



SCHOOL OF ECONOMICS
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Playing the Game

- A Study of Budgetary Gamesmanship within Financial Planning Processes

by

Samuel Drummond-Brown

Sonja Sófúsdóttir

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Supervisor: Gert Paulsson
Examiner: Anders Anell

Abstract

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Authors: Samuel Drummond-Brown, Sonja Sófusdóttir.

Supervisor: Gert Paulsson.

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Purpose: The purpose of this research is to look into different financial planning processes and approaches and see whether gaming behavior is more predominant in one financial planning process or approach over the other as theory suggests. Additionally, the research aims to identify whether performance measures directly tied to financial planning targets are evident and whether this could be the root cause of the continuous gaming behaviors, despite the various new budgeting alternatives and approaches introduced which aim to reduce them. This will help understand if budgets are being used unnecessarily for control, causing information asymmetry problems (moral hazard) between management and executives.

Methodology: This paper follows a quantitative research strategy with a deductive relationship between theory and research. A non-experimental cross-sectional research design (survey research) is used for primary data collection which is then complemented by secondary data from two previous studies.

Literature Review: The literature review focuses on topics around the budgetary literature. This includes budgeting critique, budgeting processes and approaches, Better Budgeting, Beyond Budgeting and lastly, budget gaming and performance measures tied to financial planning.

Empirical Foundation: The empirical data consists of both primary and secondary data. The data was collected through a self-completion questionnaire, reports and academic journals.

Conclusion: This research confirmed that gaming behaviors are evident within organizations, even dominant in some samples. The gaming behaviors are nonetheless independent of the type of financial planning process or approach exercised, or whether budgetary or forecast targets are tied to performance measures or not. Although gaming behavior was certainly identified, no decisive cause nor solution for gaming behavior was found in this research. Importantly, the study concluded that most organizations still used budgets, although, supplemented with other alternative planning tools alongside them. Although these budgeting alternatives may reduce other inefficiencies of the traditional budgetary process, there was no sign that they reduced the effect of gaming behavior. What truly affects and mitigates the gaming behavior within financial planning processes is therefore left for further research.

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Sonja SÓfusdóttir

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1. Introduction

The primary chapter of this research provides informative knowledge of the subject area in question and a base for understanding why the research topic is of importance. Firstly, the background of the research is assessed which will outline the basis of the research topic. Secondly, the problem discussion and research questions will be covered. Lastly, the outline of the overall thesis will be described.

1.1. Background

The ever-changing and unpredictable global economy in recent years has put various pressures on companies wanting to operate in the accelerating world. The increased pressures from various stakeholders including customers, suppliers and employees often mean that organizations must ensure that valid control systems are in operation in the best possible means, in order to achieve to their full capacities. The changes in the recent years has meant that the way manager's plan, budget or even forecast have gone through changes. Accounting phenomena introduced as far back as the 1980s such as Activity Based Costing (ABC) and the Balanced Scorecard (BSC) have gained huge diffusion in many companies in many industries (Becker, Messner & Schäffer, 2010) yet still, budgetary control still lacks direction and represents an unstable component of the management control system (Heupel & Schmitz, 2015).

The traditional budgeting process originally emerged in the 1920s as a tool for managing costs and cash flows, predominantly in larger industrial organizations (Hope & Fraser, 2003a). Starting as a financial control mechanism, the budget evolved into a fixed performance contract and management device to keep score and attempt to dictate organizational actions. Over the years, the relevance and benefits of having a budget have been questioned by many researchers. After all, the budget is really just a planning device to help identify what could lie ahead. Anthony, Govindarajan, Hartmann, Kraus & Nilsson (2014) suggest an alternative to such planning tool is to be extremely flexible and quick with regard to environmental changes, although, it seems companies still retain their budgets out of habit. As most organizations have been using the budgetary management control device for as far as anyone can remember, it is said that they forget why they do it and do not consider the possibilities of not doing it (Anthony et al. 2014).

On paper, budgets could be seen as essential; they could be used to improve planning and coordination by outlining where scarce resources will be deployed, giving a link to activities across multiple business units (Fisher, Sprinkle & Walker, 2007). While budgets hold advantages against many firms, the underlying criticisms are still an important subject. The multiple discouraging elements including short-termism, creativity and innovation discouragement and the act of gaming are of continuous debate as to whether a well-designed budgetary system can mitigate these concerns (Fisher, Sprinkle & Walker, 2007). Stated by Hope and Fraser (2003a), many companies have recognized to the full extent the damage caused by budgeting. Budgets have failed to keep up with market needs, trends and general operational aspects of a firm and thus has led to multiple unethical practices such as gaming.

The traditional budgetary view was rarely questioned until the study of Beyond Budgeting was applied heavily within the literature in the late 1990s, which heavily criticized the traditional view (Narkowski, 2012). Even though the focus advanced heavily in the 1990s, the origins of the Beyond Budgeting idea can

be traced back to the 1970s when the visionary leader of Sweden's Handelsbanken, Jan Wallander, argued that motivation has nothing to do with incentives but everything to do with involvement (Hope & Fraser, 2003b). Although, even though the general idea of the Beyond Budgeting model is to eliminate the traditional view of the budget, it goes on much further with regard to management principles. Along with company values, the Beyond Budgeting approach forms a coherent management model supported by tools such as benchmarking, balanced scorecards, rolling forecasts and activity based management (Narkowski, 2012). Models such as the above help the firm to focus further than just financially in regard to decentralization, transparency and long-term planning. Under the Beyond Budgeting view are 12 new leadership and performance measurement principles which highlight the ways in which Beyond Budgeting goes above and beyond the traditional budgetary view (Daum, 2002). The highlight of principle number eight "the motivation and reward process is based on the success of the team compared to the competition" (Daum, 2002) could be a strong indicator of reduced gaming and unethical practices, or at least attempts to lower the gaming problem in the business environment.

For organizations which refuse to restructure their entire control system as the Beyond Budgeting approach suggests, Better Budgeting, another recent topic within the literature might be the answer. Better Budgeting allows organizations to remain with a similar budgetary structure but implements more flexibility (Rodríguez, 2013), which aligns organizational strategies and provides a base for adding value (Neely, Bourne & Adams, 2003). Even though the Better Budgeting or Beyond Budgeting view seems to have been implemented in some way by various organizations in the modern day, still many problems are apparent in the overall financial planning processes, including both traditional budgets as well as alternatives to budgets. The criticism and negative aspects remain at a high level, especially within organizations which refuse to let go of the traditional budget.

1.2. Problem Discussion

The impact of traditional budgeting has led to adverse selection behavior which has been a result of asymmetric information between executives and management, more commonly known as the agency theory (Holmstrom, 1982). The agency theory explains the relationship between principals (executives) and agents (management) whereas the adverse selection behavior is the result of the actions taken between them. Holmstrom (1982) explains adverse selection as a situation where an action can be observed but no verification can be given whether or not the action was the correct one. This has resulted in certain behaviors putting management in a better position with regard to having superior information over executives, thus manipulating the outcome of the budget process (Chong & Strauss, 2017). Therefore, the agency theory is in effect when private information of management (agent) exceeds that of the executives (principles). However, additional to the agency theory which applies in this context, budgeting has other major flaws which have been brought attention by the literature. Listed in Otley (2006) are various major issues of budgets which include: Being costly, time-consuming, blocking change, having a lack of strategic focus, being based on guesswork and lastly, focusing too much on cost reduction over value creation. However, the main focus of this research is to look at one of the most predominant issues when setting budgets, the encouragement of "gaming" and persuasive behaviors.

