table of Contents

Figures

Tables

Acknowledgments

My desire to earn a terminal degree began after serving in Special Operations Command Pacific (SOCPAC) to support Operation Enduring Freedom, Philippines. This group of intelligent officers and non-commissioned officers sparked an intellectual curiosity and a desire to learn more about the world around me and its corresponding complexity. In complex operations, the problems have problems, and complexity exists that is not time-bound nor linear. My journey in the Army culminated with an assignment teaching reserve officers at the Command and General Staff College (CGSC). I enjoyed debating ideas with students, and I learned more than they did. My instructor colleagues were pursuing terminal degrees and discussing the misery of a doctoral process. I wanted to be miserable too. I decided that happiness was research and working with students, so I applied for the UMSL DBA program.

First, I want to thank Dr. Mitch Millstein, my former supervisor at Supply Velocity and a lifelong mentor. When I worked for Mitch, he encouraged critical thinking and was patient with me. He encouraged me to become CPIM certified and start my MBA. Fifteen years later, I called Mitch for a letter of recommendation. Mitch encouraged me to apply at UMSL. He introduced me to Dr. Ekin Pellegrini, and I was accepted into the Class of 2021.

I want to thank the Class of 2021. I was inspired by my cohort and learned to appreciate and love each of them. I am incredibly grateful for team politics (Jaime Peters, Bill Butler, Andrew Thomas, and Liz Boyle). Team politics completed every research project together (and side research projects), published three articles, and endlessly

debated. Team Politics is a highly functioning team. The DBA program will not be the last of Team Politics. We have a rich agenda of collaborative research in the future!

I sincerely appreciate all the UMSL DBA faculty but want to thank my committee. There is a special place in heaven for a committee that can endure 130-pages on budgeting. First, I sincerely appreciate my chair, Dr. Meriac. As an IO psychologist, I am sure chairing a dissertation on budgeting was not on his bucket list. He read, reread, and reread - the dissertation, which was long and dry. I appreciate his feedback and mentorship and his willingness to meet with me every week (to discuss budgeting). Second, I want to thank Dr. Jim Hesford for serving as a committee member and expert in accounting. Dr. Hesford encouraged me to change course several times and learn R. It was just the push I needed. He was a wonderful mentor. I appreciated his frank feedback and candor, which made my dissertation better. I also want to thank Dr. Breaugh. Dr. Breaugh's feedback was on time and target. He encouraged me to do better. The best part of the program was my committee. I learned more from my committee than in class and grateful to study under them.

Finally, I owe gratitude to my family. I studied during soccer games. I missed activities, and I did not attend vacations. I was on conference calls late at night with weekends buried in books and journals. I am deeply grateful to my husband, Chris Cochrane, who leaned in as a parent while studied. I appreciate my son, Luke Cochrane, who patiently let mommy study. I am grateful to the creators of Fortnite, which provided an hour of entertainment for my son while I finished one more chapter. My mother-in-law, a lifelong learner, helped with the household while I completed the program. She was such an inspiration to me and is the sole reason I achieved balance in the program.

Finally, I appreciate the example my mother, Bernice Decker, left with me. My mother was in an education program most of my childhood. I watched her study, read journal articles, and work hard to get an education. My desire for life-long learning started with my mother's example. My family was my rock during the program.

Chapter 1: Introduction

Budget gaming is prevalent in practice but is a source of frustration for managers. Budget gaming is defined as “the deliberate and premeditated manipulation of current year sales, cost, and profit forecast by product managers to project an overly conservative image into their product budgets” (Bart, 1988). Examples of budget gaming include: (1) manipulating the timing of revenue and expenses to meet a budget objective, or (2) under committing to budget targets. For example, managers might adjust the timing of an expense or accelerate revenue to meet current year budget objectives. A manager might have information on team abilities in budget submission season but could add some “cushion” or “slack” to their budget submission to provide a buffer. Changing timing or adding “cushions” to the budget is budget gaming tactics. It is important to note that gaming doesn’t improve performance. Gaming is intentional and not unintentional forecasting errors. The motivation behind gaming is to leave an impression that performance is changing. This impression management could be to earn compensation objectives, to reduce the “hassle” of explaining variance, and/or to avoid a negative impression.

In a survey, over 95% of respondents reported that budget gaming occasionally occurs (Libby & Lindsay, 2010). Budget gaming is prevalent and represents an inefficient use of time and resources (Hansen et al., 2003; Hope & Fraser, 2003).

> Budgeting is a joke, and everyone knows it. It consumes a huge amount of executives' time, forcing them into endless rounds of dull meetings and tense negotiations. It encourages managers to lie and cheat, lowballing targets, and inflating results, and it penalizes them for telling the truth. Jensen (2001, p. 96).

Jensen (2003) claims, "[budget gaming is] considered part of business life, so much so that it often takes on a life of its own" (p. 382). Budget gaming can be an aspect of culture, driving organizational norms. Similarly, organizational politics is a cultural factor that likely affects gaming, but this factor has not been considered in the budget gaming literature previously. Finally, Jensen (2003) found in his research that when budget attainment is a factor in performance management and ultimately compensation, gaming results. This study seeks to understand if performance pay compensation schemes tied to budget attainment and organizational politics affect gaming.

The Budgeting Dilemma

If budgets are subject to manipulation, why are they used? Budgets for planning, performance, evaluation, and communication are ubiquitous (Hansen et al., 2003; Lau & Tan, 2012; Libby & Lindsay, 2007, 2010; Neely et al., 2003). Moreover, budgeting is ingrained in company culture, a key to communication and linking departments, essential to planning and monitoring performance (Hansen et al., 2003). A survey of Institute of Managerial Accountant (IMA) members concluded that "respondents indicate overwhelmingly that they couldn't manage without budgets" (Libby & Lindsay, 2007, p. 51). Despite budgeting being indispensable, complaints are substantial (Hansen et al., 2003; Hope & Fraser, 2003; Libby & Lindsay, 2007, 2010; Neely et al., 2003). Budgeting is essential to industry, yet some practitioners are so frustrated that they have abandoned the process (Hope & Fraser, 2003).

Budgeting Complaints

Practitioners and scholar articles complain about the problems in budgeting (e.g., the behaviors budgeting encourages, and the time budgeting consumes) (Hansen et al.,

2003; Hope & Fraser, 2003; Libby & Lindsay, 2007, 2010; Neely et al., 2003; Wolf, 2015). The first complaint is the type of behaviors incented when the static budget is used to judge performance in a dynamic environment (Neely, 2001). The budget becomes a fixed performance contract made at the beginning of the year, yet business environments change throughout the year. Managers can face adverse conditions when they do not achieve the budget goals (e.g., bonus reduction or time spent explaining variances). Therefore, managers tend to reduce incremental effort once budget objectives are met (Hansen et al., 2003) and develop a "use or lose" mentality (e.g., spend their budget, regardless of need, to maintain next year's budget) (Hope & Fraser, 2003). Another performance criticism is that the process creates a short-term-oriented culture (Van der Stede, 200). For example, a cost center manager is incentivized to focus on cost reduction over value creation (Van der Stede, 2000). Second, critics claim that the budget process is time-consuming (Hansen et al., 2003). It is time-consuming for finance managers and business unit managers to explain past performance in budget and forecast reviews (notably when the unit not meeting budget performance objectives). Moreover, it is time-consuming to game the financials and makeup explanations for accelerating or decelerating revenue and expenses for repetitious budget and forecast reviews. Practitioners question the value obtained for budgeting versus the time commitment (Hansen et al., 2003; Neely et al., 2003; Wolf, 2015). Finally, the most prevalent complaint of the budget process is gaming (Hansen et al., 2003; Neely et al., 2003; Wolf, 2015). Neely, Bourne, and Adams (2003) exclaim, "budgets encourage gaming and perverse (dysfunctional) behavior" (p. 23). Given the pervasiveness of these issues, Hope

and Fraser (2003) suggested severing the connection of the budget and the performance management system to avoid gaming.

Prevalence of Budget Gaming

Budget gaming is a frequent complaint of the budgeting process (Libby & Lindsay, 2007, 2010, 2012, 2019). “In the last few years, critics have charged that planning and budgeting systems are rife with politics and gameplaying” (Hansen et al., 2003, p. 110). Neely et al. (2003) conducted a qualitative study of 15 leading companies to find problems with current budgeting processes. Their survey found that most companies are adapting budgeting processes rather than eliminating budgeting, “making them less threatening- to avoid gaming- and trying to improve accuracy with rolling forecasts” (Neely et al., 2003, p. 4). Research on the frequency and impact of budget gaming has emphasized the adverse outcomes of this behavior. For example, Wolf (2015) claimed, “It's stressful for company leaders who have to endure endless budget iterations, debate over conflicting business goals, and sandbagging, all of which lead to poor decision making” (p. 24). The most interesting aspect of this problem is that budget gaming is not new yet remains an enigma. Bart (1988) stated, “The nature and extent of budget games are still relatively unknown; most managers, therefore, do not know how widespread budgeting gamesmanship is within their organization…Thus, while budgeting gamesmanship is of interest, it remains understudied and misunderstood” (p.285). Libby and Lindsay (2007, 2010, 2012, 2019) found that budget gaming is prevalent in practice and a source of frustration.

Problems with the Prior Literature

Past literature provides insights into some environmental factors that accentuate gaming, such as a firm's performance management system, prior period performance, and environmental uncertainty. Several studies indicate that a firm's performance management system can be linked to increased budget gaming (Bart, 1988; Jensen, 2003; Sprinkle, 2003). For example, if budget performance is used to determine performance management scores and compensation, gaming is heightened (Bart, 1988; Jensen, 2003; Sprinkle, 2003). Merchant (1985) found managers created budgetary slack when they explain overruns frequently. Jensen (2003) stated, "These budget-based systems reward people for lying and for lying about their lying and punish them for telling the truth. These systems reward gaming while obfuscating the facts they are meant to summon." (p. 380).

Simply put, the managerial reward systems contribute to budget gaming. Under these circumstances, prior period performance can predict the amplitude of gaming (Libby & Lindsay, 2012; Van der Stede, 2000). When prior period performance is negative, managers can engage in gaming behaviors to deal with future uncertainty (Libby & Lindsay, 2012; Van der Stede, 2000). Environmental uncertainty also increases budget gaming. Prior literature indicates that the creation of budgetary slack is likely a response to help managers deal with future uncertainty (Bart, 1988; Collins et al., 1987). I define budgetary slack as creating a buffer in the budget to offset potential future uncertainty. This behavior is likely in dynamic and uncertain industries, where demand is difficult to predict. For example, Neely et al. (2003) stated, "[traditional budgeting methods] are also too unresponsive to today's competitive and turbulent environment.

Furthermore, they are counterproductive in that they are usually affected by gaming, corporate politics, and horse-trading tactics" (p. 22).

Past accounting scholars have not considered a critical environmental factor: organizational politics. Organizational politics is ubiquitous in every organization (Ferris et al., 1989). The organizational politics literature links budgeting and resource allocation to high levels of political behaviors (Allen et al., 1979; Kacmar & Baron, 1999; Pfeffer & Salancik, 1974). The Pfeffer and Salancik (1974) study of a university's budget (within departments) found budget allocation was determined by the number of instructional units, student demand of classes, and power of the department. However, departmental power and politics had the most significant effect on budget allocation. Their study indicates that organizational politics has an "invisible hand" in determining resource allocation and likely contributes to budget gaming. However, past budget gaming researchers failed to recognize this crucial cultural impact. It is feasible that budget gaming levels are higher in organizations with high levels of organizational politics. The politics literature finds scarcity in resources and uncertainty are antecedents of organizational politics (Ferris et al., 1996; Ferris & Kacmar, 1992; Kacmar & Baron, 1999). Individual politicians are likely using political behaviors to gain more allocation of scarce resources. The impact of organizational politics on the resource allocation process is important because organizational politics are linked to negative individual and organizational outcomes. For example, high levels of perceived political activity are linked to lower job satisfaction, higher turnover, burnout, stress, lower organizational citizenship behavior, and increased counterproductive work behavior (Bedi & Schat, 2013). A branch of research (Jensen, 2003) advocates severing the connection between

performance management and budget attainment. Jensen (2003) claimed that disconnecting compensation from the budget will stop gaming. Jensen (2001) stated that this connection pits individuals against each other and rewards undesirable behavior.

Contribution to the Literature

My study contributes to the budgeting literature in two ways. It is the first budgeting study to examine the link to organizational politics, compensation strategy, and budget gaming. It is the first study to investigate the connection of a simple ethics attestation as a possible deterrent to budget gaming. While other studies link bonus compensation programs to budget gaming, this is the first study to include penalty pay in the analysis. While experimental methods are common in the accounting literature, it is not common in the politics literature. This study is the first budget gaming study that leveraged an experimental design. The purpose of this study is to examine whether organizational politics and compensation form affects budget gaming and if a simple ethics attestation can attenuate gaming.

Chapter 2: Literature Review

This chapter is divided into three sections. First, I review historical definitions of budget gaming. Second, I examine the historical characteristics of budget gaming, which include manipulating revenue, expenses, and profit. Third, budget gaming occurs in both the operational budget and capital budget. Finally, I discuss the hypothesized linkages between budget gaming, organizational politics, and pay for performance.

Definition of Budget Gaming

This section outlines the various definitions and conceptualizations of budget gaming. Table 1 summarizes this information. First, the section reviews historical definitions and conceptualizations, such as budget response, budget bias, budget slack, gameplay, and budget games. Next, this block demonstrates how prior studies portray gaming on a continuum of functional to dysfunctional. This dynamic occurs in other behavior constructs, such as organizational politics and social influence, where the phenomenon can be functional or dysfunctional, depending on motive (Hill, 2017; Hochwarter et al., 2020; Rahrovani & Pinsonneault, 2012). Finally, this section concludes with the definition of budget gaming for this study.

[Insert Table 1 About Here]

Collins (1978) did not use the term “budget gaming”; instead, he used the term budgetary response attitudes (ranging from positive to negative). He defined a budget response as “the predisposition to support or withhold support of the budget and even to sabotage the budget” (Collins, 1978, p. 378). By 1987, Collins was calling it “gameplay,” and his research team defined it as “routinized behaviors adopted by subordinates to cope with pressures inherent in the budgetary negotiation process” (Collins et al., 1987, p. 31).

This definition conveys a neutral tone and reflects the routine nature of gaming. It also discusses gaming as necessary to cope in the business environment. Bart (1988) defined budget gamesmanship as "the deliberate and premeditated manipulation of current year sales, cost, and profit forecast by product managers to project an overly conservative image into their product budgets" (Bart, 1988, p. 293). However, Bart portrayed gamesmanship as a coping mechanism and not necessarily dysfunctional. "Budgeting games may simply be a form of tactical maneuver that product managers deploy to survive in what they consider to be a hostile environment" (Bart, 1988, p. 292). Lukka (1988) conceptualized the term "budgetary bias," which included budgetary slack and upward bias. Budgetary bias is defined as "resources and effort toward activities that cannot be justified easily in terms of their immediate contribution to organizational objectives" (Lukka, 1988, p. 282). From the late 1980s to 2007, the literature was silent on gaming. Instead, scholars focused on the budget emphasis (when performance is measured by meeting the budget) and budgetary slack (managers understating performance expectations to get a more manageable budget). The latest budget gaming studies occur between 2007-2019 by Libby and Lindsay. However, they inconsistently defined budget gaming. In 2012, they defined budget gaming as "a dysfunctional response to the pressures to meet budget-related performance goals" (Libby & Lindsay, 2012, p. 5). By 2019, Libby and Lindsay broadened the construct. They defined it as "behaviors reflecting a short-term orientation that provides no value to the business unit, which is taken by subordinate managers simply to make the budget target easier to attain" (Libby & Lindsay, 2019, p. 157). This definition broadens the games from slack creation to anything with "short-term" orientation. In summary, researchers inconsistently define

budget gaming and sometimes portray it as functional (coping mechanism) and occasionally dysfunctional.

In this study, I adopted the definition from Bart (1988), defining budget gaming as "the deliberate and premeditated manipulation of current year sales, cost, and profit forecast by product managers to project an overly conservative image into their product budgets" (Bart, 1988, p. 293). This definition acknowledges that budget gaming is deliberate and premeditated. It acknowledges that gaming includes manipulation of revenue, expense, and/or profit. Finally, Bart's (1988) definition suggests the motive for gaming is to project a conservative image into a budget.

Characterization of Budget Gaming in the Literature

This section reviews the historical budget gaming conceptualizations and findings from 1973 (Onsi, 1973) to 2019 (Libby and Lindsay, 2019). By the 1970s, researchers found a positive and significant link between using the budget for performance and increasing performance (Sprinkle, 2003). As such, it became common to use the budget as a metric in performance objectives. The early conceptualizations of budget gaming reviewed managerial responses under conditions of participation and budget adherence (budget use for managerial performance). Collins (1978) found that budget participation increased budget acceptance with the budget response as an output variable. Budget response is defined as "the predisposition to support or withhold support of the budget and even to sabotage the budget" (Collins, 1978, p. 324). Budget response existed on a continuum from positive (personal budget acceptance, propensity to induce positive budget performance in subordinates) to negative (tendency to create budgetary slack and resistant response). Variables such as budget control measured the degree managers were

held accountable for adherence to the budget (Collins, 1978). Therefore, a company with high budget control meant performance evaluation and career progression depended on performance to the budget. The early literature found that budget slack increased when the budget was used to measure performance, and managers participated in the process (Collins, 1978; Sprinkles, 2003). However, later studies found that participation in the budget process reduced slack (Fisher et al., 2002; Sprinkle, 2003; Van der Stede, 2000).

By 1987, Collins reconceptualized "budget response" to "budget gameplay." Collins et al. (1987) defined budget gameplay as "routinized behaviors adopted by subordinates to cope with pressures inherent in the budgetary negotiation process" (Collins et al., 1987, p. 31). Compared to the 1978 definition, this definition held a neutral valence (neither positive nor negative). This definition reflected the routine nature of the process and suggested that gaming is a coping mechanism. The research team linked leadership styles to budget gaming and found that a punitive style had a positive and significant relationship to budget gaming.