The shortage of literature on whether different financial planning processes as alternatives to the traditional budget have a lower impact on certain negative outcomes, such as short-termism and gaming is still an open and unanswered subject. The traditional view, outlined in Anthony et al. (2014) explains the way financial planning processes are conducted as three approaches of top-down, bottom-up and iterative, whereby the top management either set the budgets or the specific operational department within the organization. Again, all have their benefits and problems, although the understanding of where the short-termism, sub-optimization and gaming truly lies is unknown. While the concept of Beyond Budgeting has overcome some great steps to replace the traditional budget and the problems which come with it, the concepts and multiple principles of this are still all underachieving compared with their potential (Hope & Fraser, 2003c). This form of planning tool opens up a leaner, adaptive and ethical enterprise to operate in yet the problematic elements including gaming within the rolling forecast element are still apparent to this day.

The Beyond Budgeting phenomenon introduced by Hope and Fraser (2003a) gave companies a reason to abandon the traditional budget to allow both increased profitability and changes in the current environment. This begs the question as to whether or not Beyond Budgeting actually had any impact in regards information tampering, leading to gaming, sub-optimization and overall information asymmetry problems within the working environment. In fact, Jensen (2003) argues that gaming is a part of typical business life whereby the idea often takes on a life of its own, meaning it would be unbusinesslike to actually avoid gaming altogether. The issue seems to lie within the perception of “wrongdoing”; Jensen (2003) argues that as gaming is so incorporated into the corporate mind, everyone in the system believes that they are acting with integrity and no lies are being inflicted. Even though Jensen’s (2003) study is purely in regard to traditional budgeting, there is nothing that says that this mindset from individuals has adapted in the recent years to reflect the actions of a firm who have incorporated different financial planning processes as alternative tools to budgeting, such as forecasting, rolling forecasting or Better or Beyond Budgeting.

The theory addressing the possible elimination of budgets, targets, forecasts in compensation systems possibly solves the problem (Jensen, 2003). If one’s bonus or promotion is a function of what you accomplish over meeting or exceeding a target, there is no monetary incentive to hide or alter information with regard to the budgeting or target setting process. Although, this cannot be summed as a conclusive study, it makes an interesting point as to whether companies who budget without remuneration included have a reduced gaming problem, or whether they just perceive to have less of a problem. Even though such tools in organizational environments seem to address more issues than benefits, the idea of the budget is supposed to be used for more than just forecasting cash flows.

Lastly, the extended use of using financial planning with regard to performance evaluation gives an interesting basis for the research study. Hope and Fraser (2003a) have immensely criticized the idea of fixed performance targets to measure employee and company performance, yet, management still tends to use these means of evaluation due to simplicity and unwillingness to change behaviors. Even though many new publications have been released with regard to Better and Beyond Budgeting, the outcomes still show that little has been changed regarding whether or not to use a budget for fixed and inflexible targets.

1.3. Research Purpose and Questions

The purpose of this research is to look into different financial planning processes and approaches and see whether gaming behavior is more predominant in one financial planning process or approach over the other as theory suggests. Additionally, the research aims to identify whether performance measures directly tied to financial planning targets are evident and whether this could be the root cause of the continuous gaming behaviors, despite the various new budgeting alternatives and approaches introduced which aim to reduce them. This will help understand if budgets are being used unnecessarily for control, causing information asymmetry problems (moral hazard) between management and executives. To sum the above up, three research questions have been formulated to follow closely throughout this paper:

1. *How dominating is gaming behavior within financial planning processes?*
2. *Is gaming behavior more predominant in one financial planning process or approach over the others?*
3. *Is gaming behavior more dominant when financial planning targets are used for performance measurements?*

1.4. Outline of the Thesis

The outline of this thesis has been structured and divided into six parts. The first section, which has been covered already, consists of the *introduction* which has described the foundation and focus of the thesis. The second section refers to the *methodology*, which covers the research strategy, research design and explains the data collection method which will be used for this study. Thirdly, the theoretical basis of this paper will be outlined whereby the underlying *literature* on budgeting and other financial planning processes will be presented. Next, the *empirical findings* and *analysis* will be presented, outlining the full results from the primary research explained within the methodology. This section will filter through the findings with constructive analysis wherever relevant. After this section, a *discussion* in relation to the findings from the literature review will be presented, allowing room for pre-conclusions and assumptions if necessary. Finally, the final section will cover the *conclusion* and *suggestions for future research*.

2. Methodology

2.1. Research Strategy

Bryman and Bell (2007) describe two research strategies for conducting a business research, quantitative and qualitative. Quantitative strategy often emphasizes quantification in data collection and the focus is on testing a theory with a deductive relationship between theory and research, meaning that the findings are used to confirm or reject the theory. Qualitative strategy on the other hand usually emphasizes words in the data collection rather than quantification and the approach on the relationship between theory and research is inductive as the emphasis is on the generation of theory, meaning that the theory is an outcome of findings (Bryman & Bell, 2007). As the aim of the research questions presented earlier in this study is to answer whether problems of gaming behavior are more predominant in one aspect over other financial planning processes, as theory suggests, the quantitative research strategy with a deductive approach was chosen over qualitative.

Additionally, the topic of the games that manager's play with their budget has received limited attention from business writers and academics and budgeting gamesmanship activities have been largely reported by way of anecdotal reference in qualitative studies (Bart, 1988). Thereby, there was a greater need for quantitative research strategy in this field, which without a doubt strengthens the decision of choosing quantitative research strategy and this study's contribution to research.

2.2. Research Design

To be able to establish the relationship between the gaming problems and different financial planning processes and approaches with a quantitative research, empirical evidence needed to be gathered. Few research methods can be used for that purpose, namely experimental, quasi-experimental or non-experimental (Blair, 2016). Experimental and quasi-experimental studies establish causality between independent and dependent variables. Non-experimental on the other hand establishes an association between variables and examines what is observable without making any intervention (Blair, 2016). With non-experimental methods, it's only possible to examine the relationship between variables (Bryman & Bell, 2007), not identify which one causes the other, nor can be identified which variable is the independent or dependent (Blair, 2016). As previous research already showed a relationship between financial planning processes and gaming behavior, the main objective of this study was to measure *how* dominating the gaming problems are within the financial planning processes, rather than finding a causal relationship. Additionally, it could be done without any intervention, therefore a non-experimental research design was chosen for this study.

Bryman and Bell (2011) give few options when it comes to a non-experimental research design, namely cross-sectional (survey research), longitudinal, single case study and comparative design. For primary data collection in this study, cross-sectional design (survey research) was seen as the most suitable out of the research design options. With survey research, the data is collected at a single point in time, and then analyzed to detect patterns of association of two or more variables (Bryman & Bell, 2007) and the goal is to gather as much data as possible to be able to determine averages (Blair, 2016). This suited this study well

as the aim was to measure *how* dominating the gaming problems are and more than two variables were needed to be observed as organization's type of financial planning processes and approach, size, industry and sector might affect the gaming behavior. Additionally, observation at a single point in time was considered sufficient for answering the research questions in this study, which excludes longitudinal research design, which differs little from cross-sectional design other than giving more insight into the time order of variables as the sample is observed on more than one occasion (Bryman & Bell, 2011).

Survey research has, however, few limitations that will be discussed later in the methodology, however, as an attempt to cancel out those limitations (Bryman & Bell, 2011) it was found necessary to gather secondary data as well. Secondary data is data collected by other researchers and by adding that to the research along with the primary data, it enabled a comparative element to the research design and the possibility of a cross-cultural analysis. With this combination, the primary data from the survey research and secondary data, a triangulated approach was formed which could result in greater confidence in the findings (Bryman & Bell, 2011).

2.3. Primary Data Collection Method

For a survey research, two main instruments were to be considered for the data collection. A questionnaire, most often a self-completion questionnaire that respondents answer by completing the questionnaire themselves. The other instrument being a structured interview, a questionnaire administered by an interviewer (Bryman & Bell, 2007).

For this research, a self-completion questionnaire was chosen out of the two instruments. The main advantage of a self-completion questionnaire over a structured interview is that the questionnaire can be sent out to a big sample group, even a geographically dispersed sample, at the same time (Bryman & Bell, 2007). This was valued as an important factor for this research as to be able to both identify *how* dominating gaming problems are within financial planning processes as well as compare different financial planning approaches, data from a large sample was needed, something that the researchers would not be able to cover with interviews over the same period of time. Bryman and Bell (2007) also identify few disadvantages of a self-completion questionnaire in comparison to structured interviews, one being the fact that with the interviewer not present, no help can be given to respondents if they have difficulty answering the questions. However, as most organizations have been using some kind of a budgetary management control device for as far as anyone can remember (Anthony et al. 2014) and with a strong theoretical background when it comes to financial planning processes, it was evaluated that a clear and easy to follow questionnaire could be designed and respondents could complete it without an interviewer being present. Other risks and disadvantages of a self-completion questionnaire were taken into consideration when designing the questionnaire, which will be further discussed in the following section.

2.3.1. Primary Data Collection Tool

A questionnaire was designed by the authors and overviewed by their thesis supervisor. The three research questions presented earlier created the foundation for the questionnaire which was then supported by theoretical aspects of financial planning and the problem of budgetary gaming behavior. The questionnaire can be viewed in detail in *Appendix A*.

The questionnaire included 24 questions, 18 questions related to the research subject and 6 background questions for analytical purpose. The questionnaire was split into five sections so the respondents would need to complete certain questions before reviewing questions in the next section. Therefore the questionnaire could not be read as a whole before answering, which makes the questions more independent of each other as well as mitigates the problem of question order effects (Bryman & Bell, 2007).

As the term “gaming” could be perceived as negative by respondents, the questions aimed to identify the gaming behavior did not include the word “gaming” nor the theoretical names of the gaming techniques to avoid bias in answers and make the questions as neutral as possible. Additionally, the statements regarding gaming techniques were placed late in the questionnaire as respondents are less likely to stop answering when they are presented with more objectionable topics after they have answered several questions and reflected over the issues (Easterby-Smith, Thorpe & Jackson, 2015). Therefore, the sections in the questionnaire were not presented in the same order as the three research questions in this study.

The survey was opened with a cover page with introductory text which explained the aim and outline of the research as well as informed participants that participation was optional and they had the right to withdraw participation at any moment. The cover letter can be viewed in detail in *Appendix B*. The following terms were presented on the cover page of the survey and were participants asked to have them in mind while answering the survey. The terms were presented in the survey to mitigate the disadvantage of a self-completion questionnaire presented by Bryman and Bell (2007) of not having the researchers around to elaborate on certain questions if respondents are having problems answering. The terms were based on Anthony and Govindarajan’s (2007) definition of a budget and forecast, as well as Anthony et al. (2014) definition of a rolling forecast.

Budget is an estimate of both revenues and expenses stated in monetary terms used to estimate a potential profit of a business unit and organization. Budgets cover a certain period, such as one year, and the budgeting preparation takes place before the period begins.

Forecast is a prediction of what most likely will happen, can be for any time period and is updated as soon as a change in conditions is realized. Forecasts are not necessarily stated in monetary terms.

Rolling forecast is an estimate of both revenues and expenses used to estimate a potential profit of a business unit and organization. A rolling forecast is not bound to the calendar year, is usually planned 12 months ahead and revised every 3 months in which a new forecast overlaps the last one.

The questionnaire started with a multiple choice question asking what kind of financial planning process is the most descriptive within the participant’s organization. The question was designed to categorize participants after the type of financial planning process used, namely budget, budget supplemented with a forecast, budget supplemented with rolling forecast, forecast, rolling forecast or none financial planning, and affected how following questions in the survey were phrased. Following the first question, participants were asked about the frequency and importance of financial planning. The aim of those questions was to receive data for further analytics if gaming behavior would be detected in answers later on. Additionally, there was an open question regarding how much in percentage terms, actual figures differed from the

planned figures in the last calendar year, 2017. The aim of the open question was to be able to analyze if there is a correlation between gaming behavior within the organization and deviation in financial planning.

Part two of the questionnaire presented three statements regarding the approach of financial planning processes and participants were asked to choose the most applicable one for their organization. The statements were based on definitions from Anthony et al. (2014) on top-down, bottom-up and iterative budgeting approaches, which are further discussed in the theoretical chapter of this research. The aim the statements in the survey was to analyze a possible difference in gaming behavior between budgeting processes and thereby, answer the **second** research question; *Is gaming behavior more predominant in one financial planning process or approach over the others?*

Part three of the questionnaire included eight statements where the participant was asked to read each statement and answer how much he or she agrees or disagrees with each one. Response choices were presented on a five-point Likert scale (Bryman & Bell, 2011) which allowed a neutral response. The former five statements were aimed at finding out the participants' attitude towards the relevance of financial planning estimates and targets, as well as the usefulness of using financial targets for measuring performance and determining rewards and/or punishments within the organizations. The last three statements were then aimed at the actual use of financial planning targets within the organizations and with that, collect evidence for further analysis of the gaming behavior according to the **third** research question; *Is gaming behavior more dominant when financial planning targets are used for performance measurements?*

Part four of the questionnaire then included five statements directly related to gaming behavior where the participants were asked to read each statement and answer how much he or she agrees or disagrees with each one. Response choices were presented on a five-point Likert scale (Bryman & Bell, 2011) which allowed a neutral response. The statements were based on four gaming techniques, *namely sandbagging, revenue manipulation, big baths and budget ratcheting*, which are defined and discussed in the theoretical chapter of this research. The aim of these questions was to directly identify gaming behavior within the organizations participating in this research and by that, hopefully find an answer to the **first** research question; *How dominating is gaming behavior within financial planning processes?*

The questionnaire then concluded with six background questions. Two questions aimed at the participants and his/her role in the financial planning process and four questions regarding sector, industry, size and age of the participants' organization. For the organization's size criteria, the European Commission's (2018) definition of an enterprises' size was used, which is based on a staff headcount. The purpose of the background questions was to be able to analyze differences in gaming behavior based on the role in financial planning processes as well as organizations. The background questions were placed last in the questionnaire to mitigate the risk of repelling respondents with questions they might find too personal. Thereby, these ensured respondents were already engaged in the research once answering these questions, which increased the likelihood of the respondents completing the survey.