The Collins et al. (1987) categories of gaming were synonymous with the types of influence found in the influence literature (Yukl & Falbe, 1990; Yukl & Tracey, 1992). In the influence literature, socially unacceptable influence techniques are less likely to influence a target (Yukl & Falbe, 1990; Yukl et al., 1996). The first Collins (1987) gaming category is *devious games*, which use socially unacceptable influence processes. For example, one measure is "I get what I want in my budget by letting my boss think my operation has a crisis and must have the budgetary request" (Collins et al., 1987, p. 35). The second category is *economic*. The economic category questions use rational appeal influence techniques. Past influence literature would label this type of influence as useful

and socially acceptable (Yukl & Falbe, 1990; Yukl & Tracey, 1992). For example, “I invite my boss to my work area so that he can see what I really need in my budget” (Collins et al., 1987, p. 35). Finally, the *time* category captures budget games that seek incremental changes over time rather than influencing for more resources. For example, “I get changes in my budget by seeking incremental changes over past budgets” (Collins et al., 1987, p. 35). This category indicates that budget games include using influence tactics to obtain resources.

The subsequent big-budget gaming study was qualitative. Bart (1988) interviewed 113 managers in eight firms to understand budget games, frequency of games, factors in gamesmanship, and factors to attenuate gamesmanship. Bart (1988) defined budget gamesmanship as” the deliberate and premeditated manipulation of current year sales, cost, and profit forecast by product managers to project an overly conservative image into their product budgets” (Bart, 1988, p. 293). However, Bart also portrayed gamesmanship as a coping mechanism. He revealed, “budgeting games may simply be a form of tactical maneuver that product managers deploy to survive in what they consider to be a hostile environment” (Bart, 1988, p. 292).

In Bart’s (1988) study, managers learned and adjusted behaviors from experience with the process. For example, one manager provided insight, “Some of the more successful managers here last year were the ones that really got their profit targets as low as possible…Unfortunately…I called my numbers realistically and am now being penalized in terms of my bonus…. Last year I was young and innocent. This year, I'm older and wiser!” (Bart, 1988, p. 288). This example demonstrates learning and adjusting behaviors in future years to accommodate uncertainty.

Bart's (1988) study qualitatively collected budget games and recorded frequency. The types of games included: understating volume estimates (48% of respondents), understated price increases (39% of respondents), understated cost reduction (36% of respondents), overstated expenses (48% of respondents), and undeclared innovation (33% of respondents) (Bart, 1988). Bart's (1988) categories include budget slack, and it includes the concept of reducing and under-declaring innovation, an investment in long-term growth.

The literature indicates budget gamesmanship includes long-term investments (e.g., innovation, research and development, long-term projects) and likely includes the capital budget (Bart, 1988; Libby & Lindsay, 2019; Van der Stede, 2000). When long-term investments (e.g., capital investments) are delayed or used to fill short-term shortages, long-term growth is at risk. Critics of the budgeting process claim the budget causes a quest for operational efficiency and cost-cutting at the risk of strategic growth (Hope & Fraser, 2003; Neely et al., 2003). A reduction in a long-term investment exhibits short-term behavior, and some authors (Libby & Lindsay, 2019; Van der Stede, 2001) consider this in their conceptualizations of gaming.

The "Beyond Budgeting" trend advocates eliminating the budget process and measuring relative performance (Hansen et al., 2003; Hope & Fraser, 2003; Libby & Lindsay, 2007). Examining the claim of Beyond Budgeting, Libby and Lindsay (2010) found that organizations still consider the budget a valuable tool but acknowledge that budget gaming is prevalent and a legitimate source of frustration. They found that over 95% of the participants played budget games at least occasionally. They claimed, "These

results indicate that budgetary gaming is prevalent, consistent with the writings of Bart (1988) and Hope and Fraser (2001)" (Libby & Lindsay, 2010 p.65).

Libby and Lindsay (2012) reviewed three antecedents (prior period performance, budget emphasis, and trust) of budget gaming and the relationship to budget value. Like earlier studies (Bart, 1988; Otley, 1978; Van der Stede, 2000), prior period performance and budget focus significantly positively correlated with budget gaming. Libby and Lindsay (2012) defined budget value as a "budget's ability to assist in meeting organizational goals" (p. 2). In the 2012 study, budget emphasis was described as "the degree to which the firm places emphasis on meeting budget targets in performance evaluation" (Libby & Lindsay, 2012, p. 3). Like the Bart (1988) study, Libby and Lindsay (2012) found a significant relationship between trust and budget gaming. This finding was a critical boundary condition because it indicates that trust can attenuate budget gaming.

Libby and Lindsay (2019) continued the line of inquiry between budget gaming and budget value. It was clear that budget gaming played a role in attenuating budget value. Libby and Lindsay found that budget gaming mediates the relationship between a set of antecedents (budget emphasis, budget target difficulty, budget-based bonuses, and superior trust) and the consequence of budget value. Libby and Lindsay (2019) expanded the definition of budget gaming to include "short-term" behaviors. Therefore, the study recognizes that managers can sacrifice long-term investments (capital projects or long-term expensed projects) for short-term gain; and the study acknowledges that gaming goes beyond just creating budgetary slack (Libby & Lindsay, 2019, p. 155).

The past budget gaming, budget slack, and budget bias literature outlined many financial behaviors leveraged in budget games. Libby and Lindsay (2010, 2012, 2019) consistently measured budget gaming as one factor centered on financial games. Games include accelerating or delaying expenses or revenue, under committing to targets "sandbagging," and taking a "big bath" if you are not likely to meet performance expectations (Libby & Lindsay, 2019). Taking a "big bath" is a term used when managers incur excess expenses or delay revenue when budget attainment is not feasible. The action is claimed to help the manager obtain the following year's budget.

Moral Hazard, Budget Gaming, and Ethics

Some characterize budget gaming as benign and a mechanism to survive (Bart, 1988; Collins, 1987), whereas others see it as a moral hazard or ethical problem (Collins, 1978). A moral hazard occurs when an agent acts in their best interest instead of the principal's best interest. While budget gaming is perceived differently, most agree it is the inefficient use of resources and is a non-value-added consumption of time (Hope and Fraser, 2003; Libby and Lindsay (2007, 2010, 2012). My dissertation characterizes it through the principal-agent theory as a moral hazard caused by information asymmetry. In the principal-agent framework, an agent has more information than the principal. The agent leverages this information asymmetry to shirk. For example, the agent understands their performance capability but adds buffers or can delay/accelerate revenue and expenses to achieve targets because information asymmetry exists. Using this theory, budget gaming should be attenuated through mechanisms to reduce information asymmetry; however, the prior literature indicates budget gaming remains high (Libby

and Lindsay, 2019). This study will manipulate a simple ethics attestation to see if it is effective in attenuating gaming.

Hypothesis 1: Budget gaming will be reduced if the manager signs an ethics attestation.

Throughout the history of the construct, budget gamers delay revenue and expenses to make a budget plan. Managers accelerate revenue or expenses, depending on prior period performance. Managers under-commit to revenue and productivity goals to establish easier targets. Furthermore, managers missing the budget this year can delay revenue and accelerate expenses to set themselves up for the following year (Bart, 1988; Collins et al., 1987; Libby & Lindsay, 2019). Budget gamers manipulate timing to achieve budget rather than changing actual performance.

To conclude, budget gaming includes deliberately accelerating or decelerating expenses or revenue to hit a target. It also includes under-committing to revenue or expense targets in both the operational and capital budgets. While the past literature suggests that the motive for gaming is survival, the literature indicates gaming intensifies when performance and compensation are linked to budget attainment.

Organizational Politics and Compensation Conditions

In this section, I outline two factors hypothesized to affect budget gaming: organizational politics and compensation conditions.

Perceptions of Organizational Politics and Budgeting

Organizational politics are ubiquitous in every organization and affect individuals and organizations positively and negatively (Ferris et al., 2019; Gandz & Murray, 1980; Kacmar & Baron, 1999). Political behavior and the division of scarce resources are often

paired together in the literature. For example, Ferris et al. (2002) confirmed, "organizational politics examines the extent to which such (political) behaviors are pervasive in the workplace, decision-making, and resource allocation processes within the organization" (p. 6). Mayes and Allen (1977) stated, "Political behavior in an organization has been viewed as actions that make a claim against the organizations' resource sharing system" (p. 673). Kacmar and Baron (1999) noted, "political behavior generally occurs when there is competition over limited resources and a lack of clear rules as to how the resources should be allocated" (p. 4). The organizational politics literature links the division of resources to political behavior.

Moreover, one study found that the division of resources is the third-highest ranked organizational process that elicits political behavior (Allen et al., 1979). The study found that organizational processes are labeled political if the process is ambiguous, critical to the organization, and salient to the political actor (Allen et al., 1979). In budgeting, the division of scarce resources is a process salient to the actor, and the saliency amplifies when the budget is used for performance evaluation and pay.

Because politics is characterized in many ways, it is helpful to ground the reader in the definition of organizational politics for this study, which aligns with the definition of organizational politics by Gotsis and Kortezi (2009). Gotsis and Kortezi (2009) describe politics as:

> Intentional acts of influence, mainly through informal means, the intentional use and exercise of power, often through activities employed to give access to scant resources, actions, and tactics to influence decision making, as well as behaviors occurring on an informal basis within organizational settings. (p. 498)

By this definition, an individual using influence through the informal system to obtain a resource is engaging in organizational politics. This definition asserts that organizational politics is linked to the division of resources, resulting in political behaviors.

The organizational politics literature links politics to budget allocation (Gandz & Murray, 1980; Pfeffer & Salancik, 1974). Pfeffer and Salacik (1974) found that influence (measured by the membership on research board committee membership and instructional units (e.g., student demand for classes) was significantly and positively correlated to the allocation of general budgetary funds (Pfeffer & Salancik, 1974). However, the single most crucial indicator of the allocation of the general fund was departmental power. Power, politics, and influence are linked and amplified when the division of resources is involved (Kacmar & Baron, 1999). Ferris et al. (1996) found that the centralization of power has a significant and positive relationship to organizational politics. So, highly centralized organizations have more political behavior.

Formalization (degree of policies and procedures) is a significant antecedent in both the organizational politics literature and budgeting literature (Ferris et al., 1996; Lau & Tan, 2006; Maiga & Jacobs, 2007). Formalization is found to reduce the amplitude of organizational politics (Ferris et al., 1996; Kacmar & Baron, 1999). The literature is clear: Ambiguity and lack of formal policies and procedures amplify organizational politics and the perceptions of politics. As such, it is reasonable to expect the budgeting process is more prone to organizational politics if it lacks procedural justice and a formalized process (Lau & Tan, 2006, 2012; Maiga & Jacobs, 2007). Maiga and Jacobs (2007) found an indirect link between procedural and distributive fairness and the

propensity to create budget slack. Other studies (Wentzel, 2002; Lau & Tan, 2012, 2006) found connections between distributive and procedural fairness and job attitudes such as job satisfaction, job tension, and performance. Kacmar and Carlson (1996) included the degree of formalization in their perceptions of organizational politics scale. From this perspective, low formalization is related to a higher perception of organizational politics and is a good indication of a "high political environment."

Perceptions of organizational politics. The perceptions of organizational politics scale (POPS) is frequently used to measure the effect of political behavior on individuals and organizations (Ferris et al., 2019). A political behavior/tactic triggers a political perception (Ferris et al., 1989). An individual's perception becomes their reality (Gandz & Murray, 1980). Furthermore, each actor can perceive the same event differently. Gandz and Murray (1980) suggested, "workplace politics is best conceived as a state of mind" (p. 245). Ferris et al. (2019) defined POP as "an individual's subjective evaluation about the extent to which the work environment is characterized by coworkers and supervisors who demonstrate self-serving behavior" (p.311). Ferris et al. (1989) developed the first model of perceptions of organizational politics, which scholars have enhanced and leveraged for additional studies over the last thirty years (Ferris et al., 2019; Ferris et al., 1989). The best measure of the benefits and consequences of political behavior and tactics is the perception of organizational politics (Ferris et al., 1996; Ferris & Kacmar, 1992; Hill, 2017).

Political behavior is linked to the division of scarce resources (Ferris et al., 2002; Kacmar & Baron, 1999). Simply put, individuals seek to use influence through informal systems to gain resource advantages. This behavior is likely not sanctioned by the

organization and can be perceived as positive or negative (Ferris et al., 2019; Ferris et al., 1989; Gandz & Murray, 1980). Moreover, when the budget is used to measure performance, individual politicians are incentivized to ensure budget obligations are met and are likely to engage in political behaviors to obtain larger budgets and secure slack (Allen et al., 1979; Ferris et al., 1996; Ferris & Kacmar, 1992; Pfeffer & Salancik, 1974). Therefore, it is feasible that the perceptions of organizational politics are an antecedent of budget gaming, as individual politicians exhibit political behaviors to obtain scarce resources. See Figure 1.

[Insert Figure 1 About Here]

Hypothesis 2: Organizational politics are positively related to budget gaming, where higher levels of politics are associated with increased levels of budget gaming.

Budget attainment, compensation, and gaming. Managerial accounting plays a crucial role in the use of information to incentivize behaviors and outcomes, and it provides control systems to monitor for agency problems. This section provides an overview of one type of incentive program—pay for performance (PFP). If incentives, such as compensation practices, increase gaming behaviors, one must ask if the increased performance is worth the effort. This is troublesome because the budget is an organizational control system. In this section, I outline the inherent problems with PFP as an incentive to improve outcomes. Finally, the passage ends with controls to uncover two agency problems—information asymmetry and moral hazards.

Performance pay is one type of contingency pay where individual-based incentives are offered in exchange for specific outcomes. So, as results increase, pay

increases (Ogbonnaya et al., 2017). Pay for performance includes merit-based pay (annual pay raises from individual performance) and bonus pay (annual lump sum payouts based on individual performance) (Nyberg et al., 2013). The objective of PFP is to incent employees to achieve higher goals. Studies find that both forms of PFP can increase performance and attract higher-quality employees (Gerhart & Rynes, 2003). Budgeting literature finds similar results. Fisher et al. (2015) found that as budget goals are used to measure performance, performance increases. In addition, stretch targets result in higher performance (Fisher et al., 2015; Sprinkle, 2003). Performance pay is also shown to improve job satisfaction, employee commitment, and trust (Ogbonnaya et al., 2017).

Both forms of PFP (merit pay and bonus pay) have shown a positive and significant relationship to future performance; however, bonus pay has a stronger connection to future earnings (Nyberg et al., 2013). From an economic perspective, a rational agent prefers merit pay because it increases the base salary resulting in increased earnings over time. However, studies indicate that agents prefer bonus pay to merit pay (Gerhart & Rynes, 2003) when the bonus and merit increase are equivalent due to behavioral biases. A $6,000 bonus is likely more salient than a salary because it is available at once. On the contrary, a merit increase of $6,000 would result in a $500 per month over a year. The irrational agent would prefer an instant lump sum amount over small amounts paid out over 12-months.

Expectancy theory explains the enhancement of performance through a pay-for-performance program (Vroom, 1964). A rational agent is motivated by a perceived connection between their effort and a financial reward (Nyberg et al., 2013). A rational

agent will link performance to rewards and exert more effort. Three attributes must be present for PFP to work (Nyberg et al., 2013). First, the reward must have value to the agent. Next, there must be a tangible link between performance and the reward so that the agent perceives their efforts result in improved performance. Finally, achieving the outcome must be likely. Assuming these conditions are present, performance pay should be a no-debate in management. Many companies leverage various forms of performance pay (Gerhart & Rynes, 2003), but there are disadvantages to PFP.

Pay for performance has three distinct disadvantages: a myopic focus on the incentivized behavior at the expense of other behaviors, information asymmetry leading to shirking, and moral hazards. First, PFP compensation systems cannot address all performance areas; employees are likely to be biased toward behaviors that are directly rewarded. This could result in agency costs that erode firm value. Examples of this include focusing on one performance at the expense of others (e.g., productivity over quality or individual over the organization). Gerhart and Rynes (2003) found that PFP schemes also encourage intense competition between employees.

Information asymmetry is a form of agency cost which can result in slack and shirking. The principal's and agent's interests conflict. The principal-agent theory predicts an agent desires to exert the lowest possible effort for the highest possible compensation while the principal desires the most effort for the lowest possible compensation (Nyberg et al., 2013; Ogbonnaya et al., 2017; Sprinkle, 2003). This conflict of interest can lead to information asymmetry. Researchers have found that agents can withhold private information on their ability and effort (Fisher et al., 2002; Gerhart & Rynes, 2003). Past accounting scholars find managers leverage information asymmetry to

build slack and budget game (Bart, 1988; Collins et al., 1987). Information asymmetry is an enabler in shirking, slack creation, and budget gaming.

Third, incentives and performance pay are linked to moral hazards. For example, one explanation of the Enron scandal was executive incentives and compensation (Kulik et al., 2008). In the Enron example, the agent (senior management team) acted in their interest rather than the principal's interest (shareholders). Enron executive PFP compensation includes stock-based incentives. Executives fraudulently misrepresented financial statements and cashed out personal stock options before the company collapsed (Gerhart & Rynes, 2003; Kulik et al., 2008). Kulik et al. (2008) found that Enron's corruption was not isolated to the top management team. Instead, corruption was found throughout the entire organization. One of the culprits of the institutionalization of corruption was the incentive system of force ranking employees (Kulik et al., 2008). This incentive system distributes most awards to the top performance, with a portion going to the middle. Bottom performers are removed from the organization. This type of system is credited with promoting the best politicians rather than the best performers and is linked to moral hazards (Kulik et al., 2008). Another example of an incentive system that leads to widespread moral hazards was Wells Fargo. The Wells Fargo incentive system included unrealistic sales goals and incentives, which rewarded new account growth. As such, employees opened new accounts and transferred money without the consent of account owners. Wells Fargo terminated 5,300 employees and paid over $185 million in fines (Glazer, 2016) because of this moral hazard.

Finally, budget biasing and gaming behavior is linked to the incentives in compensation structures. An agent has two motivations to game: 1) gain resources in

their budget 2) to achieve performance evaluation and compensation goals (Lukka, 1988; Walker & Johnson, 1999). Walker and Johnson (1999) found that budgetary slack increased when a bonus-based compensation structure was implemented in a Fortune 250 company. Specifically, salespeople under committed to sales targets after a bonus-based compensation program was implemented (Walker & Johnson, 1999). In an experiment at a professional sales company, Larkin (2013) found that salespeople offered more significant pricing discounts to customers in the periods the salesperson was missing their quota required to earn their maximum bonus and commissions.