2.3.2. Primary Data Sample Selection

The sample selection was based on the criteria that the organizations included in the research had primary headquarters in Sweden. This was due to two reasons. First, the research was conducted from Lund University in Sweden, increasing the likelihood of participating organizations relating to the researchers. Second, the fact that a number of Swedish companies have abandoned budgets (Jensen, 2003), has increased the likelihood of having an organization using Beyond Budgeting as a financial planning process in the research sample.

A list of 299 organizations with primary headquarters in Sweden was found online with the help of Google search engine. The list was assembled by unknown authors, so a complete coverage of organizations with primary headquarters in Sweden could not be guaranteed. The sample is therefore categorized as a convenience sample as the list was simply available by virtue of its accessibility (Bryman & Bell, 2011).

After sorting out all non-operating organizations, 278 organizations within eleven industries were left. For this research, 100 organizations was found to be a relevant final sample size given the amount of time and resources available for collecting contact information for each organization. The list was therefore narrowed down to 100 organizations, and limitations that come with a smaller sample size were kept in mind for analytical purposes. To make the final sample as descriptive as possible, the proportion of each industry was kept the same in the final sample as in the original list (see *Table 1*). Organizations within each industry were selected randomly with the help of the “random selection” function in Microsoft Excel.

Table 1: Sample Selection

Industry	Original sample size	Original sample %	Final sample size	Final sample %
Basic materials	14	5%	5	5%
Conglomerates	5	2%	2	2%
Consumer goods	56	20%	20	20%
Consumer services	34	12%	12	12%
Financials	24	9%	9	9%
Health care	16	6%	6	6%
Industrials	64	23%	23	23%
Oil & gas	2	1%	1	1%
Technology	45	16%	16	16%
Telecommunications	12	4%	4	4%
Utilities	6	2%	2	2%
	278	100%	100	100%

An email address was collected for each organization, found on their web pages, and an email sent out to all organizations on April 23, 2018, with an introduction to the research and link to the survey. Most of the email addresses were general addresses such as press and media contacts. Others were email addresses with a direct contact, such as CFO or managers. Email recipients were asked to forward the survey to the person(s) responsible for developing and controlling the financial planning process within their

organization, if that person was not the recipient itself. Email recipients were also given the option to send the survey to two or more employees within the organizations. The email sent to organizations can be found in *Appendix C*. A reminder was sent out by email twice, on April 27 and May 3.

2.4. Secondary Data Collection Method

For secondary data, two prior studies from academic papers were gathered which took on a similar focus on the nature of this research and were used to complement the primary data. The studies were found in academic journals. The journals were found online with help from Google Scholar search engine as well as LUBsearch, being the University of Lund's academic paper database. As this thesis was conducted as a part of Master program at Lund University, an access to both of these databases was in place. The key terms used in the search for the secondary studies were "budget gaming" and "budgetary gaming" which made the papers easily identifiable.

As gaming is a subsection of budgetary criticisms, it was quite challenging to find studies which focused to great extent on gaming, manipulation and slack creation. Most of the studies found had a focus on general problems with budgetary control and therefore, relevant studies needed to be filtered from the responses. This meant that some of the data within the secondary studies was not relevant for this research so the secondary data collected was purely based on the criteria that it was comparable to the primary data of this research. However, a short introduction of each case including research purpose, sample size and data collection method was included for informative and analytical purposes.

2.5. Literature Review

A literature review was conducted for this study and presented in chapter 3 as it provides a base for the research which helps to familiarize the key concepts, the current state of integral knowledge and methodological approaches used for the topic in question. Additionally, literature review helps suggest potential further research questions and helps to interpret results from primary and secondary data to form a valid conclusion (Bryman & Bell, 2011).

The literature review covers the overall subject area of budgetary criticisms, which is then narrowed down to the criticism of the primary focus, gaming. In order to gather relevant academic journals and publications, keywords such as "gaming", "budget gaming", "budget criticisms" and "beyond budgeting" were used on academic search engines, primarily Google Scholar and LUBsearch.

The information from the literature review was used to provide a suitable frame for primary data collection, which was combined with the empirical findings and analysis. Using the literature in this way follows a structure outlined by Bryman and Bell (2011) known as the "snowball effect", meaning previously conducted literature is used for the purpose of creating further findings.

2.6. Data Analysis

For analyzing, the primary data was exported from the online survey software, SurveyGizmo, to Microsoft Excel. The data was then analyzed both in Microsoft Excel as well as in the statistics software, IBM SPSS Statistics 25. Both software were used and data was compared to prevent errors in the data processing,

ensuring result consistency. For comparison of mean between different groups, a one-way analysis of variance (ANOVA) test was used and Post Hoc test to identify where the difference lies. For correlation between variables, a Pearson correlation coefficient test was used.

The numerical data from secondary case studies was collected and structured in Microsoft Excel for comparison to the primary data. As the authors did not have access to the raw data, no further analysis or statistical tests were run for the secondary data further than presented in the cases themselves.

2.7. Limitations of Research Strategy and Design

As previously stated, a cross-sectional research design (survey research) with a self-completion questionnaire was chosen to be the most applicable for the research purpose, although such research design presents various shortcomings. The following section will elaborate on those most relevant and important for this research.

Response rates are generally low in self-completion questionnaires for various reasons (Blair, 2016) which increases the risk of bias, unless it can be proved that there is no difference between those who participate and those who don't (Bryman & Bell, 2015). However, Bryman and Bell (2007) argue that when relying on a convenience sample, as is the case in this research, a low response rate is less significant. The risk of a low response rate was though not to be ignored and two reminder emails were sent to all organizations within the sample to follow up on the survey. In addition, secondary data was collected to increase the validity of the research through triangulation (Bryman & Bell, 2015).

The reliability of the data can be an issue as participants can intentionally or unintentionally give inaccurate responses (Blair, 2016) and the researcher cannot be sure that the right person has answered the questionnaire (Bryman & Bell, 2015). This was especially a risk in this research as answers were received with full confidentiality towards the respondents and little was known about respondents except their job position. As a response to this risk, instructions on who was most relevant to answer the questionnaire was given within the email to organizations. Additionally, respondents were asked to answer all questions with integrity. On the other hand, as a trade-off for the risk of not being sure who specifically answered, confidentiality may increase motivation of those participating in the research if the questionnaire asks sensitive and non-disclosed information (Van der Stede, Young & Chen, 2007) which gaming behavior can certainly be perceived as, thereby increasing the previously mentioned low response rate.

A general limitation with a self-completion questionnaire is a high risk of missing data due to lack of supervision as it is extremely easy for participants to decide whether or not to answer questions, especially if they appear boring or irrelevant (Bryman & Bell, 2007). To mitigate this, all questions within the survey, except for one open question, required an answer in order to be able to continue the survey. To ensure respondents were not prompted to fill in an option without integrity, neutral answering options such as "cannot say" and "neither agree nor disagree" were in place.

Finally, the questionnaire was sent out in English to Swedish organizations, meaning that the literacy in the English language may affect some respondents not having English as their first language. The effects of

this might though not be significant as numerous organizations within the sample operate in an international environment.

2.8. Validity and Reliability

After reflecting on the limitations of a quantitative research strategy and survey research design, it is important to look into the important criteria's for evaluation of the research, which are reliability, replication and validity.

Reliability indicates a consistency, or the likelihood for the same results in another study with the same methodology (Blair, 2016) and is mainly related to the quality of the measures used (Bryman & Bell, 2015). Replication, being very close to the idea of reliability, refers to as the name suggests, the capability of replication (Bryman and Bell, 2015). Validity then takes on the integrity of the conclusion generated from a research (Bryman & Bell, 2015) as well as referring to whether the research measures the concept it claims to study (Blair, 2016). Although these concepts seem to portray synonyms, they have very different meanings, yet are intertwined as if a measure used is not stable and reliable, meaning it cannot be valid (Bryman & Bell, 2015).

2.8.1. Reliability and Replication

Bryman and Bell (2015) mention three important factors when considering whether measures are reliable, namely stability, inter-rater-reliability and internal reliability. Stability refers to whether a measure is stable over time and inter-rater reliability deals with consistency when a lot of subjective judgement is involved. For example, in rating or categorizing answers to open-ended questions (Bryman & Bell, 2015). As this research was conducted once at a single point in time and does not include measures relying on the subjective judgement of the researchers, stability and inter-rater-reliability were not found to be relative for this research.

Internal reliability, on the other hand, was found to be an important factor for this research and refers to the issue whether the scale or index used is consistent or not, which for primary data in this research was the Likert scale. One way of testing this is with the split-half method, whereas variables are divided into two halves and a degree of correlation between the two halves is scored (Bryman & Bell, 2015). For this, the Cronbach's alpha test within the statistics software of SPSS was used, which is the most commonly used test of internal reliability. The test calculates and presents a result of a score from 0, no internal reliability, to 1, meaning perfect internal reliability and is score over 0.7 accepted for internal reliability (Bryman & Bell, 2015). The Cronbach's alpha was calculated for variables within this research and when variables for gaming behavior, financial planning perception as well as financial planning targets in relation to performance measures were tested together, total 14 variables, the result was 0.635 which is little below the acceptable level. When groups of variables were split up, the Cronbach's alpha for gaming behavior variables was 0.914, for financial planning perception 0.707 and financial planning targets in relation to performance measures was 0.868, which is all above the acceptable level for internal reliability.

For the research to be replicable, the procedure of data collection was clearly described within this chapter and the questionnaire along with cover letter is displayed within the appendices, which increases the likelihood of another researcher being able to reproduce the research and gain similar results.

2.8.2. *Validity*

Bryman and Bell (2015) outline four sides of validity, namely measurement validity, internal validity, external validity and ecological validity. Measurement validity is highly related to the reliability of measures clarified in the previous section. Internal validity relates primarily to the issue of causality and as cross-sectional research design (survey research) produces associations rather than causal inferences, the internal validity is typically weak within this research design and will therefore not be elaborated further on. This leaves external validity and ecological validity for further discussion.

External validity is concerned with whether or not the results of a research can be generalized beyond research context (Bryman & Bell, 2015), in this research, beyond the organizations that made up the sample. As a non-random convenience sample was used in this research, the external validity of the research becomes questionable (Bryman & Bell, 2015). In attempt to increase the external validity and possible generalization, it was made sure that the organizations within the final sample chosen represented as many industries as possible as well both private and public sector. Bryman and Bell (2015) then highlight that it is important to realize that findings from quantitative research can be generalized only to the population from which the sample was taken, in this case, Sweden. The last part of the validity considerations is the ecological validity which is concerned with whether or not the research findings are applicable outside the unnatural research environment, to everyday life. Research design, such as cross-sectional research, which makes a great deal of use of research instruments may compromise the ecological validity. However, for this research, it is believed that the ecological validity is ensured as respondents are being questioned regarding their personal experience within the organization rather than them performing a certain observed task. Additionally, the research reached out to those individuals directly involved in the financial planning processes which was being observed.

3. Literature Review

The literature review will begin with a general overview of the origins of budgeting and how it has implemented itself as a management control tool within the organizational context. The idea is to explore and come to a conclusion as to how gaming has evolved as a part of everyday activities within the budgetary process and to try and understand if a predominant approach influences gaming more than another. The literature review will help to answer the outlined research questions as the theoretical verdicts from other researchers can back up findings conducted later in this paper.

The theoretical review is divided into various chapters which aim to give more information with regard to the chosen topic. Firstly, the general view on budgets and their uses will be outlined. Secondly, the view on budgets will be followed up on criticisms outlined within the literature. Thirdly, the next section will cover elements closely associated with the different budgetary processes which organizations tend to structure into their control system. After this, the alternatives such as Better Budgeting and Beyond Budgeting will be outlined to try to identify if any elements of these adaptations have led to reduced gaming. This will be viewed alongside the outlook between a focus on strategic growth and adding value, which leads to a perception of reduced unethical practices in the working environment. Lastly, the study will focus primarily on budgetary gaming to assist in answering the outlined research questions. Heavy emphasis will be aimed towards different gaming techniques, performance evaluations and the information asymmetry issue in organizations.

3.1. Budgeting

As discussed in previous sections, budgeting processes originally emerged in the 1920s as a tool for managing costs and cash flows, which have then evolved into a fixed performance contract and management device to keep score and attempt to dictate organizational actions (Hope & Fraser, 2003a). The following section will describe further what budgets entail, the process of budget preparation, and distinguish budgets from both strategic planning and forecasts.

Anthony and Govindarajan (2007) define budgets as estimates of both revenues and expenses and therefore, an estimate of potential profit stated in monetary terms. Budgets usually cover one year, with the preparation taking place before the year begins. Budget proposals are reviewed and accepted by an authority higher than the manager who creates the budget, and by that, budgets become management commitment. Managers agree to accept the responsibility to attain the budgeting objectives and higher authority makes implicit assumptions that managers will take positive steps to make actual events correspond to the planned budget.