Simply put, salespeople were gaming the system to ensure they received the maximum compensation (Larkin, 2014). Jenson (2001, 2003) links budget gaming to compensation structures. Jensen (2003) stated, “These budget-based systems reward people for lying and for lying about their lying and punish them for telling the truth. These systems reward gaming while obfuscating the facts they are meant to summon.” (p. 380). This is problematic because the budget is a corporate control system. In summary, if employees stand to gain financial bonuses from budget outcomes, this rewards gaming behavior, especially in comparison with salary or fixed-rate compensation systems.

The alternative to a PFP scheme is a fixed-rate salary system. A fixed-rate (salary only) pay system is a compensation scheme with a base salary that is not results-based. Expectancy theory predicts there is no incentive to perform above standards (Vroom, 1964). In the same manner, economic theory would not predict above-average performance. Prior studies have indicated that performance under fixed-rate compensation systems is lower than performance pay compensation systems (Sprinkles, 2003). There is also evidence that individual performance declines when results are not

visible under a fixed-rate system (Sprinkles, 2003). In the same manner, agency cost is predicted to be lower under a salary. The beyond budgeting initiative advocates severing the budget from performance incentives as a solution to gaming. Therefore, it is feasible that budget gaming is lower in a fixed-rate (salary-only) system than under a pay-for-performance system.

Hypothesis 3: Budget gaming is lower in a fixed-rate system than a bonus-based system.

Before the financial crisis of 2008, penalty pay was common practice in contracts between customers and suppliers, but it was not a typical compensation process (Church et al., 2008). However, it emerged as an executive compensation practice after the Troubled Asset Relief Program (TARP) Act of 2009. This act required TARP recipients to add provisions to claw back incentive compensation from the top 20 compensated employees for material misstatements in financial statements.

Penalty pay is a compensation strategy where a bonus is paid upfront (to the agent) but returned to the principal if the agent does not meet objectives. An example of penalty pay is military sign-on bonuses. Military members return the sign-on bonus if an objective is missed in the contract. Other examples include long-term incentive compensation in which bonuses paid over a time period are returned for performance. The total compensation in a penalty pay compensation strategy is equivalent to a bonus-based compensation strategy. From an economic perspective, a rational agent would be indifferent to a comparable compensation structure. For example, if an agent's salary is $5,000, and they can earn a $1,000 bonus for meeting a target, total compensation is $6,000. Penalty pay has the same compensation total of $6,000; however, if the target is

not achieved, the agent would return the $1,000, leaving a base salary of $5,000. The bonus compensation system and penalty compensation system have the same value. However, previous studies indicate that agents prefer bonus pay to penalty pay structures, defying economic theory (Brink & Rankin, 2013; Frederickson & Waller, 2005; Gonzalez et al., 2019). Church et al. (2008) found that effort increases under penalty compensation systems. An agent's irrational behavior is explained through the behavioral bias of loss aversion. Individuals are averse to lose compensation and prefer not to earn a bonus over returning a bonus (Brink & Rankin, 2013). Experimental studies indicate that participants under penalty pay compensation exert more effort than under bonus pay to avoid returning compensation (Gonzalez et al., 2019; Hannan et al., 2005). Hannan et al. (2005) found that loss aversion explained why employees preferred not earning a bonus to penalty pay.

Behavioral finance and accounting researchers consistently found that individuals make irrational decisions and exert effort to avoid losses (Gerhart & Rynes, 2003; Hannan et al., 2005; Shefrin, 2007). Therefore, it is likely that budget gaming is heightened under a penalty pay compensation system than a bonus-based or fixed-rate compensation system. An agent will likely work harder to avoid returning the bonus.

Hypothesis 4: Budget gaming is higher under a penalty-based system than a bonus-based system.

I expect an interaction between the political environment and compensation structure in predicting budget gaming. Agency theory predicts that employees are risk-averse and take measures to avoid risk (Munyon et al., 2016; Rynes et al., 2005). Specifically, when the compensation is material to the individual, gaming can occur. An

annual bonus is a material payment that is salient to the agent. (As mentioned in the pay for performance section above, Gerhart and Rynes (2003) found behavioral bias causes a rational agent to prefer a bonus compensation structure over an annual merit raise with the same value due to the saliency and size of the reward.) Rynes et al. (2005) studied pay intensity and found that the more intense and salient the compensation structure, the more likely managers will game. They stated, "employees or executives may be tempted to manipulate results-based systems by artificially inflating results measures (e.g., revenues or profits), resulting in short-term incentive payouts but long-term harm to organizations" (Rynes et al., 2005, p. 584). Other researchers find that gaming can occur if standards are not achievable (too easy or too hard) (Munyon et al., 2016). In a political environment, self-interest and opportunistic behavior are used to gain power and resources (Mintzberg, 1983). Therefore, when compensation losses or gains are material and salient to the agent in a political environment, gaming is likely more prevalent in a high political environment than in a low political environment.

Hypothesis 5: A 3-way interaction will be present between politics, compensation, and ethics conditions.

In conclusion, budget gaming is prevalent in practice and a source of frustration. Budget gamers manipulate budgets by delaying expenses or revenue, accelerating expenses or revenue, under committing to productivity, delaying long-term projects for short-term gain, and "taking a big bath" when they will significantly miss their budget objectives. These financial management behaviors are leveraged to meet performance objectives. This study is differentiated from the past literature in that it recognizes organizational politics as an environmental factor that could amplify or attenuate gaming.

Second, this study examines the level of gaming under performance pay, penalty pay, and salary-only compensation conditions. Third, this study analyzes the interactions between compensation, gaming, and political environments. In the end, readers learn how a political environment attenuates or amplifies budget gaming under different compensation systems.

Chapter 3: Method

The hypotheses were tested with an experiment. This section describes the participant demographics and sampling procedures. In addition, I conceptualize the dependent variable (budget gaming) and how it was operationalized. Finally, I discuss the procedures and experimental flow in detail.

Participants

The source of participants was from a business school in the Midwest. A power analysis was conducted using G*Power (Faul et al., 2007) and indicated a sample size of 158 was appropriate for a medium effect (Erdfelder et al., 1996). The medium effect size was selected a priori based on previous findings (Murphy, 2002). Specifically, Libby and Lindsay (2019) found medium effect sizes between the bonus condition and budget gaming. Accordingly, this seemed reasonable to expect a similar compensation program to achieve similar effect sizes. I obtained IRB approval for all procedures before collecting data.

Two hundred forty-three participants enrolled and participated in the study, but only 168 participants remained in the complete analysis. I removed 75 participants for failing the compensation manipulation check. Seventeen professors offered their students extra credit for participating in the experiment. The primary incentive for participation was the extra credit. However, I provided a secondary raffle incentive (twelve $50 gift cards) to ensure that participants remained engaged and would take the task seriously. Per IRB requirements, a research alternative was offered for extra credit. Fifty-two students selected the research alternative extra credit assignment.

The respondent demographic characteristics are reported in Tables 2 and 3. Seventy-five percent of the sample were undergraduate students. Gender was balanced at 50% male and 50% female. Ninety percent of the participants were from the business school with a mix of undergraduates and graduates.

[Insert Table 2 About Here]

[Insert Table 3 About Here]

Materials and Procedures

The hypotheses were tested with an experimental design. The experiment was conducted online using Qualtrics. The experimental design was a 2×3×2 factorial design: the manipulation variables were organizational politics (high or low), compensation condition (salary, bonus, or penalty), and ethics attestation (ethics attestation presented or not presented). There were 12 treatment conditions.

Budget gaming. The dependent variable (DV) in the study was budget gaming. The magnitude of gaming was measured by the difference between the agent's insider information and his/her budget submission. The participant is the agent. In the experiment, the participant is provided "insider information" on what they can achieve. The principal is the manager, who is simulated by the experiment. The agent submits a budget which could have three possible outcomes: (1) submit a budget that aligns with capability, (2) submit a budget that is easier than their capabilities, or (3) submit a budget that is more difficult than their capabilities.

The participants could game the revenue (units sold budget), fixed expense budget, and the long-term project expense budget. Budget gaming was the difference between the agent's insider information and the submitted budget, $B_g = x - y$. Where x =

the agent's insider information and y = the budget submission. There were two places to game: (1) finish 2020 (e.g., accelerate revenue or delay expenses) and (2) submission of the 2021 budget (under commit to targets). The profit metric calculations for the two scenarios: (1) accelerate or delay gaming profit = $B_{g\ Revenue} - B_{g\ Fixed\ Expense} - B_{g\ Long\ Term\ Project\ Expense}$, (2) under commit gaming profit = $B_{g\ Revenue} - B_{g\ Fixed\ Expense} - B_{g\ Long\ Term\ Project\ Expense}$).

I consolidated the six methods to game into two dependent variables: (1) accelerate or delay gaming profit, and (2) under commit gaming profit. The two dependent variables align with the two separate tasks (finish 2020 and budget 2021). To validate the two dependent variables were the best fit, multiple models were considered. Vandenberg and Lance (2000) recommend comparing multiple models to find the best fit. I compared the two factor model to a three-factor and one factor model in a confirmatory factor analyses, resulting in a 2-factor best fit model ($\chi = 21.88$, df = 8, CFI = .948, RMSEA = .102, SRMR = .068). It is important to note that Kenny et al., 2015 recommended ignoring RMSEA values in models with low degrees of freedom. Therefore, this 2-factor model has an excellent fit. The one-factor model (accelerate revenue, delay fixed expenses, delay project expense, under commit to revenue targets, under commit to fixed expense targets, and under commit to project expense targets) was significantly worse than the two-factor model ($\chi = 72.513$, df = 9, CFI = .760, RMSEA = .206, SRMR = .166). See Figure 11. I also ran a three-factor model (factor 1- accelerate revenue and under commit to revenue; factor 2- delay fixed expenses and under commit to fixed expenses; factor 3- delay project expenses and under commit to project expenses). The three-factor model ($\chi = 56.501$, df = 9, CFI = .809, RMSEA= .224 ,

SRMR = .115) was the worse fit. In addition, I ran a more rigorous fittest outlined by Vandenberg and Grelle (2009) by running a parameter-nested sequence and validating that the change in chi-square was significant. The 2-factor model was compared to the 1-factor model, and the fit was significantly different ($\Delta\chi[1] = 50.633$, $p = .001$). The 2-factor model was compared to the 3-factor model, and the fit was significantly different $\Delta\chi[3] = 34.621$, $p < .001$). The model comparison confirmed that a 2-factor model is the best fit.

The participants could play the games in the two scenarios. In the first scenario, the participant could accelerate revenue or delay expenses. These games do not change actual performance; instead, they delay or accelerate timing. In the second scenario, participants can add buffers to their revenue and expense budget submissions.

The first opportunity to game was in Q4, 2020. The participant's year-to-date performance missed budget projections. The only way to achieve the budget was to accelerate the sale of a unit (by offering a price discount), delaying a fixed expense until 2021, or delaying a long-term project. The participant could play one game and achieve the budget, or the participant could play all three games.

The second opportunity to game was the 2021 budget submission. The participant could build slack in revenue, fixed expenses, and a long-term project.

Finish 2020. In this scenario, the participant made decisions on how to finish the year on budget. For example, to complete the year on budget, the participant could:

1. Accelerate revenue- reduce the price by 10% to sell a unit in 2020 versus 2021.
2. Delay a fixed expense from 2020 to 2021.

3. Or delay a long-term project from 2020 to 2021.

Submission of 2021 budget. The participant submitted a budget for 2021. The participant had inside information and could choose to under commit to targets:

1. Under-commit to revenue targets
2. Under-commit to fixed expense targets
3. Under-commit to project expense targets

Independent Variables

The three manipulated factors (i.e., independent variables; IVs) in the experiment were organizational politics, ethics, and compensation.

Organizational politics. Two factors in Kacmar and Carlson's (1997) perceptions of organizational politics scale (POPS) were used to develop the video for the high political condition and the low political condition (general political behavior and going along to get ahead). A manipulation check was conducted using the "general political behavior" and "going along to get ahead" factors of the POPS. The coefficient alpha for this scale was .93. See Appendix A (Panel A) for Kacmar and Carlson's (1997) questions and the modifications.

There are two differences between the high and low political conditions. In the high political condition, affiliations determined process outcomes rather than policies. Similarly, in the high political condition, the protagonist was penalized for speaking up and challenging the process. In the end, the high political scenario had lower formalization and the actors "went along to get ahead." See Appendix B for the high political condition script and Appendix C for the low political condition script. A manipulation check validated that the participants perceived the political conditions

differently. There was a significant difference between the conditions and large effect size (Cohen's $d = 2.367$)

[Insert Table 4 About Here]

Political conditions. I created the political conditions with a 3-minute video. The video script was written using two factors from Kacmar and Carlson (1997) POP scale. The scenario for each political condition was similar except for nuances in (1) procedural justice, (2) affiliations, and (3) not speaking up. The budget process lacked procedural justice in the high political condition, and affiliations determined the outcome more than the formal process. Next, the main character (Alex) spoke up against his/her budget target and faced the consequences. Finally, the antagonist (Pat) received an easier target each round than Alex (protagonist).

In the low political environment condition, budget approval practices were congruent with the policy. Participant budget targets and results were entirely randomized. The participant (Alex) had the same probability as the other avatar (Pat) of achieving the budget target. Therefore, there was a high degree of formalization and procedural justice in the low political condition.

The video was tested in a pilot study with 32-participants. The Kacmar and Carlson (1997) instrument was administered in the pilot test. There was a significant difference between the high and low political environment in the pilot testing and the experiment.

Compensation. The experiment included three compensation conditions (salary, bonus, penalty pay). The salary group received a base salary of $100K, regardless of budget performance. The bonus-based group received a $100K salary and participated in

the bonus program (e.g., worth $20K). The participant received the bonus if the budget target was achieved. The penalty pay group received $120K (the $100K salary plus the $20K bonus) at the beginning of the year; however, this condition returned the $20K bonus if the budget target was not met. The participants in the penalty condition could return compensation two times in the experiment.

A manipulation check was added to the experiment to ensure the participant understood their pay condition. See Appendix A (Panel 3). The test asked the participant to recall their compensation and their bonus amounts based on performance levels. Based on the nature of this test, a t-test was not conducted. The manipulation check had two questions for each compensation condition. Respondents were asked to recall their base compensation and bonus compensation (if applicable). A pilot was conducted to ensure that manipulation checks were adequate. The first pilot was with a sample size of 25-participants. The compensation condition failed in the pilot, and modifications were made. However, when the actual experiment began, the compensation failure rate remained high (75 respondents yielded a 58% failure rate). To address this failure rate, I changed the font of the compensation in the experiment to ensure the saliency of the compensation condition. After this modification, only 5 additional respondents (10% rate) failed the manipulation check. Therefore, the modification worked, and the future manipulation failure rate radically declined. The participants that failed the compensation check were removed from the experiment.

Ethical attestation. The participants in the ethics condition agreed to provide accurate numbers on their budget. Forty-nine percent of the participants received an ethics attestation (81 participants). In the treatment group, participants were presented

with and either agreed or disagreed with the statement, *"*Accurate forecasts and budget submissions are important. WMB requires business managers to acknowledge they will submit accurate and realistic numbers to the best of their ability. Please indicate if you agree to provide accurate numbers to the best of your ability." Two participants did not agree with the ethics attestation in the ethics condition, a 2.4% rate. The disagree rate was low, and the answers were not different from the respondents who agreed. These respondents were added to the treatment group because the participants received the statement. The remaining participants (79 participants) agreed with the statement. Participants in the control group did not receive the statement.

Procedures

As mentioned above, I used an experiment to test my hypotheses, using a 2×3×2 factorial design. Organizational politics had two conditions (high and low). Compensation type had three conditions: (1) salary, (2) bonus, and (3) penalty pay. The ethics attestation had two conditions: (1) statement presented and (2) statement not presented. Therefore, there were 12 treatment conditions. The number of participants in each condition is listed below. See Table 5. The groups were balanced, except for the penalty pay section. Since the penalty pay condition had the highest rate of manipulation check failures, the conditions were not balanced.

[Insert Table 5 About Here]

The experiment was conducted online using Qualtrics. The political manipulation were created using a video: (1) high political environment and (2) low political environment. The compensation condition was created within the text of Qualtrics, which highlighted compensation conditions for: (1) salary, (2) bonus, and (3) penalty pay. The

dependent variables were participant budget selections. The participant used Qualtrics sliders to select: (1) amount of revenue to accelerate, (2) amount of fixed expenses to delay, (3) amount of long-term project expense to delay, (4) revenue budget submission, (5) fixed expense budget selection, and (6) project expense budget selection.

Participants began the experiment by watching a video applicable to their assigned political condition. Next, all participants reviewed a video on how to game at WMB. At this point, 50% of participants entered an ethics condition and signed an ethics attestation.

Finally, participants started the scenarios listed below in the experimental task section

To keep participants engaged, the experiment included: (1) a raffle with prizes and (2) a scenario using multimedia to maintain participants' attention. The raffle system offered a payout of twelve $50 gift cards to keep participants engaged in the exercise. Finally, the scenarios included different media techniques (videos, text, and spreadsheets) to engage participants at various points in the experiment. To ensure the scenarios were realistic, the budget scenarios were modeled from a large corporation in the South.

Rounds. There were three rounds. The first two rounds were practice rounds. I created two practice rounds to ensure the participant understood the mechanics of submitting the budget on Qualtrics. The final round was the round of record. Each round included two tasks. The first task asked participants if they would accelerate revenue, delay fixed expenses, or delay a long-term project expense to achieve the budget target. The second task asked participants to submit a revenue, fixed expense, and long-term project expense budget for the new year.

Experimental tasks. The participant began the exercise by reviewing the politics video corresponding to their political condition. Budget emphasis is high in each political condition. The video explained that managers who do not achieve their budget get "reassigned or fired." The video explains that it is currently Q4, 2020, and the participant is not achieving their budget.

Next, all participants review a "how to game" video. In this video, Alex received advice from other WMB managers on how to game to achieve the 2020 budget target. The video explains the two tasks in the experiment: (1) game to achieve the 2020 budget and (2) submit the 2021 budget. The video instructed Alex on how to submit the 2021 budget. See Appendix D.