As a management plan, the budget does not only fulfil the planning role by deciding on what the organization is going to do during the budgeting period in monetary terms. Additionally, it involves allocation of resources throughout the organization to fulfil the plan and coordination internally, ensuring that all parts of the organization are following the same plan. Reflection and communication are as well useful activities formed during the process of preparing a budget, as the budgeting task actually makes managers think about matters and communicate not only within the organization but as well with suppliers. So, regardless of how the actual budget turns out, these activities may prove to be very valuable for the

organization (Anthony et al. 2014). The process of a budget is therefore seen as an important planning tool within organizations but is distinguished from the process of strategic planning. This usually covers several years and is structured by product lines or other programs, while a budget is structured by responsibility centers (Anthony & Govindarajan, 2007).

With the management commitment outlined in Anthony and Govindarajan's (2007) definition of budgets, the budget takes on the accountability role as managers are made accountable for them (Anthony et al. 2014). Accountability comes in two forms, monitoring and motivation. Monitoring is about superiors making sure that their subordinates are following the plan while motivation is mainly achieved through the setting of goals with both employee participation in setting goals and rewards for reaching the goals. The two forms of accountability can work at cross-purposes regarding intrinsic motivation that managers and employees feel to reach a certain goal, as monitoring might reduce intrinsic motivation and external rewards do not always increase motivation (Anthony et al. 2014). The use of rewards for motivation will be reflected on in more detail later on within the literature review due to the high impact they have gaming behavior.

The commitment characteristic of the budget is an important factor when a budget is distinguished from a forecast, as a forecast is a prediction of what is most likely to happen and is usually not approved by a higher authority. Additionally, the manager in charge of the forecast is unlikely to make an attempt to shape events to ensure it is met. In addition, forecasts are not necessarily stated in monetary terms, can be valid for any time period and are updated as soon as a change in condition is realized. Therefore, from the management's point of view, forecasts are a planning tool while budgets are used for both planning and as a control tool (Anthony & Govindarajan, 2007).

Apart from contributing to the number of different purposes mentioned above, Anthony et al. (2014) state that budgeting has also become a ritual, as it is not only used for the purpose of management control. Many organizations prepare a budget out of habit and do not consider the possibility of not having one, while others use it for legitimacy, as not preparing a budget is seen as very unprofessional or inefficient by external stakeholders.

3.2. Critique Against Budgeting

Budgets have historically played a major role in management control but over the later years, they have become subject of huge criticism and debate (Libby & Lindsay, 2010). There has been widespread debate as to whether the problems amount in regard to how they are used or whether the idea of budgets is fundamentally flawed (Hope & Fraser, 2003a). In fact, Jensen (2001) in his study "Budgeting is broken, let's fix it" labelled corporate budgeting as "a joke" and states how everyone is aware of how flawed it actually is. Additional to this, Wallander (1999) stated that budgets are "an unnecessary evil" and that the best a company can do is to heave the budgeting department and all the paperwork overboard. So why all the criticism for something which has been actively part of business life for almost a century? The question remains unknown as to why literature nearly two decades ago has been warning organizations about budgeting yet most still use the management tool towards this day. Listed in Otley (2006, p.292) are twelve major issues and problems related to budgetary control, which have been highlighted from various sources of literature:

1. Budgets are time-consuming and costly to put together.
2. Budgets constrain responsiveness and are often a barrier to change.
3. Budgets are rarely strategically focused and often contradictory.
4. Budgets add little value, especially given the time required to prepare them.
5. Budgets concentrate on cost reduction and not value creation.
6. Budgets strengthen vertical command and control.
7. Budgets do not reflect the emerging network structures that organizations are adopting.
8. Budgets encourage “gaming” and persuasive behaviors.
9. Budgets are developed and updated too infrequently, usually annually.
10. Budgets are based on unsupported assumptions and guesswork.
11. Budgets reinforce departmental barriers rather than encourage knowledge sharing.
12. Budgets make people feel undervalued.

The above gives evidence of conclusions gathered from various practitioners over the years to show a dissatisfaction alongside the traditional budgeting process, yet most companies still use the traditional approach within their financial and management control system. Various authors (Otley, 2003) have argued that due to the amount of time budgeting has been accepted as a practice, it has been deeply embedded into organizational culture. Therefore, various problems of the budgetary control imply more of a lack of strategic focus more than anything. The first point is particularly important in regard to cost and time as global organizations strive to be competitive and quick in the current global economy. In fact, Hope and Fraser (2003a) concluded that some project leaders estimate that they saved 95% of time and large amounts in cost when they stopped using a budget. All in all, the idea of overall value creation is also challenged as really, budgets are only put in place to have some structural guideline on paper, which does not directly link to shareholder value.

However, Libby and Lindsay (2010) outline that it seems hard to imagine why so many organizations would continue to budget if it was continuously flawed after Hope and Frasers (2003b) universal perception of “Abandon the budget”. Also stated by Libby and Lindsay (2010) is that too much emphasis may have been placed by Hope and Fraser (2003b) on the above budgetary problems which have given a very personal and judgmental view on the subject. Overall, there must be something keeping the budgetary process alive, which could link in with the section on budget gaming. Could management be continuing with the budgeting process to continue receiving the personal benefits of gaming?

However, no matter how much the budget is continued to be used in the present day, the criticisms still remain at a high. In fact, more literature is focused on the negative aspects of budgetary control, whether this is primarily one aspect or even a general overview of the budgetary flaws. It seems to be quite difficult to locate previous research primarily on the benefits of budgeting as it is clear that a positive view has very little argumentation or evidence to prove advantageous.

3.3. Budgeting Processes

The way the budgets are conducted, the budget process itself, has a great impact on how the budget is communicated within the organization and therefore affecting the many aspects of the budget critique

mentioned earlier. Anthony et al. (2014) mention three different budget processes, namely top-down, bottom-up and iterative budgeting.

Top-down budget is a relatively fast process where the top management draws up a budget and breaks down the relevant part for subordinate managers who are responsible for different items in the budget. The relevant manager checks if the figures are realistic, and if so, accepts them. Otherwise, they can protest them, and then it's up to the controlling department to decide on if and what changes are made. However, the top management still has the last word regarding any changes. In this way, managers decide what they want the budget to show based on their own predictions of the organization's performance and what is tactical to show in the budget. This type of process has a major drawback though, that is the low participation of employees which can result in both less realistic budget as well as lack of commitment (Anthony et al. 2014). If the top-down budgeting process is put in retrospect with the major issues and problems of budgeting presented by Otley (2006), few issues are coherent. The top-down budgeting process is likely to be based on guesswork and reinforces departmental barriers rather than encouraging knowledge sharing, although not being particularly time-consuming and seems to give little space for gaming behavior. However, some researchers argue that the top-down budgetary approach does cause problems in human relations at work as it's used an externally controlled pressure device, which results in gaming behavior problems such as budgetary slack and data manipulation (Heupel & Schmitz, 2015).

The bottom-up budgeting, adverse to the top-down budget, is a process with high participation and involvement from managers and even ordinary employees. The budget is created under managers' own assessment following only guidelines received from top levels. Each department sends their figures to a control department that consolidates all departmental budgets, finalizes them and sends them to top level management. Due to high participation from lower levels, this process more likely to generate commitment to meet the budget as well as being realistic. On the other hand, the figures in the budget might not be in line with top management's predictions or ambition and might indeed increase the risk of managers including buffers in the budget figures to make goals more attainable (Anthony et al. 2014). Heupel and Schmitz (2015) however provide counter arguments and state that employees that have a voice in the process of budgeting have a higher perception of organizational justice than employees using top-down process. With this participation, a trust is built that leads to a reduction of dysfunctional actions such as budgetary gaming and data manipulation.

The third process, iterative budgeting, is conducted in the same way as bottom-up budgeting but the cycle is repeated one or more times, with the controlling department ensuring communication is issued promptly until top management is satisfied with the figures. As the revision requires participation from many levels, it often includes negotiation between low-level managers and their superiors which can be very time-consuming, motivationally strenuous and requires commitment that links with participation (Anthony et al. 2014). Although the major drawback with the revisions is the room for gaming behavior as if management is aware of the revision, they are more likely to put a slack or a buffer within the first round. Top management and controlling departments are aware of this and try to prevent it by creating even higher demands in the revision, which in the most severe scenarios, turns the negotiations into a game where managers on different levels try to trick each other (Anthony et al. 2014). However, this type of budgetary

process attempts to reduce the information asymmetry problem within the workforce which in turn opens up transparency. This then aims to reduce data manipulation of financial planning processes overall (Chong & Strauss, 2017).

Reviewing these different budgeting processes with the pros and cons gives an indication that the critique against budgeting is rightful as different alternatives only provide some kind of a trade-off between the budget issues and problems presented by Otley (2006), rather than eliminate them.

3.4. Better Budgeting

Due to the limitations and complications with the traditional budgeting process in the modern day, new budgeting techniques have been the highlight of topic within the literature, which aim to improve planning and the overall budgeting process (Uyar, 2009). A predominant theme is that the traditional planning and budgeting processes are failing to deliver any results and therefore, Better Budgeting was introduced in order to be aligned with the organization's strategies and secondly, to offer something that is value based and continuous in order to maximize shareholder value (Neely, Bourne & Adams, 2003). Additional to this, Rodríguez (2013) states that the Better Budgeting model is necessary within the organization in order to support continuous improvement and innovation and to develop and maintain a consistent behavior. As the general rule of Better Budgeting is to correct the majority of deficiencies with the traditional approach, it could show signs of reduced gaming and data manipulation due to the flexibility involved.

A more widely spread budgeting alternative which the literature normally directs at is Beyond Budgeting (Hope & Fraser, 2003a), which will be highlighted in further detail later in the theoretical review. However, to be able to go fully Beyond Budgeting it requires the organization to virtually abandon budgeting altogether, which suggests why many companies might not be inclined to abandon the budget (Jackson & Starović, 2004). Better Budgeting, on the other hand, might therefore be more suitable as the approach compromises of making incremental improvements to the traditional approach which adapt to the modern world (Uyar, 2009). The question though remains, whether the Better Budgeting approach entirely acts on the disadvantages of traditional budgeting and mitigates the inefficiencies overall.

Outlined by Neely, Bourne and Adams (2003), the Better Budgeting approach takes form under five underlying principles which can assist an improved financial and non-financial planning process within an organization. The principals are beneficial for the long-term strategic planning of a company, although the principles tend to be time-consuming to complete. Neely, Bourne and Adams (2003) also state that the Better Budgeting techniques are best used on an ad-hoc basis rather than continuously as they tend to be more work than traditional budgets.

The Better Budgeting principles have an advantage over traditional budgets when it comes to the use of spreadsheets (e.g. Microsoft Excel), as other techniques are preferred. This means that the planning processes are not completed on easily manipulative programs where it is easy for someone to change data without a trace. As the use of a spreadsheet is closely linked with high levels of data manipulation and lack of control, a planning approach without spreadsheet usage could prove to be more efficient (Uyar, 2009).

The five Better Budgeting principles, listed by Uyar (2009), are comprised of:

1. *Activity Based Budgeting*: Similar to activity based costing and management (ABC) but involves planning and coordination along the value adding activities in the budgeting process. Although this activity is favored due to its strategically minded nature, it particularly requires a lot more time than the other principles of Better Budgeting (Neely, Bourne and Adams, 2003).
2. *Zero Base Budgeting*: Expenditures must be re-justified during each budgeting cycle, rather than basing budgets on the previous year. With this technique in particular, it could really minimize the act of gaming behaviors such as *sandbagging* and *revenue manipulation*, which will be outlined in the final section of the theory.
3. *Value Based Management*: Approach more focused on managing the creation of shareholder value over time. All expenditure planning including what would have been including in the original budget are evaluated more as project appraisals and assessed in terms of shareholder value they will create. Although, Neely, Bourne and Adams (2003) argue that this technique seems to be more theoretical and that there is little evidence to prove that this will help to improve the budget process.
4. *Profit Planning*: Profit wheel method for planning future cash flows of profit centers and sees whether an organization generates sufficient cash. Neely, Bourne and Adams (2003) also argue that this is more theoretical and does not directly give an alternative to budgeting but has a similar concept. This technique implies that it could still be a victim of subjective behavior and number manipulations due to number planning.
5. *Forecasting*: Solves the problems associated with infrequent budgeting and result in more accurate forecasts. This minimizes many problems with budgets in the fixed point of time i.e. manipulating data and cutoffs at the end of the year. Neely, Bourne and Adams (2003) state that this approach is the most likely to be a Better Budgeting approach as it takes a similar form to the traditional view but overcomes the time-lag problem.

The above techniques could be regarded as useful towards the current changing business environments, although, Neely, Bourne and Adams (2003) suggest some criticisms with the principles, largely because they believe that some of them do not give an alternative to a budget based system, more a completely different tool having no similarity to a budgetary structure. However, many cases studied by Rodríguez (2013) indicate that Better Budgeting is a more common practice than a traditional budget or the complete alternative of Beyond Budgeting. This is relevant to what Jackson and Starović (2004) identified and stated that 60% of companies are simply trying to improve their budgeting processes to the Better Budgeting view to meet the demands set for management. They identify two factors in this evolvement, firstly when there is more uncertainty, budgets become irrelevant for control and need more of planning emphasis. Secondly, in unpredictable environments, budgets are almost useless for control purposes, so therefore Better Budgeting could be the correct alternative. Anyhow, the outlook is simple; the environment and uncertainty is becoming too unpredictable to keep traditional budgeting process active and the limitations of this are only growing.

3.5. Beyond Budgeting

Continuing further from the Better Budgeting view, the outlook on Beyond Budgeting has rapidly emerged in the literature over the last few decades due to the traditional budgeting view blocking change and a direction into a more strategic light. Since the initial idea formulated and became an academic publication in 1998 (Beyond Budgeting Institute, 2014), it has been proposed as an influential idea that aims to reinvigorate management accounting within the organization's operations and performance elements. However, the tool which is Beyond Budgeting, did not take off to full extent until founders of the Beyond Budgeting Institute addressed their publication "*Who needs budgets?*" (Hope & Fraser, 2003a). Since this publication, the literature and research on the Beyond Budgeting principles seem to have increased dramatically due to the valid and encouraging benefits which are apparent in the rapidly changing world.