Task 1: complete 2020. The experimental task began in Q4 of 2020, and participants were informed they were not achieving the budget targets. To achieve the budget target, the participants were required to either (1) accelerate revenue, (2) delay fixed expenses, or (3) delay a long-term project. If participants did not game, Qualtrics moved them to the compensation results (e.g., bonus compensation did not receive a bonus, penalty pay returned the bonus, but salary condition has no change) and moved on to Task 2. The remaining participants gamed to achieve the budget. Participants could game once or multiple times. They chose the gaming method (e.g., offer a 10% price discount to accelerate revenue, delay fixed expenses, or delay project expenses). They also chose the amount to game (amount of revenue to accelerate or expenses to delay. If participants decided to game and make the 2020 bonus, both the bonus and penalty pay conditions earned $120K. The participants earned raffle tickets for achieving the budget target. (e.g., the salary condition received ten lottery tickets, and both the penalty and

bonus conditions received 12 lottery tickets). These were used for chances in the drawing for winning one of the gift cards, as explained below.

Task 2: submit the 2021 budget. After completing Task 1, the participant was sent to Task 2. The participant was provided historical revenue, fixed expense, and project expense information. The participant received insider information (what could be accomplished) and what finance would approve. This scenario created the information asymmetry necessary for a moral hazard. The participant chose the units sold (revenue budget), the fixed expense budget, and the project expense budget with this information.

[Insert Figure 2 About Here]

Participant compensation. After the experiment, the participant earned raffle tickets based on their compensation strategy and the budget results. For example, participants in the bonus condition earn either 10 or 12 raffle tickets (12 for meeting budget targets). After the experiment closed, I selected four tickets from each compensation condition. Therefore, I awarded twelve $50 gift cards. Participants were notified by email and sent electronic gift cards.

Chapter 4: Results

Hypothesis Testing

There were six ways to game in the experiment with two overarching categories: (1) accelerating or delaying revenue and expenses and (2) under-committing to revenue and expense targets. As mentioned above, I created a profit dependent variable in each category. The first DV was the profit from accelerating or delaying expenses (accelerated revenue- delayed fixed expense- delayed long-term project expense). The second profit DV was the profit from under-committing to revenue and expense targets (amount of revenue slack- the amount of fixed expense slack- the amount of project expense slack). Hypothesis testing occurred with the two dependent variables.

Hypothesis 1. Hypothesis 1 stated that budget gaming would be reduced if the participant agreed to an ethics attestation. The hypothesis was significant for the under-committing profit DV ($F(2, 167) = 3.94$, $p = .021$), but the relationship was not in the hypothesized direction. See Tables 6 and 7. In other words, participants that were presented with, and subsequently agreed to, an ethics attestation engaged in a greater level of budget gaming ($M = 242.25$) compared with the group that did not receive an ethics attestation ($M = 193.81$). Therefore, Hypothesis 1 was not supported.

[Insert Table 6 About Here]

[Insert Table 7 About Here]

Hypothesis 2. The second hypothesis stated that organizational politics would be positively related to budget gaming, where participants in the high politics condition would engage in higher levels of budget gaming. This hypothesis was not supported (Accelerate/Delay Gaming Profit (F (1, 167) = 1.058, p = .305); Under commit Gaming

Profit (F (1, 167) = .68, p = .41) The relationship was not significant, indicating the political environment does not make a difference. The direction of the relationship was curious for accelerate/delay revenue and expenses. In the accelerate/delay games, participants in the low political environment engaged in a greater level of budget gaming (M = 106.18) than the group in the high political environment (M = 87.14). However, the direction for under-committing to targets was intuitive (e.g., under-committing was higher in the high political environment than the low political environment). See Tables 8 and 9.

[Insert Table 8 About Here]

[Insert Table 9 About Here]

Hypothesis 3. The third hypothesis proposed that budget gaming is lower in a fixed-rate compensation system than a bonus-based system. Although the difference was significant, the relationship was not in the hypothesized direction. Therefore, I rejected the hypothesis. For the dependent variable accelerate/delay gaming profit (F (2, 167) = .12, p = .89) and planned contrasts indicated the bonus condition and salary condition were not significantly different (p= .627). The dependent variable under commit to gaming profit (F (2, 167), p = .53) was not significant. Planned contrasts indicated the bonus condition and salary conditions were not significantly different (p = .639). For the dependent variable accelerate/delay gaming profit, the salary condition (M = 95.02, SD = 113.45) had more gaming than the bonus condition (M = 93.83, SD = 123.20). For the dependent variable under commit gaming profit, the salary condition (M = 235.88, SD = 119.56) had more gaming than the bonus condition (M = 210.84, SD = 147.78)

Hypothesis 4. The fourth hypothesis was gaming is higher in the penalty pay condition than the bonus condition. For the dependent variable accelerate/decelerate gaming profit, the relationship was not significant, (F (2, 167) = .122, p = .855). The direction was correct, the bonus condition (M = 93.83, SD = 123.20) had less gaming than the penalty condition (M = 104.91, SD = 125.54). For the dependent variable under commit to gaming profit, the relationship was not significant (F (2, 167) = .632, p = .53), but the direction was correct, but the penalty condition (M = 212.12, SD = 129.20) had more gaming than the bonus condition (M = 210.84, SD = 147.78). Planned contrasts confirmed that the relationships were not significant. See Tables 10 and 11.

[Insert Table 10 About Here]

[Insert Table 11 About Here]

Hypothesis 5. The fifth hypothesis proposed an interaction effect between compensation, organizational politics, and ethics attestation. This hypothesis was not supported for Accelerate/Delay Gaming Profit (F (2, 167) = .345, p = .983). There was not a significant interaction. See Table 12.

[Insert Table 12 About Here]

In addition, the interaction was not in the hypothesized direction. Figure 4 compares gaming in high and low political conditions by compensation condition for the ethics treatment group for the dependent variable - accelerate and delay. There was more gaming in the low political environment than in the high political environment in the salary and penalty conditions.

[Insert Figure 4 About Here]

In the treatment group without an ethics attestation, the low political environment had higher levels of gaming than the high political environment. See Figure 5.

[Insert Figure 5 About Here]

The hypothesis was not supported for overcommitting revenue and expenses because the interactions were not significant ($F = (2, 167) = 1.003$, $p = .447$). However, the directions were correct in the high political conditions with the ethics condition. See Figure 6.

[Insert Figure 6 About Here]

In the non-ethics condition, there was more gaming in the low political environment for the performance pay conditions than gaming in the high political condition. The salary condition had more gaming than the performance pay conditions. I explain this result in the discussion section. See Figure 7.

[Insert Figure 7 About Here]

Table 13 lists a summary of all the hypotheses. In short, none of the hypotheses were accepted. The discussion section provides details on the lack of significant results and the high rate of gaming.

Participants provided comments on their budget choices. These comments were coded and used for the supplemental analysis. After I finished coding, I sent it to an independent researcher to calibrate the coding. We reached an 83% agreement rate on the first pass. I recoded the codes in question and removed duplicates, resulting in an >98% agreement rate. Three distinct budget gaming mindsets emerged from the qualitative data.

[Insert Table 13 About Here]

Supplemental Analysis: Descriptives of Gaming

Seventy-six percent of the participants played at least one budget game. This high rate of gaming warranted a supplemental analysis to describe the frequency of games and leveraged qualitative comments to understand participant choices. The participants' rationale for gaming provided insights into why participants gamed. The first section of the supplemental analysis provides basic descriptives and proportions. The second section describes a participant's budget range in the context of the maximum finance would approve and the participant's choice. This range was compared to the participant's insider information (e.g., the experiment provided the participant insider information to replicate the information asymmetry). The final section provides a qualitative analysis of the participant's budgetary comments.

Gaming descriptives. Only 24% of the participants did not game. Of the participants that did not game, the mix of non-gamers was similar in the low and high political environment. However, a different dynamic occurred in the group that gamed (76% of participants). In this group (the 76%), participants in the low political environment gamed more (55%) than in the high political environment (45%). See Table 14.

[Insert Table 14 About Here]

The group of participants who did not game noted two reasons. Specifically, (1) viewed the action as unethical, or (2) felt that accelerating or delaying revenue and expenses was not an actual change in performance. These comments appeared in both the low and high political environments. For example, a participant in the high political condition said, "Regardless of if I am to get a bonus for achieving the budget, I cannot

falsify the numbers. It is against my moral code to do so." A participant in the low political environment said," I will not accelerate revenue. A competent boss will see a sale at a 10% discount at the end of a fiscal year/quarter and understand why that sale was pushed into this fiscal year. This is especially true with an incentive program centered around hitting budgets. The video clearly stated this is an unfavorable practice, so I would not even attempt it. As an accountant, I know it is wrong to delay expenses. Expenses need to hit in the month they are incurred. Anything different is simply fraud."

Some of the participants who did not game indicated they did not game because it did not meaningfully change performance. For example, one participant said, "In this construct, the gaming of the system and accounting have no real meaning. There is no way to drive sales, manage, and/or determine the value of a manager other than the budget. I would not work for a company which gives such a narrow scope."

Participants were able to play multiple games. There were 629 total games played during the experiment. The under-committing category was the most frequent (60%) type of gaming, while accelerating/delaying occurred 40% of the time. See Table 15.

[Insert Table 15 About Here]

The qualitative comments provided insight into why individuals under-committed to targets. There were 77 total comments in the slack category. Forty-five percent of the comments indicated the participant wanted to build in slack for the targets. The qualitative comments suggested the participant wanted a buffer but would work to overdeliver the budget. It is important to note; participant comments indicated the slack was for a "buffer." Observations did not reveal the "buffer" was to spend on things they did not need. Instead, they wanted breathing room. For example, "you don't want to

underestimate your project expenses because they can vary. What I've chosen to do is give myself a 10% room for error if anything could come up while still trying to minimize the expense budget throughout the project." Sixteen percent of the comments indicated the participant is using math and not emotion to determine the budget. These participants used historical averages and standard deviations to derive a number. The math (via standard deviation) provided the buffer. For example, "Historical Average is the best metric to approximate the base units sold. Additionally, you can easily find the standard deviations off the units sold for the upper and lower bounds."

The ethics attestation did not significantly deter gaming. In total, 51% of the respondents were in the ethics condition. Thirty-nine percent of the participants who signed an ethics attestation also gamed. Several participants did not consider budget gaming a moral hazard or ethics issue. This perception might explain why the ethics attestation did not deter gaming. Eighteen percent of the comments indicated no moral hazard or ethical problem with gaming. For example, one participant said, "selling 2 additional units at 10% discount is an ethical way to reach my budget goal." Thirty-seven percent of the comments indicated that gaming would help the organization. One respondent said, "I have the discretion to offer a discount, and I probably use that frequently to build loyal customer relationships. Doing so now will allow me to make (the) budget while still contributing to the long-term stability of the company." Therefore, it is not surprising that the ethics attestation did not have a significant effect. See Table 16.

[Insert Table 16 About Here]

Distribution of budgets. Histograms may provide additional insight into the participants' budget choices. The patterns were similar. There were three frequent choices: (1) no slack, (2) maximum slack, or (3) historical average. This frequency distribution makes sense because the participant was provided information on (1) the maximum budget finance will approve, (2) the budget that is possible to achieve, (3) historic averages. See figures 8, 9, and 10.

[Insert Figure 8 About Here]

[Insert Figure 9 About Here]

[Insert Figure 10 About Here]

Units sold. Fifty-eight percent of the participants selected: (1) budget with maximum slack, (2) budget with no slack, or (3) historical average. The participant's insider information was that he/she could sell 40 units, but finance would approve 32 units. Therefore, the maximum amount of slack was 8 units (under committing to revenue targets = 40 units- 32-units). Sixteen percent of the participants chose the maximum slack of 8 units, and 12% picked no slack. Finally, 30% of the participants used the historical average.

Simply put, the participants were likely anchored to these three data points that were provided in the experiment. Table 17 shows the anchor points and their relative frequency for the units sold budget. Figure 8 displays the histogram for the units sold budget.

[Insert Table 17 About Here]

Fixed expense slack. The fixed expense budget was bimodal (e.g., the most frequent choice was the maximum budget finance would approve and the insider

information) rather than having three frequent choices. Fifty-nine percent of the respondents chose the full amount of slack or no slack. The reason for this bimodal distribution is that the participant could not select the historical average. The historical average was outside of the budget limits (the maximum expense was 265, and the historical average was 277).

For the fixed expense budget, the maximum slack was 15 (Approval limit was 265- the participant could deliver (250) = 15). Forty-eight participants did not game (budget submission at 250), and 50 participants chose the maximum expense budget of 265. Again, participants were likely anchored to the data points presented in the experiment; thus, their choice was likely biased. See Table 18 and Figure 9.

[Insert Table 18 About Here]

Long-term project. Sixty-five percent of participants either selected the maximum amount of slack, no slack, or the average slack. The remaining 35% of participants chose something in between the anchors. The participants were likely anchored to the numbers provided in the experiment. See Table 19 and Figure 10.

[Insert Table 19 About Here]

The qualitative comments from the long-term project budget indicated that the participants were uncomfortable with the nature of project expenses. The participants likely were anchored to comments in the "How to Game" video. The video indicated that projects are often late and have more cost variance than other expense lines. For example, one participant said, "You don't want to underestimate your project expenses because they can vary. What I've chosen to do is give myself a 10% room for error if anything could come up while still trying to minimize the expense budget throughout the project."

Mindset of gamers. The study participants provided comments and reasons for gaming. Participants were able to comment for the 2020 tasks (why they gamed or not and how they gamed), and the participants commented on how they chose the budget submissions. The comments were coded and categorized with NVIVO v. 12 coding software. The codes were calibrated with another researcher. There was an 83% coding agreement (individual codes) in calibration with a 100% agreement on the categories. The codes without rater agreement were recoded. The categories emerged into three behaviors. Three key budgeting behaviors were: (1) the mathematician, (2) the sandbagger, and (3) the rationalizer.

The mathematician. The mathematician leveraged a mathematical method to choose budgets and decide if he/she would game. This person leveraged the historical data (e.g., average and standard deviation) to budget. A mathematical process dictated an unemotional approach to select and submit the budget. The comments from this type of person indicated a factual rather than emotional budget choice. An example comment of this budget behavior was, "The fixed expense budgets have varied around one standard deviation in last four years." This person also used historical averages in the absence of facts, "It doesn't appear the contract is signed with a vendor, so I believe a more accurate number is the average project expense." This mindset appeared at a high frequency in the under-commit to revenue targets (20.253% of comments) than the total under-commit category (12% of comments). Simply put, 20.253% of the participants selecting revenue targets used mathematical calculations to arrive at a budget number.

The sandbagger. The sandbagger wanted a buffer in the budget, but they indicated they would over-deliver the budget. An example comment was, "Finance will

approve 147K, but I have a vendor that can do it for 130K. I want to provide a cushion for added expenses but show that I can do it for less." The sandbagger felt it was ethical to under-commit to budget targets and over-deliver. This participant was conscious of what finance would approve and what could be delivered, "my choice of 140 for the project expense is because it will get approved by finance and it gives a little wiggle room for mistakes."

The moral hazard rationalizer. The moral hazard rationalizer appeared in the two revenue games (e.g., accelerate revenue and under commit to revenue targets). This person rationalized why it was not a moral hazard nor immoral to accelerate revenue. This behavior was interesting because the participant offered a 10% price discount to accelerate the revenue. Therefore, technically, the fictitious company lost 10% revenue in the spirit of accelerating a sale earlier. An example comment was, "Selling two additional units at a 10% discount is an ethical way to reach my budget goal." This group also rationalized that gaming was necessary, and it was better than other options to the game. An example comment, "I want to focus on accelerating revenue instead of pushing a bunch of projects back. I think this will be more beneficial in the long run."

To conclude, budget gaming was prevalent. Qualitative comments indicated that 18% of respondents did not view gaming as a moral hazard. On the other end, 14% of respondents did not game because they felt it was unethical. The remaining 68% of participants gamed, despite how they felt about gaming. The remarks of these participants suggested that achieving the budget goals was the ultimate objective, and gaming was the best alternative. Essentially, the budget emphasis in the experiment prevailed across political conditions and compensation conditions. The discussion section enlightens the

reader on (1) why the hypotheses were not accepted, (2) offer shortcomings in the experiment, and (3) provides direction for future research.

Chapter 5: Discussion

Budget gaming was prevalent in the experiment. Seventy-six percent of participants gamed the budget. This high rate of gaming is alarming because it prevents the efficient allocation of resources. The "How to Game Video" has contextual clues into the cause of the high rate of gaming: (1) the consequences for missing the budget were high, and (2) "all" of the managers gamed to meet their budget. For example, the video details that consequences of not achieving the budget include loss of compensation and "reassignment, demotion, or termination." The other contextual factor is that the "other managers" game to achieve the budget. The script states, "finish on budget, even if you have to 'fudge' or 'manipulate' the numbers. We call it gaming, and there is nothing wrong with it. It is how you survive at WMB." In summary, there were strong contextual features that likely influenced participant choices.

There were two overarching categories of gaming in the experiment. The first category was accelerating or delaying revenue and expenses. This category offered three ways to game: (1) accelerating revenue (through a price discount), (2) delaying a fixed expense, or (3) delaying a long-term project. Forty percent of participants played games in this category. The second category of gaming was under-committing to targets (e.g., building slack into the budget). This category offered three ways to game: (1) under committing to revenue targets, (2) under committing to fixed expense targets, and (3) under committing to project expense targets. Sixty percent of the games were in this category.

Two primary explanatory mechanisms differentiate the two categories: (1) changing financial timing and (2) under-committing to targets. The first category is

related to changing financial timing to achieve the budget in the current fiscal year. Participants were not changing *performance* to get results; they were changing the *timing of revenue and expenses* to get results. The experiment started in Q4, 2020, and at the baseline, or beginning time point, the participant was off-budget. The only way to finish the year on budget was to game. This type of gaming is common in practice (Libby & Lindsay, 2007, 2010, 2012, 2019). During the fiscal year, business managers may realize they are off-target and can take such actions to achieve the budget. The manager would have three choices: (1) change actual performance (reduce expenses or sell more revenue), (2) not achieve the budget, or (3) game (adjust revenue and expense timing) to achieve budget without changing performance. The actions in this game were not related to improving performance. Instead, this game allowed the person to adjust timing (e.g., offer a price discount to move a customer's order to the current year—initially projected in the next fiscal year, or delay paying an expense until next year).

The second category is related to under-committing intentionally to build a buffer. Technically, this situation is likely to have the most significant amount of information asymmetry. Business managers are likely to understand team capabilities that are not transparent to the individuals creating and approving the budget. In the experiment, participants were asked to submit a budget for 2021: (1) units sold budget (revenue), (2) fixed expense budget, and (3) project expense budget. Participants were provided historical information, insider information, and the number finance would approve. Sixty percent of participants chose a budget different from the insider information. Most participants chose either (1) insider information (19%), (2) historical average (19%), or

(3) max finance approved (24%). Only (40%) of participants chose a number outside of the data provided in the experiment.

I will discuss the key findings in the next section. First, the section outlines why a simple ethics attestation did not reduce gaming. Next, the section outlines why the political condition did not make a difference in gaming. Finally, the section discusses the compensation results (no difference).

Ethics Attestation

A simple ethics attestation did not reduce gaming. At first glance, this result might be surprising; however, for an ethics attestation to be effective, the participant would need to view gaming as a moral hazard or ethical issue. And the participant would need to believe there were other alternatives. The qualitative comments provided insight into this finding. Simply put, some participants did not feel the gaming was an ethical issue. In fact, 18% of the qualitative comments indicated that participants did not think adjusting the timing of revenue and expenses was an unethical practice. One participant said, “selling 2 additional units at a 10% discount is an ethical way to reach my budget goal.” Next, participant comments indicated that budget gaming was necessary, and the only alternate decision was “how.” For example, “I want to focus on accelerating revenue instead of pushing a bunch of projects back. I think this will be more beneficial in the long run.”

The ethics literature supports this finding. The first step in the ethical decision model is identifying a problem (Rest, 1984; Chang, 1994; Cottone & Clause, 2000). Therefore, if the actor does not perceive a problem, the action will not go through an ethical decision-making process. Rest’s (1984) model states that the second step is

perceiving how the action affects others. Again, if a moral problem is identified, the actor would need to perceive that gaming negatively affects others not to act. The budgeting literature provides insights into how a budget gaming action could be perceived as an act of survival and necessity rather than an action that hurts others. Bart's (1988) study indicates that gaming is necessary to survive in a business environment. Collins (1987) calls gaming a "coping mechanism."

Other participants identified gaming as an ethical issue. The participants were frustrated, but they gamed to receive incentives. One participant emailed this comment, "The second video showed a dilemma between listening to coworkers and underestimating the budget to meet goals or being honest on it to give an appropriate estimate for the company. The answer portion was difficult to do because I wanted to do the right thing, but I also wanted to get raffle tickets. I think that helps us understand the study because just like I wanted raffle tickets, the managers wanted bonuses… therefore they did what they had to." One participant sensed a problem (but not an ethical problem) because accelerating revenue or delaying expense did not drive meaningful change. This participant said, "In this construct, the gaming of the system and accounting have no real meaning. There is no way to drive sales, manage, and/or determine the value of a manager other than the budget. I would not work for a company which gives such a narrow scope." In summary, for an ethics attestation to make a significant difference (in the correct direction), the actor would need to: (1) perceive there is an ethical problem, and (2) the problem would need to affect others negatively.

The Political Environment

Organizational politics did not have a significant impact on budget gaming. The high and low political conditions were statistically different, measured by the political manipulation check. Yet, the political situation did not determine the level of gaming.

Qualitative comments indicated that the budget emphasis and the company culture in the experiment significantly affected how participants made choices. For example, in the how-to game video, the moderator states, "At WMB, you are held accountable to your budget, no matter what. Managers who cannot achieve budget targets are reassigned, demoted, or terminated." In addition, the protagonist asks for advice on how to finish the year on budget target from 'other managers." The video states, "finish on budget, even if you have to 'fudge' or 'manipulate' the numbers. We call it gaming, and there is nothing wrong with it. It is how you survive at WMB." Finance creates problems that cause the budget to be unfair, and the games help ensure the budget is achievable." The strong language in the video created a culture and budget emphasis in both political conditions that drove behaviors. Qualitative comments support this explanation. A participant in the high political condition stated, "(I) need to keep the job and stay in the position to make a difference." A participant in the low political environment said, "taking the other managers' advice, I accelerated revenue of one unit and delayed fixed expenses, but not project expenses." This participant followed the advice in the video. A participant in the high political condition said, "by delaying certain budgets, I will be able to make my budget goal and keep the management happy." Next, 48% of the overcommitting comments indicated participants just wanted a buffer. For example, "anything can go wrong over how long it will take to complete this project. I should

allow my team the most room for error that I can get them. Now if anything were to go wrong and increase my expected expenses then it is already budgeted for. If we manage to finish the project under this budget then that makes me, my team, and my boss all look better in the eyes of those at the top." The comments are explicit; individuals want to achieve the budget, add buffers, or change timing. Budget emphasis has a powerful effect. Libby and Lindsay (2012) found that budget emphasis had a medium positive impact on budget games. Budget emphasis was consistent across all 12 conditions. Budget emphasis is the likely cause of non-significant findings between political conditions.

Compensation Condition and Gaming

While past studies found a link between compensation condition and budget slack, this study did not find significant results (Libby & Lindsay, 2012, 2019; Lukka, 1988; Walker & Johnson, 1999). This result is surprising due to the amount of literature on the connection between compensation and gaming. In fact, the entire premise of Jensen (2003) was that companies could reduce gaming if the relationship between compensation and the budget is severed. This experiment questions the validity of those claims. Is it possible that intrinsic motivation and management's importance on budget attainment are more powerful motivators than financial rewards? After all, the beyond budgeting movement (i.e., movement to abolish the budget) never gained traction outside Europe. Perhaps the avoidance of adoption is a sign of the effectiveness of the beyond budgeting program.

Each compensation group received the same level of budget emphasis. The manager in the experiment was disappointed when the participant did not achieve the

budget. In addition, the company culture in the video outlined that everyone gamed, and it was the only way to survive in the company. It is possible that culture and the desire to portray a conservative image were more important to the participants than their compensation. One participant in the salary condition said, “I request 140 to show leadership that I am committed to cost-savings, while still realizing that the data indicates a 140k average project expense. I don't know yet if I have a contract with the vendor, so I request a higher amount to be safe.” Another participant in the bonus condition said, “There was nothing illegal about selling more units to the customer and having them foot the variance of units so you can continue looking good.” Finally, comments from the penalty pay condition indicated a desire to display a good image. “I chose to accelerate two sales because I believe I can sell two units with favorable deals. Only accelerating two sales is a safe bet and is likely. I didn't change the expenses because I want my budget and actual results to mirror each other to show my forecasting/budget skills are superb.”

It is also possible that the compensation conditions weren’t salient to the participants; however, the 168 participants included in the analyses did pass a compensation manipulation check. There are a couple of reasons to believe it was difficult for the participants to feel the effects of the compensation conditions. First, the currency in the experiment was experimental Francs. Although Francs were turned in for raffle tickets, the participant would not physically receive Francs (virtually receive). Most participants completed the experiment between late January and February. The experiment did not close until April 15^{th,} and lottery prizes were drawn until May 1st.

Simply put, the participants did not receive an actual salary, and the raffle was drawn three months after the experiment started. Therefore, the time delay between the experiment and the distribution of raffle prizes could have affected the saliency between budget performance and the rewards. The participants earned extra credit regardless of performance. Therefore, it is likely that the incentives to "finish" the experiment for extra credit was more salient than playing to win for the raffle.

Implications for Practice

Budget gaming is prevalent and is viewed as a mechanism to survive in corporate budgeting processes. Prior studies indicate that budget emphasis is positively and significantly related to budget gaming (Libby & Lindsay, 2010, 2012, 2019). This emphasis on the budget has a powerful effect that exceeds financial incentives and corporate politics. This emphasis is likely controllable and could be adjusted to change the gaming landscape. The boundary conditions for a budget emphasis could provide insights into reducing gaming while using the budget as a control mechanism for performance.

There is a reason the budget remains an essential process in the corporation (Libby & Lindsay, 2007, 2010). The budget provides control mechanisms and a way to monitor progress against strategic initiatives. In many companies, the budget is an annual process, and managers are held accountable to a static number in a very dynamic environment. Managers fear uncertainty and hedge against this uncertainty with budget gaming. The critical question becomes, "how can corporations help managers deal with uncertainty?" Trust might be the key to this question. If managers trust their leadership to take care of them when situations arise out of their control, the buffers might decrease. A

study by Libby and Lindsay (2019) found a significant and negative relationship between trust and budget gaming. This finding indicates that trust could be a key antecedent in budget gaming.

Information asymmetry is the fodder that enables budget gaming. If the information asymmetry could be reduced, the allocation process could be more efficient. The modern corporation has access to more data with digitization, automation, and machine learning. Automation control mechanisms could reduce information asymmetry. As information asymmetry decreases, gaming is likely to decrease. Corporations should consider processes to revise the budget as uncertainty arises.

The under-commit games were played 60% of the time versus the acceleration and delaying games at 40%. The qualitative comments revealed this was to provide "breathing room," but the respondents would try to improve performance. Budget targets caused anxiety in the experiment. Accelerating and delaying revenue and expense games occurred 40% of the time. The qualitative comments revealed that some individuals did not see this game as a moral hazard. If accelerating a sale this year (through a 10% price discount) helps achieve the budget goal, the participant did not see a problem.
Simply put, if "everyone" games, then there is an underlying culture and practice that gaming is not a problem. The experiment played to this culture. The "how to game' videos indicated that everyone delays and accelerates to achieve the budget objective. In other words, practice will override policy. Corporations should understand if their practice and policy are aligned or not aligned. If practice and policy are not aligned, then the practice is likely to guide employees. The culture literature indicates that culture is a positive force that can cause positive or negative outcomes. Specifically, Balthazard et

al., 2006 linked negative culture attributes to practice to negative individual and organizational outcomes. Simply put, practice and culture will guide employee decisions to behave. Therefore, it is not enough to have a policy to receive positive results; the culture and practice should align to the policy.

Limitations

There were several limitations in this experiment. First, I used students from a Midwestern university. Students could respond differently than a practitioner. Sixty-eight percent of the respondents had no budgeting experience. Libby and Lindsay (2007, 2010, 2012, 2019) sampled professionals in the Institute of Managerial Accountants in budget gaming studies. Therefore, prior study samples were from practice and used accounting professionals. Only 45% of the respondents in this experiment were in the accounting or finance departments. However, general managers come from multiple disciplines, and perhaps a sample of students from various business majors is more representative than a sample from a professional accounting association.

Another limitation is that the experiment provided the user with three data points that could have led the participant's answer: (1) historical average, (2) the budget finance would approve, and (3) insider information on what could be accomplished. At first, this seems benign; however, 62% of the participants chose one of these three numbers. This result could be an indicator that the experiment led the participant to the choice. A better way to design future experiments is to ask the participant to complete a task (e.g., solve a puzzle, make a widget, etc.), so the budget submission is entirely in his/her control and not suggested in language. See Table 20.

[Insert Table 20 About Here]

Because the budget distributions were either bi or tri-modal, the residuals were non-normal. Technically, an underlying assumption in an ANOVA is normal residuals. Non-parametric tests were considered, but none were robust enough to handle 12 treatment conditions. Therefore, a factorial ANOVA was leveraged, but it is a limitation in the experiment.

Next, the experiment was conducted during the COVID-19 pandemic, so an online platform (Qualtrics) was utilized. Because an online platform was used to administer the experiment, it was likely that the compensation conditions were not salient. The experiment took three months to complete, and the payments were not available until all data were collected. A related concern is that experimental Francs were used to compensate the students, but students were not handed real money. Instead, Qualtrics calculated the participant compensation and traded it in for lottery tickets via a screen. While the participants passed compensation manipulation checks, there is the chance they did not really "feel" their compensation condition. It is plausible that the participants felt the budget emphasis, which was more potent than compensation or political conditions. For example, one participant said, "Same as before. My opinion has not changed since I experimented in the 2nd round…. No matter what happens, Pat sabotages you, finance gets the spreadsheet wrong, VP hates you for it, and the result is such a swing that changing the settings to meet next year is impossible, so I might as well do what is best and hope for good results." In addition, in the accelerate and delay gaming category, 27% of the qualitative comments indicated they were just trying to meet the budget target.

Finally, the concept of penalty pay is not well known. Participants likely struggled with the idea, affecting results. Moreover, three compensation conditions overcomplicated the ANOVA (12- total treatment conditions).

Future Research

The budget gaming literature could advance in many ways. Gaming was prevalent in this experiment. It would be interesting to understand the mindsets of a budget gamer. A simple conjoint choice analysis leveraging mind genomics (e.g., conjoint choice analysis) would provide the mindsets of gamers. Mind Genomics would validate the qualitative comments in this experiment. Moskowitz (2012) refers to this approach of mindsets as, "'Mind genomics' is founded based on inductive science, rather than based on the more traditional hypothetico-deductive science" (p. 1). If a practitioner, manager, or controller understood manager mindsets, they could control for environment or culture to reduce gaming.

For the budget gaming literature to advance, a new scale should be developed that considers the new digital age. The early behavioral psychometric scale was Collins et al. (1987), with the most recent as Libby and Lindsay (2007). The practice has shifted to big data, automation, artificial intelligence, and machine learning. Budget gaming behaviors are likely different as big data is likely to reduce information asymmetry. The games and behaviors are possibly shifting with technology.

This study did not consider prior period performance as an antecedent to budget gaming; however, past studies found a significant and positive effect (Libby & Lindsay, 2012). It would be interesting to understand if prior period performance mediates the relationship between organizational politics and budget gaming. It could be plausible that

most people prefer not to game but engage in it if prior period performance negatively impacts the budget. And the engagement in gaming, mediated by prior period performance, could differ by political condition. Similarly, the literature would advance by understanding if prior period performance mediates the relationship between compensation strategy and budget gaming.

This study focused on budget gaming on the operational budget and did not consider the capital budget. The capital budget is also likely to have gaming. Gaming could be more prevalent and significantly impact the organization since capital projects affect the balance sheet, statement of cash flows, and the profit and loss statement. Moreover, the games are likely to be different since capital projects are approved in a different process.

Budget emphasis is an influential antecedent for budget gaming (Libby & Lindsay, 2012, 2019). Budget emphasis is likely controllable, and with slight changes to emphasis, there could be a reduction in gaming. Moreover, trust could mediate the relationship between budget emphasis and budget gaming. Trust was found as a significant and negative relationship to budget gaming in Libby and Lindsay (2019). It would be interesting to understand if budget gaming gets lower in high trust environments under different political conditions.

Conclusion

Budget gaming is common (76% of participants gamed in the experiment) and a source of frustration. Participant qualitative comments indicated that most participants preferred a buffer in the budget to offset uncertainty. There was not a significant difference in gaming between a low and high political environment. In addition, the

compensation condition did not make a significant difference in budget gaming. Finally, the ethics condition was not significant. The experiment contained a high level of budget emphasis, which likely influenced the results. Qualitative comments indicated there were three budgeting mindsets. The first mindset was the moral hazard rationalizer. The remarks of this mindset rationalized why gaming was not wrong. The second mindset was the sandbagger. This mindset added buffers to protect against uncertainty. The final mindset was the mathematician. This mindset used an algorithm rather than emotion to choose budget targets.

References

Allen, R. W., Madison, D. L., Porter, L. W., Renwick, P. A., & Mayes, B. T. (1979). Organizational Politics: Tactics and Characteristics of Its Actors. *California Management Review, 22*(1), 77-83. https://doi.org/10.2307/41164852

Anderson, C. A., & Bushman, B. J. (1997). External Validity of "Trivial" Experiments: The Case of Laboratory Aggression. *Review of General Psychology, 1*(1), 19-41. https://doi.org/10.1037/1089-2680.1.1.19

Balthazard, P. A., Cooke, R. A., & Potter, R. E. (2006). Dysfunctional culture, dysfunctional organization. Journal of Managerial Psychology, 21(8), 709-732. https://doi.org/10.1108/02683940610713253

Bart, C. K. (1988). Budgeting Gamesmanship. *Academy of Management Perspectives, 2*(4), 285-294. https://doi.org/10.5465/ame.1988.4274774

Bedi, A., & Schat, A. C. H. (2013). Perceptions of organizational politics: A meta-analysis of its attitudinal, health, and behavioral consequences. *Canadian Psychology/Psychologie canadienne*, *54*(4), 246-259. https://doi.org/10.1037/a0034549

Brink, A. G., & Rankin, F. W. (2013). The Effects of Risk Preference and Loss Aversion on Individual Behavior under Bonus, Penalty, and Combined Contract Frames. *Behavioral Research in Accounting*, *25*(2), 145-170. https://doi.org/10.2308/bria-50408

Chang, V. N. (1994). A transactional analysis decision-making model and ethical hierarchy. Transactional Analysis Journal, 24, 15–20.

Church, B. K., Libby, T., & Zhang, P. (2008). Contracting Frame and Individual Behavior: Experimental Evidence. *Journal of Management Accounting Research, 20*(1), 153-168. https://doi.org/10.2308/jmar.2008.20.1.153

Colquitt, J. A. (2001). On the dimensionality of organizational justice: a construct validation of a measure. *Journal of Applied Psychology, 86*(3), 386-400. https://doi.org/10.1037//0021-9010.86.3.386

Collins, F. (1978). The Interaction of Budget Characteristics and Personality Variables with Budgetary Response Attitudes. *The Accounting Review, 53*(2), 324-335. https://www.jstor.org/stable/245897?seq=1#metadata_info_tab_contents

Collins, F., Munter, P., & Finn, D. W. (1987). The Budgeting Games People Play. *The Accounting Review, 62*(1), 29-49. www.jstor.org/stable/248044

Cottone, R. R., & Claus, R. E. (2000). Ethical Decision-Making Models: A Review of the Literature. *Journal of counseling and development, 78*(3), 275-283. https://doi.org/10.1002/j.1556-6676.2000.tb01908.x

Erdfelder, E., Faul, F., & Buchner, A. (1996). GPOWER: A general power analysis program. *Behavior Research Methods, Instruments & Computers, 28*(1), 1–11. https://doi.org/10.3758/BF03203630

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods, 39*, 175-191.

Ferris, G., R., Adams, G., Kolodinsky, R., W., Hochwarter, W., A., & Ammeter, A., P. (2002). Perceptions of organizational politics: Theory and research directions. In J. Y. Francis & D. Fred (Eds.), *The many faces of multi-level issues* (Vol. 1, pp. 179-254). Emerald Group Publishing Limited. https://doi.org/10.1016/S1475-9144(02)01034-2

Ferris, G. R., Ellen, B. P., McAllister, C. P., & Maher, L. P. (2019). Reorganizing Organizational Politics Research: A Review of the Literature and Identification of Future Research Directions. *Annual Review of Organizational Psychology and Organizational Behavior, 6*(1), 299-323. https://doi.org/10.1146/annurev-orgpsych-012218-015221

Ferris, G. R., Frink, D. D., Galang, M. C., Zhou, J., Kacmar, K. M., & Howard, J. L. (1996). Perceptions of Organizational Politics: Prediction, Stress-Related Implications, and Outcomes. *Human Relations, 49*(2), 233-266. https://doi.org/10.1177/001872679604900206

Ferris, G. R., & Kacmar, K. M. (1992). Perceptions of Organizational Politics. *Journal of Management, 18*(1), 93-116. https://doi.org/10.1177/014920639201800107

Ferris, G. R., & Judge, T. A. (1991). Personnel/Human Resources Management: A Political Influence Perspective. *Journal of Management, 17*(2), 447-488. https://doi.org/10.1177/014920639101700208

Ferris, G. R., Russ, G. S., & Fandt, P. M. (1989). Politics in organizations. In *Impression management in the organization.* (pp. 143-170). Lawrence Erlbaum Associates, Inc.

Fisher, J. G., Frederickson, J. R., & Peffer, S. A. (2002). The effect of information asymmetry on negotiated budgets: an empirical investigation. *Accounting,*

Organizations and Society, *27*(1), 27-43. https://doi.org/https://doi.org/10.1016/S0361-3682(01)00046-0

Fisher, J. G., Maines, L. A., Peffer, S. A., & Sprinkle, G. B. (2002). Using Budgets for Performance Evaluation: Effects of Resource Allocation and Horizontal Information Asymmetry on Budget Proposals, Budget Slack, and Performance. *The Accounting Review*, *77*(4), 847-865. https://doi.org/10.2308/accr.2002.77.4.847

Fisher, J. G., Peffer, S. A., Sprinkle, G. B., & Williamson, M. G. (2015). Performance Target Levels and Effort: Reciprocity across Single- and Repeated-Interaction Settings. *Journal of Management Accounting Research*, *27*(2), 145-164. https://doi.org/10.2308/jmar-51089

Frederickson, J. R., & Waller, W. (2005). Carrot or Stick? Contract Frame and Use of Decision-Influencing Information in a Principal-Agent Setting. *Journal of Accounting Research*, *43*(5), 709-733. https://doi.org/10.1111/j.1475-679X.2005.00187.x

Gandz, J., & Murray, V. V. (1980). The Experience of Workplace Politics. *Academy of Management Journal*, *23*(2), 237-251. https://doi.org/10.5465/255429

Gerhart, B. A., & Rynes, S. (2003). *Compensation: theory, evidence, and strategic implications*. Sage.

Glazer, E. (2016). Wells Fargo to Pay $185 Million Fine Over Account Openings. *Wall Street Journal*. http://www.mandomarketing.com/library/wp-content/uploads/2016/09/Wells-Fargo-to-Pay-185-Million-Fine-Over-Account-Openings.pdf

Gonzalez, G. C., Hoffman, V. B., & Moser, D. V. (2019). Do Effort Differences between Bonus and Penalty Contracts Persist in Labor Markets? *The Accounting Review*, *95*(3), 205-222. https://doi.org/10.2308/accr-52655

Gotsis, G. N., & Kortezi, Z. (2010). Ethical Considerations in Organizational Politics: Expanding the Perspective. *Journal of Business Ethics*, *93*(4), 497-517. https://doi.org/10.1007/s10551-009-0241-7

Graham, J. W. (2009). Missing Data Analysis: Making It Work in the Real World. *Annual Review of Psychology*, *60*(1), 549-576. https://doi.org/10.1146/annurev.psych.58.110405.085530

Hannan, L. R., Hoffman, V. B., & Moser, D. V. (2005). Bonus versus Penalty: Does Contract Frame Affect Employee Effort? In *Rapoport A., Zwick R. (eds) Experimental Business Research* (pp. 151-169). https://doi.org/https://doi.org/10.1007/0-387-24243-0_8

Hansen, S. C., Otley, D. T., & Van der Stede, W. A. (2003). Practice Developments in Budgeting: An Overview and Research Perspective. *Journal of Management Accounting Research, 15*(1), 95-116. https://doi.org/10.2308/jmar.2003.15.1.95

Hill, S. (2017). Positive vs. Negative Politics and Behavioral Intentions: An Experimental Examination. https://doi.org/https://irl.umsl.edu/dissertation/642

Hochwarter, W. A., Rosen, C. C., Jordan, S. L., Ferris, G. R., Ejaz, A., & Maher, L. P. (2020). Perceptions of Organizational Politics Research: Past, Present, and Future. *Journal of Management, 0*(0), 0149206319898506. https://doi.org/10.1177/0149206319898506

Hope, J., & Fraser, R. (2003). Who needs budgets? *Harvard Business Review, 81*(2), 108. https://hbr.org/2003/02/who-needs-budgets

Jensen, M. C. (2001). Jensen, Michael C., Corporate Budgeting is Broken, Let's Fix it. *Harvard Business Review*, 94-101. https://doi.org/http://dx.doi.org/10.2139/ssrn.321520

Jensen, M. C. (2003). Paying People to Lie: the Truth about the Budgeting Process. *European Financial Management, 9*(3), 379-406. https://doi.org/10.1111/1468-036X.00226

Kacmar, K. M., & Carlson, D. S. (1997). Further Validation of the Perceptions of Politics Scale (Pops): A Multiple Sample Investigation. *Journal of Management, 23*(5), 627-658. https://doi.org/10.1177/014920639702300502

Kacmar, K. M., & Baron, R. A. (1999). Organizational politics: The state of the field, links to related processes, and an agenda for future research. In *Research in human resources management, Vol. 17.* (pp. 1-39). Elsevier Science/JAI Press. https://www.researchgate.net/profile/K_Kacmar/publication/232582228_Organizational_politics_The_state_of_the_field_links_to_related_processes_and_an_agenda_for_future_research/links/53fdd5810cf2dca80003971c.pdf

Kenny, D. A., Kaniskan, B., & McCoach, D. B. (2015). The Performance of RMSEA in Models With Small Degrees of Freedom. *Sociological methods & research, 44*(3), 486-507. https://doi.org/10.1177/0049124114543236

Kulik, B. W., O'Fallon, M. J., & Salimath, M. S. (2008). Do Competitive Environments Lead to the Rise and Spread of Unethical Behavior? Parallels from Enron. *Journal of Business Ethics, 83*(4), 703-723. https://doi.org/10.1007/s10551-007-9659-y

Larkin, I. (2014). The Cost of High-Powered Incentives: Employee Gaming in Enterprise Software Sales. *Journal of Labor Economics, 32*(2), 199-227. https://doi.org/10.1086/673371

Lau, C. M., & Tan, S. L. C. (2006). The effects of procedural fairness and interpersonal trust on job tension in budgeting. *Management Accounting Research, 17*(2), 171-186. https://doi.org/https://doi.org/10.1016/j.mar.2005.10.001

Lau, C. M., & Tan, S. L. C. (2012). Budget Targets as Performance Measures: The Mediating Role of Participation and Procedural Fairness. In (Vol. 20, pp. 151-185). Emerald Group Publishing Limited. https://doi.org/10.1108/S1474-7871(2012)0000020013

Libby, T., & Lindsay, R. M. (2007). Beyond Budgeting Or Better Budgeting? *, 89*(2), 46. https://sfmagazine.com/wp-content/uploads/sfarchive/2007/08/Beyond-Budgeting-or-Better-Budgeting.pdf

Libby, T., & Lindsay, R. M. (2010). Beyond budgeting or budgeting reconsidered? A survey of North-American budgeting practice. *Management Accounting Research, 21*(1), 56-75. https://doi.org/https://doi.org/10.1016/j.mar.2009.10.003

Libby, T., & Lindsay, R. M. (2012). *The Effects of Trust and Budget-Based Controls on Budget Gaming and Budget Value* AAA 2013 Management Accounting Section (MAS) Meeting Paper, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2131555#:~:text=Results%20indicate%20good%20prior%20period,negatively%20associated%20with%20budget%20gaming.

Libby, T., & Lindsay, R. M. (2019). The Effects of Superior Trust and Budget-Based Controls on Budgetary Gaming and Budget Value. *Journal of Management Accounting Research, 31*(3), 153-184. https://doi.org/10.2308/jmar-52238

Lukka, K. (1988). Budgetary biasing in organizations: Theoretical framework and empirical evidence. *Accounting, Organizations and Society, 13*(3), 281-301. https://doi.org/10.1016/0361-3682(88)90005-0

Maiga, A. S., & Jacobs, F. (2007). Budget participation's influence on budget slack : the role of fairness perceptions, trust and goal commitment [article]. *Journal of Applied Management Accounting Research, 5*(1), 39-58. http://urn.kb.se/resolve?urn=urn:nbn:se:ltu:diva-11589

Mintzberg, H. (1983). *Power in and around organizations*. Prentice-Hall.

Moskowitz, H. R. (2012). 'Mind genomics': The experimental, inductive science of the ordinary, and its application to aspects of food and feeding. *Physiology & behavior, 107*(4), 606-613. https://doi.org/10.1016/j.physbeh.2012.04.009

Munyon, T. P., Jacobs, J. D., Carnes, A. M., & Bohle, S. L. (2016). Handbook of Organizational Politics. In *Pay-for-politics: considering the variable compensation–organizational politics relationship*. Edward Elgar Publishing. https://doi.org/https://doi.org/10.4337/9781784713492.00012

Murphy, K. R. (2002). Using power analysis to evaluate research. In S. G. Rogelberg (Ed.). *Handbook of research methods in industrial and organizational psychology* (pp. 119-137). Malden, MA: Blackwell.

Neely, A. (2001). Driving Value Through Strategic Planning and Budgeting. https://pdfs.semanticscholar.org/1f67/9a2cc798e31827e44d4b3e8c13110a6871f3.pdf

Neely, A., Bourne, M., & Adams, C. (2003). Better budgeting or beyond budgeting? *Measuring Business Excellence, 7*(3), 22-28. https://doi.org/10.1108/13683040310496471

Nyberg, A. J., Pieper, J. R., & Trevor, C. O. (2013). Pay-for-Performance's Effect on Future Employee Performance: Integrating Psychological and Economic Principles Toward a Contingency Perspective. *Journal of Management, 42*(7), 1753-1783. https://doi.org/10.1177/0149206313515520

Ogbonnaya, C., Daniels, K., & Nielsen, K. (2017). Does contingent pay encourage positive employee attitudes and intensify work? *Human Resource Management Journal, 27*(1), 94-112. https://doi.org/10.1111/1748-8583.12130

Otley, D. T. (1978). Budget Use and Managerial Performance. *Journal of Accounting Research, 16*(1), 122-149. https://doi.org/10.2307/2490414

Pfeffer, J., & Salancik, G. R. (1974). Organizational Decision Making as a Political Process: The Case of a University Budget. *Administrative Science Quarterly, 19*(2), 135-151. https://doi.org/10.2307/2393885

Rahrovani Y., P Pinsonneault A. (2012). On the Business Value of Information Technology: A Theory of Slack Resources. In: Dwivedi Y., Wade M., Schneberger S. (eds) Information Systems Theory. In I. S. i. I. Systems (Ed.), *Information Systems Theory* (Vol. 28, pp. 165-198). Springer.

Rest, J. R. (1984). Research on moral development: Implications for training counseling psychologists. Counseling Psychologist, 12, 19–29.

Rynes, S. L., Gerhart, B., & Parks, L. (2005). Personnel Psychology: Performance Evaluation and Pay for Performance. *Annual Review of Psychology, 56*(1), 571-600. https://doi.org/10.1146/annurev.psych.56.091103.070254

Shefrin, H. (2007). *Beyond Greed and Fear: Understanding Behavioral Finance and the Psychology of Investing*. Oxford University Press.

Sprinkle, G. B. (2003). Perspectives on experimental research in managerial accounting. *Accounting, Organizations and Society, 28*(2), 287-318. https://doi.org/https://doi.org/10.1016/S0361-3682(01)00058-7

Van der Stede, W. A. (2000). The relationship between two consequences of budgetary controls: budgetary slack creation and managerial short-term orientation. *Accounting, Organizations and Society, 25*(6), 609-622. https://doi.org/https://doi.org/10.1016/S0361-3682(99)00058-6

Van der Stede, W. A. (2001). Measuring 'tight budgetary control'. *Management Accounting Research, 12*(1), 119-137. https://doi.org/https://doi.org/10.1006/mare.2000.0149

Vroom, V. H. (1964). *Work and motivation*. Wiley.

Vandenberg, R. J., & Lance, C. E. (2000, 2000/01/01). A Review and Synthesis of the Measurement Invariance Literature: Suggestions, Practices, and Recommendations for Organizational Research. *Organizational Research Methods, 3*(1), 4-70. https://doi.org/10.1177/109442810031002

Walker, K. B., & Johnson, E. N. (1999). The effects of a budget-based incentive compensation scheme on the budgeting behavior of managers and subordinates. *Journal of Management Accounting Research, 11*, 1. https://www.researchgate.net/publication/270889806_The_Effects_of_a_Budget-based_Compensation_Plan_on_the_Budgeting_Behavior_of_Managers_and_Subordinates

Wolf, R. (2015). Broken Budgets? *Strategic Finance. 96*(12), 22. https://sfmagazine.com/post-entry/june-2015-broken-budgets/

Yukl, G., & Falbe, C. M. (1990). Influence Tactics and Objectives in Upward, Downward, and Lateral Influence Attempts. *Journal of Applied Psychology, 75*(2), 132-140. https://doi.org/10.1037/0021-9010.75.2.132

Yukl, G., Kim, H., & Falbe, C. M. (1996). Antecedents of influence outcomes. *Journal of Applied Psychology, 81*(3), 309-317. https://doi.org/10.1037/0021-9010.81.3.309

Yukl, G., & Tracey, J. B. (1992). Consequences of influence tactics used with subordinates, peers, and the boss. *Journal of Applied Psychology, 77*(4), 525-535. https://doi.org/10.1037/0021-9010.77.4.525

Appendix A: Scales Used in This Study

Panel A: Perceptions of Organizational Politics Scale (Kacmar and Carlson, 1997)

Original Question	Modified Question
General Political Behavior	
People in this organization attempt to build themselves up by tearing others down.	Managers at WMB build themselves up by tearing others down.
There has always been an influential group in this department that no one ever crosses.	At WMB, there is an influential department that no one ever crosses.
Going Along to Get Ahead	
Employees are encouraged to speak out frankly even when they are critical of well-established ideas.	Managers at WMB can speak frankly even when they are critical of well-established ideas.
There is no place for yes-men around here; good ideas are desired even if it means disagreeing with superiors.	At WMB, managers should just say "yes" and not disagree with superiors.
Agreeing with powerful others is the best alternative in this organization.	Agreeing with powerful others is the best alternative at WMB.
It is best not to rock the boat in this organization.	It is best not to rock the boat at WMB.
Sometimes it is easier to remain quiet than to fight the system.	Sometimes it is easier to remain quiet than to fight the system.
Telling others what they want to hear is sometimes better than telling the truth.	At WMB, telling others what they want to hear is sometimes better than telling the truth.
It is safer to think what you are told than to make up your own mind.	It is safer to think what you are told than to make up your own mind at WMB.

Panel B: Procedural Justice (Colquitt, 2001)

Original Question	Modified Question
Have you been able to express your views and feelings during those procedures	Excluded
Have you had influence over the (outcome) arrived at by these procedures	Alex had influence on the outcomes of the budget process.
Have those procedures been applied consistently?	At WMB, the budgeting procedures were applied consistently.
Have those procedures been free of bias?	The WMB budgeting procedures were free of bias.

Have those procedures been based on accurate information?	The budgeting procedures were based on accurate information.
Have you been able to appeal the (outcome) arrived at by those procedures?	Excluded
Have those procedures upheld ethical and moral standards?	The budgeting procedures were applied consistently at WMB.

Panel C: Compensation Strategy Manipulation Check

Compensation Condition	Question
Salary	What was your WMB compensation if you meet or exceed your budget target? What was your WMB compensation if you missed your budget target?
Bonus	How much was the WMB bonus if you met the budget target? What was the WMB bonus if you missed the budget target?
Penalty Pay	What was your compensation at the beginning of each year? How much compensation did you return if you missed your budget target at the end of the year?

Appendix B: High Political Scenario

WMB is company that attracts talented individuals. The culture at WMB is competitive and managers compete for resources. Simply put, WMB is so competitive that managers tend to tear down others to make themselves look better.

At WMB, employees are encouraged to voice their opinions fearlessly and question status quo. Managers are expected to create cultures where employees can speak out and disagree. But employees are afraid to speak up. There are influential people and departments that no one EVER crosses. An example of this behavior is the finance team and the budget process.

For this experiment, you will pretend to be Alex, a manager at WMB.

This is Jamie, the SR Director at a business unit at WMB. You and Pat work for Jamie. Jamie hired you from another company. Jamie was pleased with your leadership as the team was growing and developing. Jamie was disappointed in your business results because the budget target was missed last year.

Jamie hired Pat from a great MBA program. Jamie was pleased with Pat's business results. Pat achieved budget targets. However, people leadership was not a strength. Pat over delegates and does not get results through the team. Pat's team was not growing and developing.

Last year, you missed the budget target. Your R&D project was delayed from February to October, so the new product was not able to generate revenue in time to meet budget objectives. WMB expects managers to meet their targets, so Alex was held accountable.

You did not feel this was fair. It was not your fault the R&D project was delayed. You discussed the situation with Jamie. Jamie disagreed with you. The budget policy is consistently enforced. Jamie is a firm believer in the policy. Managers have good years and bad years and cannot cherry pick on their budget. Jamie told you the VP of Finance delayed the R&D project.

You wanted to talk with the VP of Finance. Jamie told you that no-one crosses the VP of Finance, a senior company executive. The budget policy was created by the VP. It is better to just take the loss and move on. Speaking up against an influential department is a bad idea and can end your career.

You asked Jamie about the WMB policy of voicing your opinion. Jamie agreed that it was the policy but for senior executives it is best to say, "yes," even if you disagree. Jamie told you, "It is best not to rock the boat, especially with the executives." However, you wanted to speak to the VP and build a case for a budget target adjustment.

You went to Pat for advice on how to approach the VP of Finance. Pat knew the VP of Finance well because they attended the same business school and alumni functions. You were concerned about disagreeing with the budgeting policy with an influential senior executive. Pat told you that the VP of Finance is influential but fair and prefers employees to speak up.

Pat viewed you as a competitor and threat to advancement. Pat decided to tear you down. Pat knew the VP of Finance created the budget policy and no one crosses the VP of Finance. However, Pat told you that he is influential but fair and prefers employees to speak up. Pat coached you on how to use data and facts to build a case.

That night, Pat attended an alumni event with the VP of Finance. Pat complained about you. “I spend my time figuring out how to achieve the budget and less time complaining about budget targets.” The VP of Finance agreed that you should focus energy on achieving results and less time on complaining.

When you met with the VP, it was a difficult conversation. In the end, the VP of Finance decided you were not manager material. The VP was irritated that a new employee debated a well-established policy. The VP approved Alex’s request but was irritated at the extra 10-hours to make the exception. The VP of Finance talked with the HR director. “Alex is not ready to advance. He should spend less time debating targets and more time on achieving targets.”

Appendix C: Low Political Scenarios

WMB is a company that attracts talented individuals. The culture at WMB is collaborative and managers help each other to succeed. Simply put, WBM is a great place to work. But it is important to get results. WMB measures results by performance to budget.

At WMB, employees are encouraged to voice their opinions fearlessly and question status quo. Managers are expected to create cultures where employees can speak out and disagree. This behavior is rewarded. An example of this behavior is found in the budgeting process.

For this experiment, you will pretend to be Alex, a manager at WMB.

This is Jamie, the SR Director at a business unit at WMB. You and Pat work for Jamie. Jamie hired you from another company. Jamie was pleased with your leadership as the team was growing and developing. Jamie was disappointed in your business results because the budget target was missed last year.

Jamie hired Pat from a great MBA program. Jamie was pleased with Pat's business results. Pat achieved budget targets. However, people leadership was not a strength. Pat over delegates and does not get results through the team. Pat's team was not growing and developing.

Last year, you missed the budget target. Your R&D project was delayed from February to Oct, so the new product did not generate revenue until Oct. WMB expects managers to meet their targets, so you were held accountable.

You did not feel this was not fair. It was not your fault the R&D project was delayed. You discussed the situation with Jamie. Jamie disagreed with You. The budget policy is consistently enforced. Jamie is a firm believer in the policy. Managers have good years and bad years and cannot cherry pick on their budget. Jamie told you the VP of Finance delayed the R&D project. You could speak up and build a case for a budget target adjustment. Jamie reminded you the VP is a senior executive. You still wanted to meet with him.

You went to Pat for advice on how to approach the VP of Finance. Pat respected your strength in leading teams and was honored that you were asking for advice. Pat knew the VP well because they attended the same business school and alumni functions. You were concerned about disagreeing with the budgeting policy with an influential senior executive. Pat told you that the VP is influential but fair and prefers employees to speak up. Pat coached you on how to use data and facts to build a case. You appreciated Pat's help and felt great that managers help each other. At an alumnus function last night, Pat told the VP you are the next great leader and have an interesting argument to change the budgeting process.

When you met with the VP, it was a difficult conversation. In the end, the VP of Finance adjusted your budget target. The VP of Finance appreciated that you spoke up and modeled company values on voicing their opinion fearlessly. The budget target adjustment caused 10-hours of work for the finance team. The VP of Finance told the HR leader that You challenges status quo and thinks differently.

Appendix D: Learn How to Game Script

It is Q4, 2020, and you might miss your budget target again. At WMB you are held accountable to your budget, no matter what. Managers who cannot achieve budget targets are reassigned, demoted, or terminated.

Finance asked for your Q4 forecast for 2020 and you are required to submit your 2021 budget by next week. You were concerned because not achieving the budget target a second time, could stall your career. You ask the other managers for advice.

The other managers said, "finish on budget, even if you have to 'fudge' or 'manipulate' the numbers. We call it gaming and there is nothing wrong with it. It is how you survive at WMB." Finance creates problems that cause the budget to be unfair, the games help ensure the budget is achievable.

You showed your year-to-date profit and loss statement to the other managers. They said, "You have three ways to prevent a budget loss. You can accelerate revenue. Incent a customer to purchase a unit this year. Managers are authorized to discount pricing by 10%. The second way is to reduce expenses by $20K Francs. Finally, you can delay a long-term project. We do not recommend this because the long-term projects come with profit benefits like increased revenue and reduced expenses. If you delay the project, you delay the benefits.

You asked the other managers for best practices for budget submission, so it is fair and achievable. The other mangers said, "There are two practices that help us achieve our budget. First, do not be too optimistic, a lot of can happen in a year. Second, learn how finance approves the budget, so you can play the game to ensure a level playing field."

Units sold. Finance will always approve a unit sold budget equivalent to the prior year. You sold 32-units last year, so finance will approve a 32-unit budget for 2021.

What does this mean?

You knew your team could sell 34-units which is almost 40K Franc more in profit. The other managers said, "Why would you over commit or be too optimistic? If finance will approve a 32-unit target, why would you sign up for 34? Always get the lowest possible revenue target. Give yourself a buffer.

Other fixed expenses. Finance builds an expense budget using the prior year spent. You can use it or lose it. If you are over delivering on your budget, then try to accelerate expenses. Never leave unspent money. If you are short to your budget, you can delay an expense.

What does this mean?

You knew you could reduce expenses next year from 265K Francs to 250K Francs, a 15K profit savings.

The other managers laughed. Why would you submit 250K if finance will approve 265K? Give yourself a buffer. Always ask for the highest possible expense budget.

Long-Term Projects expense. Finance allows a budget 140K Franc for long-term projects with long-term benefits such as cost reduction or revenue enhancement. You get the same budget every year. However, this year- the inflation is high, so finance will approve a 5% inflation rate, which is 147K Francs.

What does this mean?
You have a vendor who can deliver a long-term project for 130K Francs, so you do not need 147K Francs.

The other managers stated, “Why would you ask for anything less than the 147K Francs that finance will approve. Anything can happen in projects such as delays, inflation, or other unexpected events. Always submit the maximum amount finance will approve. You thanked the other managers for their help.

You received a call from your finance manager, she said, “It is important to submit an accurate forecast and budget. We need honest and truthful numbers to grow as a company.”

You thought about that and the fear of not delivering the budget this year.

The next few questions will guide you through the process to submit your forecast and budget.

The code word for this video is Brownie.

Table 1

Definition of Budget Gaming

Year	Author	Term	Definition
1978	Collins	Budget Response	The predisposition to support or withhold support of the budget and even to sabotage the budget
1973	Onsi	Budget Slack	The differences between the total resources available to a firm and the total necessary to maintain the organizational coalition
1985	Merchant	Budget Slack	The excess of the amount budgeted in an area over that which is necessary.
2000	Van der Stede	Budget Slack	Resources and effort toward activities that cannot be justified easily in terms of their immediate contribution to organizational objectives
1988	Kari Lukka	Budgetary Bias	Deliberately created difference between the budgeting actor's forecast about the future (“honest budget estimate”) and his or her submitted budget figure (budget proposal).
1987	Collins, Munter, Fill	Game Play	Routinized behaviors adopted by subordinates to cope with pressures inherent in the budgetary negotiation process
1988	Bart	Budget Games	The deliberate and premeditated manipulation of current year sales, cost, and profit forecast by product managers to project an overly conservative image into their product budgets
2012	Libby and Lindsay	Budget Games	A dysfunctional response to the pressures to meet budget-related performance goals
2019	Libby and Lindsay	Budget Games	Behaviors reflecting a short-term orientation that provides no value to the business unit, which are taken by subordinate managers simply to make the budget target easier to attain

Table 2

Participant Demographics

	Age		
	Female	Male	Total
18 - 24	32	37	69
25 - 34	38	31	69
35 - 44	10	12	22
45 - 54	3	3	6
55 - 64	1	1	2
65 - 74	0	0	0
Total	84	84	168

	Race		
	Female	Male	Total
Black or African	10	6	16
White	61	71	132
Asian	8	3	11
Hispanic	0	0	0
Other	5	4	9
Total	84	84	168

Table 3

Demographics by Student Major

Major	Graduate	Undergraduate	Total	Mix
Accounting	11	54	65	39%
Finance	0	10	10	6%
MBA	15	2	17	10%
DBA	2	0	2	1%
Business Administration	9	36	45	27%
Marketing	1	7	8	5%
International Business	0	2	2	1%
Entreprenuership	0	1	1	1%
Leadership	0	2	2	1%
Other	4	12	16	10%
Total	42	126	168	100%

Table 4

Political Manipulation Check

					Political Condition			
					High Politics		Low Politics	
	F	df	*p*	Cohen's *d*	M	*SD*	M	*SD*
Political Condition	126.174	166	0.000	2.367	3.926	0.904	2.192	0.814

Table 5

Participants by Treatment Condition

	Ethics Condition				Non-Ethics Condition			
Participants	Salary	Bonus	Penalty	Total	Salary	Bonus	Penalty	Total
High Politics	16	18	12	46	13	15	7	35
Low Politics	12	16	10	38	16	20	13	49
Total	28	34	22	84	29	35	20	84

	Participant Proportions							
	Ethics Condition				Non-Ethics Condition			
	Salary	Bonus	Penalty	Total	Salary	Bonus	Penalty	Total
High Politics	9.52%	10.71%	7.14%	27.38%	7.74%	8.93%	4.17%	20.83%
Low Politics	7.14%	9.52%	5.95%	22.62%	9.52%	11.90%	7.74%	29.17%
Total	16.67%	20.24%	13.10%	50.00%	17.26%	20.83%	11.90%	50.00%

Table 6

One Way ANOVA- Ethics Attestation and Budget Gaming

Game Type	*F*	η2	*p*	M	*SD*	*df*
Accelerate/Delay Gaming Profit	0.290	0.004	0.749	97.000	119.945	167.000
Under commit Gaming Profit	3.934	0.046	0.021	219.655	133.864	167.000

Table 7

Table of Means Between Ethics Conditions

	Ethics Condition		No Ethics	
	M	*SD*	M	*SD*
Accelerate/Delay Gaming Profit	101.086	113.887	94.738	127.844
Under commit Gaming Profit	242.247	120.112	193.810	142.530

Table 8

ANOVA Results for Political Condition

Game Type	*F*	η2	*p*	M	*SD*	*df*
Accelerate/Delay Gaming Profit	1.058	0.006	0.305	97.000	119.945	167
Under commit Gaming Profit	0.681	0.004	0.411	219.655	133.864	167

Table 9

Table of Means for Political Condition

	Low		High	
	M	*SD*	M	*SD*
Accelerate/Delay Gaming Profit	106.184	126.845	87.136	112.008
Under commit Gaming Profit	211.425	122.255	228.494	145.558

Table 10

ANOVA Results for Compensation Condition

Game Type	*F*	η2	*p*	M	*SD*
Accelerate/Delay Gaming Profit	0.122	0.000	0.885	97.000	119.945
Under commit Gaming Profit	0.632	0.000	0.533	219.655	133.864

Table 11

Table of Means for Compensation Condition

	Salary		Bonus		Penalty	
	M	*SD*	M	*SD*	M	*SD*
Accelerate/Delay Gaming Profit	95.018	113.452	93.826	123.196	104.905	125.542
Under commit Gaming Profit	235.877	119.552	210.841	147.781	212.119	129.197

Table 12

ANOVA Results for Interaction

Game Type	*F*	η^2	*p*
Accelerate/Delay Gaming Profit	0.345	0.028	0.983
Political × Compensation	0.341	0.171	0.712
Compensation × Ethics	0.302	0.227	0.824
Political × Ethics	0.883	0.221	0.349
Compensation × Ethics × Political	0.091	0.046	0.913
Under commit Gaming Profit	1.003	0.078	0.451
Political × Compensation	0.341	0.059	0.712
Compensation × Ethics	0.562	0.146	0.641
Political × Ethics	0.157	0.014	0.693
Compensation × Ethics × Political	0.810	0.141	0.447

Table 13

Summary of Hypotheses

Hypothesis	Description	Dependent Variable	Significance	Direction
Hypothesis 1	Budget gaming will be reduced if the manager signs an ethics attestation.	Accelerate/Delay Gaming Profit	No	No
		Under commit Gaming Profit	Yes	No
Hypothesis 2	Organizational politics are positively related to budget gaming, where higher levels of politics are associated with increased levels of budget gaming.	Accelerate/Delay Gaming Profit	No	No
		Under commit Gaming Profit	No	Yes
Hypothesis 3	Budget gaming is lower in a fixed-rate system than a bonus-based system.	Accelerate/Delay Gaming Profit	No	No
		Under commit Gaming Profit	No	No
Hypothesis 4	Budget gaming is higher under a penalty-based system than a bonus-based	Accelerate/Delay Gaming Profit	No	Yes
		Under commit Gaming Profit	No	Yes
Hypothesis 5	A 3-way interaction will be present between politics, compensation, and	Accelerate/Delay Gaming Profit	No	No
		Under commit Gaming Profit	No	No

Table 14

Frequency of Games by Political Condition

	High Politics	Low Politics	Total	% of Total Respondents
Game	57	70	127	76%
No Game	22	19	41	24%
Total	79	89	168	100%

Table 15

Frequency of Games by Type

Game	Count	Proportion
Accelerate/Deaccelerate Revenue	118	18.8%
Accleerate/Deaccelerate Expense	72	11.4%
Delay Long Term Projects	61	9.7%
Undercommit to Revenue Targets	143	22.7%
Undercommit to Fixed Expense Targets	106	16.9%
Undercommit to Long-Term Project Expense	129	20.5%
Total	629	100.0%

Table 16

Relationship Between Ethics Attestation and Gaming

	High Politics	Low Politics	Total	% of Total Participants
Signed Attestation and Gamed	31	35	66	39%
Signed Ethics Attestation	43	42	85	51%

Table 17

Units Sold Budget Deep Dive

Anchor	Units Sold	Count	Mix
Min Finance Approves	32	27	16%
Historical Average	34	51	30%
Insider Information	40	20	12%
Better than Insider Information	>40	5	3%
Other		65	39%
Total		168	100%

Table 18

Fixed Expense Budget Deep Dive

Anchor	Fixed Expense	Count	Mix
Max Finance Approves	265	51	30%
Historical Average	277	0	0%
Insider Information	250	48	29%
Better than Insider Information	<250	10	6%
Other		59	35%
Total		168	100%

Table 19

Long Term Project Expense Deep Dive

Anchor	Project Expense	Count	Mix
Max Finance Approves	147	41	24%
Historical Average	140	43	26%
Insider Information	130	26	15%
Better than Insider Information	<130	8	5%
Other		50	30%
Total		168	100%

Table 20

Insight into Budget Choice: Anchoring

Anchor	Units Sold	Fixed Expense	Project Expense	Total	Mix
Max Finance Approves	27	51	41	119	24%
Historical Average	51	0	43	94	19%
Insider Information	20	48	26	94	19%
Better than Insider Information	5	10	8	23	5%
Other	65	59	50	174	35%
Total	168	168	168	504	100%

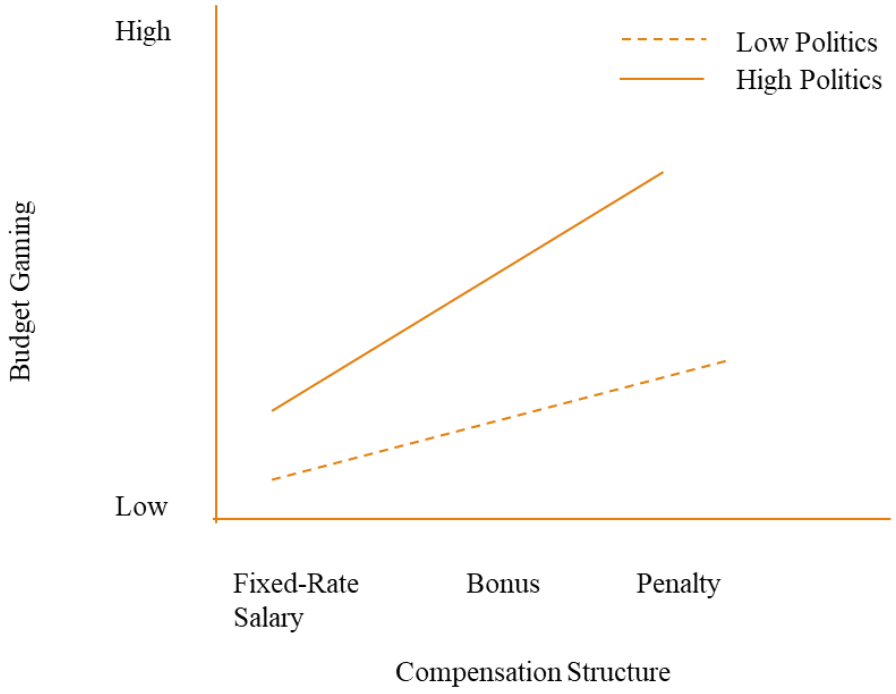


Figure 1. Hypothesized Interaction Between Budget Gaming, Organizational Politics, and Compensation Condition

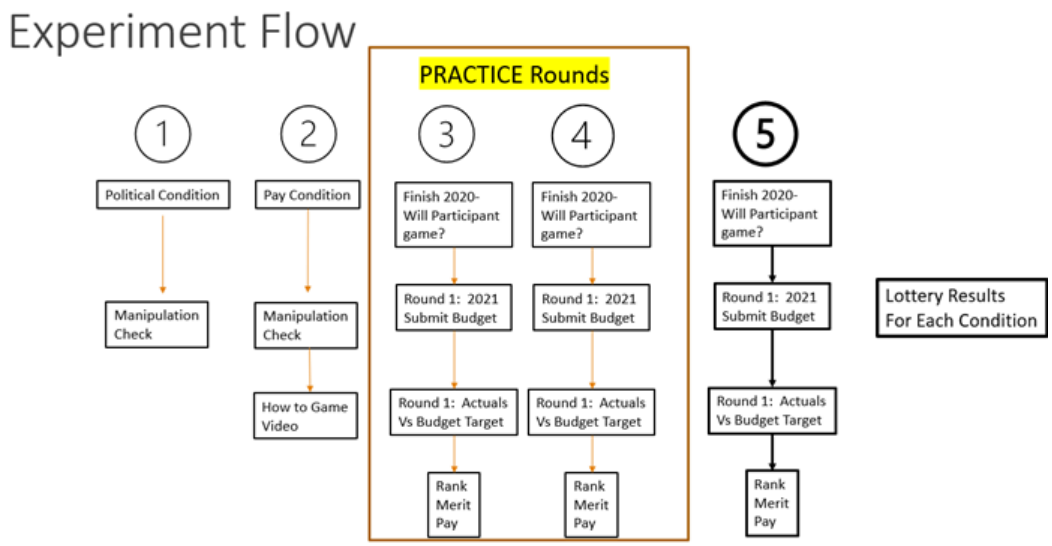


Figure 2. Experimental Flow

1) Participants review a political condition video- with manipulation check.
2) Participants review a pay condition- with manipulation check.
    a. Participant reviews a "how to game" video.
3) Participant submits 2020 expense and revenue changes (short to budget)
    a. Participant makes choices to game or not.
    b. Participant submits 2021 budget.
    c. Actuals flow into experiment.
    d. Experiment results displayed for each avatar (B/(W) Budget target)
    e. Avatars ranked.
    f. Avatar merits increase reviewed.
    g. Compensation condition is reviewed.
    h. Lottery ticket amount is displayed (tabulate each compensation condition)

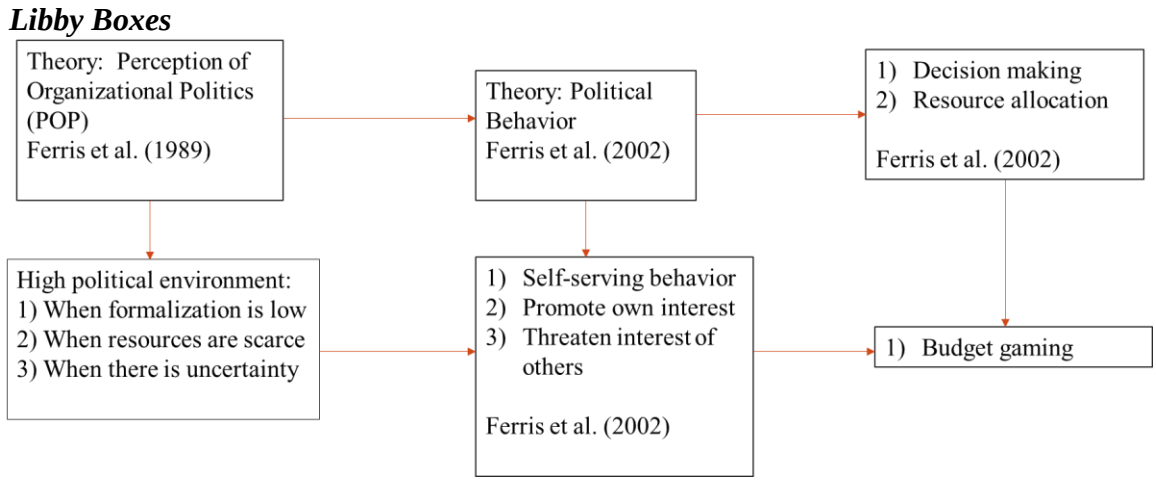


Figure 3. Libby Boxes

Accelerate/Delay Revenue and Expenses in Ethics Condition

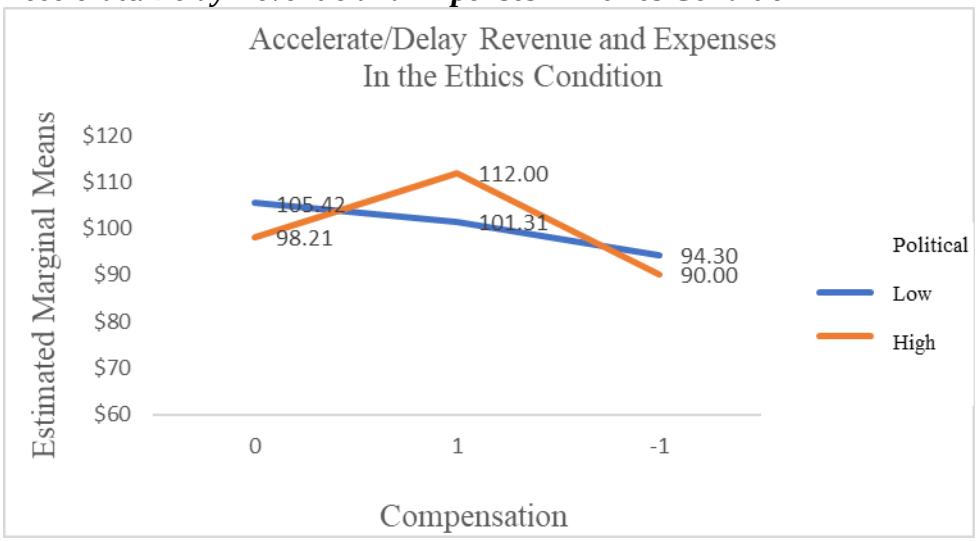


Figure 4. Accelerate and Delay Budget Games- In Ethics Condition

Accelerate/Delay Revenue and Expenses Not in Ethics Condition

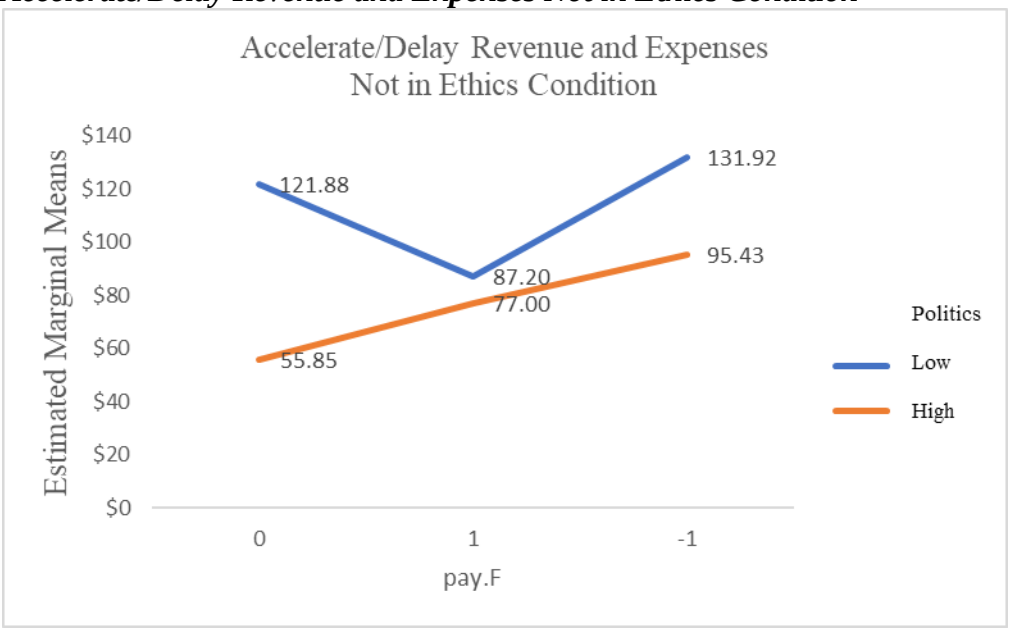


Figure 5. Budget Gaming Accelerate and Delay- Not in Ethics Condition

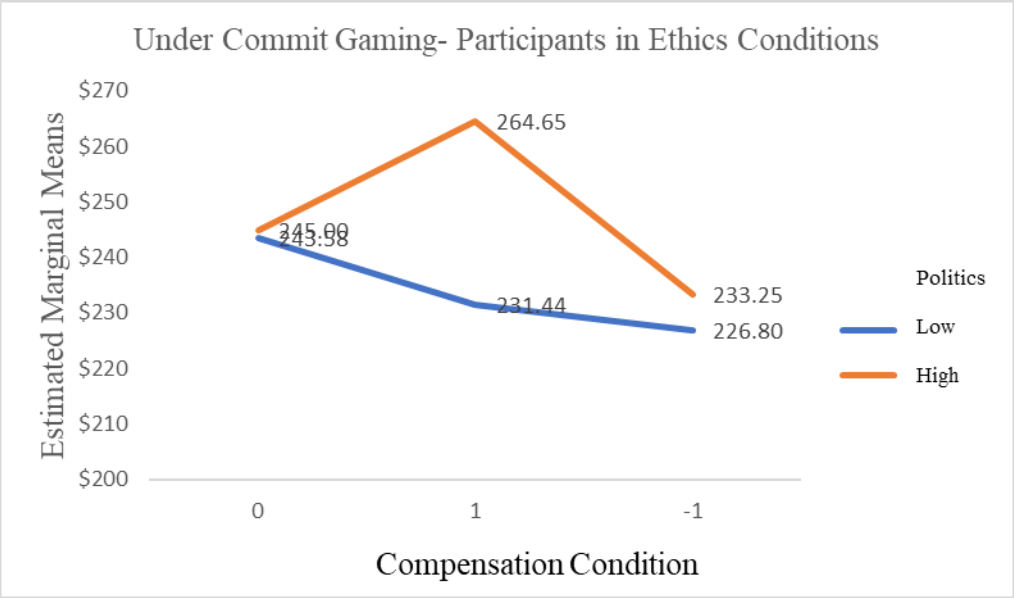


Figure 6. Budget Gaming, Under Commit in Ethics Condition

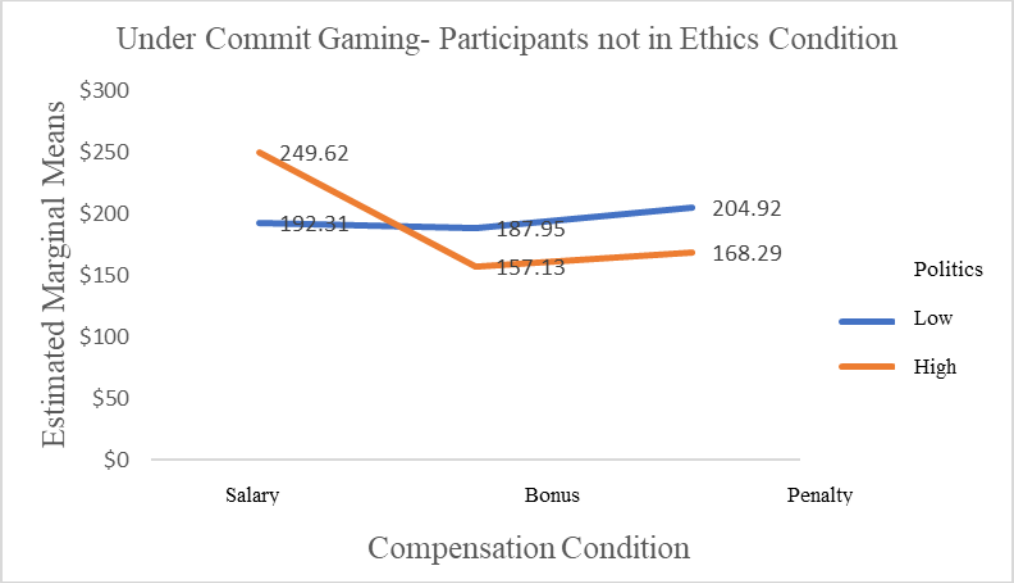


Figure 7. Budget Gaming- Under Commit not in Ethics Condition

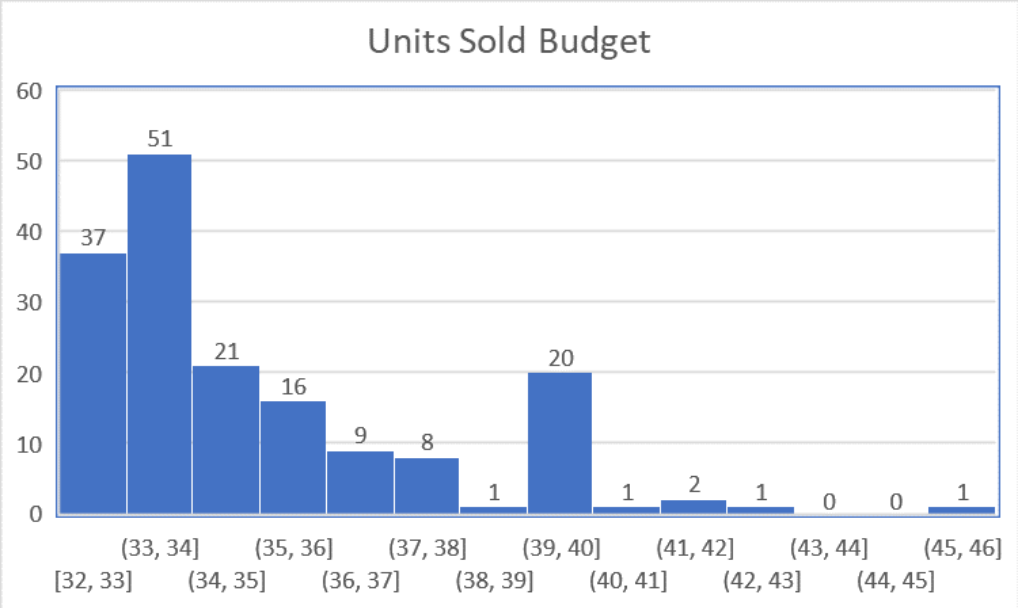


Figure 8. Units Sold Distribution

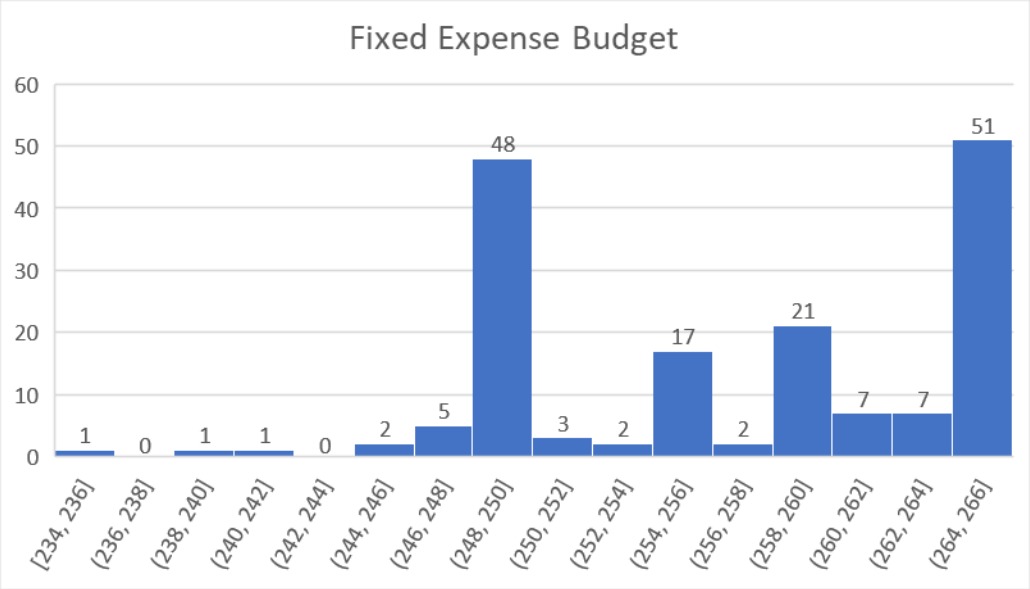


Figure 9. Fixed Expense Distribution

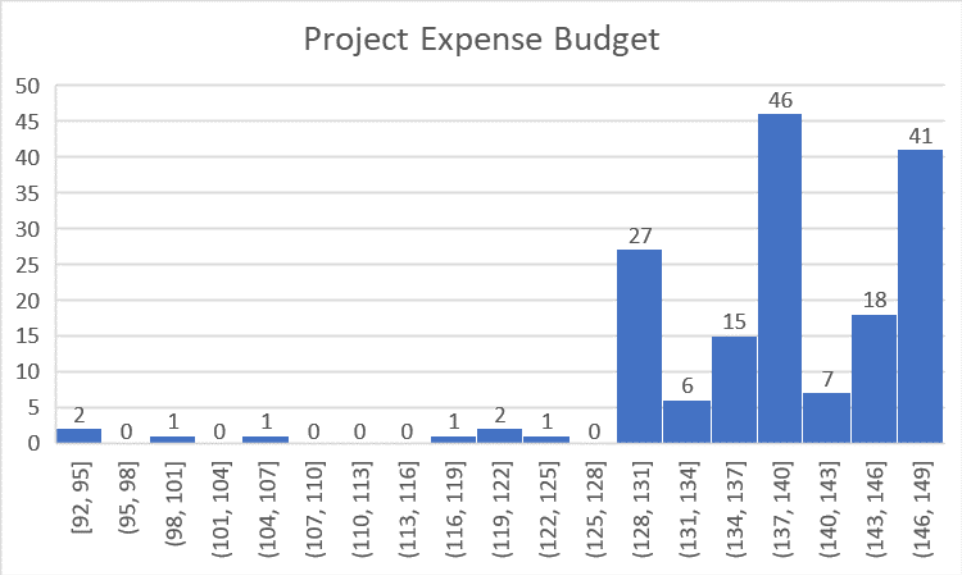
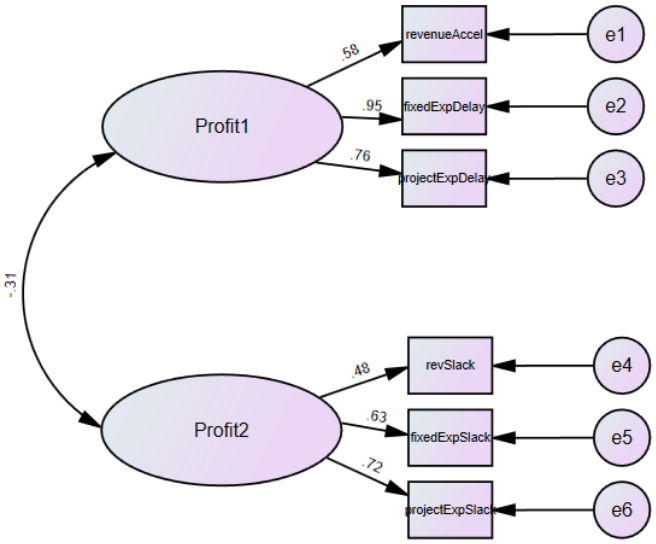


Figure 10. Long-Term Project Expense Distribution



Chi Square = 21.880 @ 8df
CFI = .948
SRMR = .069

Figure 11- Two-Factor CFA Model