However, traces of Beyond Budgeting can be identified decades before the publication from Hope and Fraser (2003a). The origins of the Beyond Budgeting idea can be traced back to the 1970s when the visionary leader of Handelsbanken, Jan Wallander, argued that motivation has nothing to do with incentives but everything to do with involvement (Hope & Fraser, 2003b). Since the Swedish business leader adapted the operating structure of the bank to focus more on relevant KPIs, it has outperformed all Scandinavian rivals on just about every measure including return on equity, earnings per share and total shareholder return (Hope & Fraser, 2003a). The decentralized structure at Handelsbanken has enabled each and every branch to run as an independent profit center and thus focus on group targets of smaller segments of the organization, giving employees motivation for team collaboration (Goode & Malik, 2011). Not only has Jan Wallander turned Handelsbanken into a cost-efficient and well-structured company, focusing on staff engagement and stakeholder value, but has also become a visionary role model for other Swedish companies who aim to follow his footsteps in the adaptation (Hope & Fraser, 2003a).

The Beyond Budgeting approach promotes the most ideal characteristics for the more modern view of the budgeting system: Openness, transparency, flexibility and coordination (Pilkington & Crowther, 2007). However, moving from a traditional budgeting view over to a Beyond Budgeting position is no easy task. Goode and Malik (2011) state that Beyond Budgeting is not just another system of tools, but a practice, which requires a complete shift in the organization's culture and management style. The problematic and restrictive nature of the budgeting process is removed entirely, which directly enhances the potential of the firm, whilst motivating employees to make better decisions (Goode & Malik, 2011). As mentioned above, the Beyond Budgeting idea is more than set of tools; the idea is a practice which forms a coherent management model supported by tools such as benchmarking, balanced scorecards, rolling forecasts and activity based management (Narkowski, 2012). The approach overall should aim to reduce ineffective and unethical practices by promoting a decentralized and integrated working environment.

Effectively, the studies of Hope and Fraser (2003a) aimed to highlight the problematic effects of traditional budgeting with regard to fixed performance contracts, which was argued to be the heart of all the issues put together. The continuous research into the problems led to the formation of the Beyond Budgeting Round Table (BBRT) which was established in 1998 by Hope, Fraser and additionally, Peter Bunce (Beyond Budgeting Institute, 2014a). The idea of the BBRT is an active network where organizations can learn from the best practice studies as well as share information, such as implementation experiences (Beyond

Budgeting Institute, 2014b). Taken from the BBRT, but adapted by Daum (2002), the 12 guideline principles to follow for a Beyond Budgeting view are listed below, which were created by an early case study of 14 companies retaining an almost fully Beyond Budgeting structure:

1. *Performance Measurement*: Measuring success against competition, not against an internal budget.
2. *Motivation*: Through challenges and transferred responsibility.
3. *Responsibility*: Delegated to operational managers who can make decisions for themselves.
4. *Empowerment*: Allowing operational managers to act independently.
5. *Organization structure*: Based on customer focused teams aiming to maximize shareholder value.
6. *Truth*: Single truth with open and transparent information flows.
7. *Target setting*: Based on the agreement of external benchmarks.
8. *Rewards*: Based on the success of the team compared to the competition.
9. *Action planning*: Delegated to operational managers and updated continuously.
10. *Resource utilization*: Based on direct local access to resources.
11. *Coordination*: utilizes the use of resources on the basis of the internal markets.
12. *Control*: Continuous and open performance information focused on multilevel control.

To mitigate the general problems with the budgeting process, the Beyond Budgeting view generally tends to link all the principles together in a holistic view to ensure the best possible outcome (Bogsnes, 2009). The idea behind this is to not let any of the principles be seen as independent and to make sure they are linked interdependently whenever possible to create an overall open and transparent workforce. As the Beyond Budgeting principles focus on an adaptive and decentralized view, the view needs to be holistic in order for companies to meet the success factors of the information economy (Norkowski, 2012).

As identified above, the list immediately acts upon many of the major issues and problems of the traditional budgeting presented earlier by Otley (2006). An important aspect of this study is the use of rewards and how it affects an individual's motivation in order to outperform expectations. As Otley (2006) pointed out, budgets are highly linked to gaming and can make individuals feel undervalued. The Beyond Budgeting approach therefore at least tries to address the problem with gaming in the sense of setting rewards to motivate people in more of an intrinsic way and to encourage employees to work strongly in a team setting.

3.5.1. Rolling Forecast

There is a range of tools within the Beyond Budgeting view which come together to form a practice to help reform an organization's culture and management style. One of the most popular tools, being rolling forecast, will be the one focused on in this study and used later on as a comparison with traditional budgets as the rolling forecast has been the heart of what most organizations following the Beyond Budgeting trend have adopted (Anthony et al. 2014).

Described by Morlidge and Player (2010), the rolling forecast is primarily a financial estimate of likely future outcomes, where the company believes it will be standing in regard to assumptions and economic forecasts about the environment and the organization's overall plan. The key word in regard to the core subject of gaming is "estimate" which automatically assumes there are no hard targets to be met and therefore, those involved in the forecasting process are unlikely to participate in data manipulative

activities. Additional to this, Zeller and Metzger (2013) highlight that the purpose of the rolling forecast is to enable better decision making to focus on maximizing shareholder revenue and completely deters the idea of manipulating the system to meet annual budgets.

The idea of the rolling forecast lies within the idea that leading companies wish to navigate their business as external conditions change (Zeller & Metzger, 2013). The openness and transparency of the forecast understands that decisions may be liable for change but fully accepts to keep the original direction if ideas run as expected. The openness means that, unlike the budget, the forecast is created for the upcoming 12 months ahead, not the calendar year (Anthony et al. 2014). Rolling forecasts are also performed every 3 months, overlapping the previous forecast by 9 months. Due to this, forecasts planned are in much less detail and are subject to change as mentioned previously with openness (Anthony et al. 2014). Although saying this, Banhan (2011) finds that companies do not completely abandon the traditional budget, or if they do, it is a rarity. Management tend to like to use the budget to set targets and to keep the workforce focused on goals (Zeller & Metzger, 2013) which implies gaming could be too far embedded into the culture as stated previously. The rolling forecast in this matter will be used primarily to manage conditional changes to business practices.

3.5.2. Beyond Budgeting Motivation and Relative Targets

A large element of the Beyond Budgeting literature is the usage of intrinsic work motivation over extrinsic motivation. Outlined heavily by Hope and Fraser (2003c) and Bogsnes (2009), the Beyond Budgeting model highlights heavily towards an intrinsically motivated team to gather the best results. Outlined by Ryan and Deci (2000), intrinsic motivation is defined as the completion of an activity for inherent satisfactions rather than for an alternative consequence, such as financial incentives. Extrinsic motivation on the other hand is the act of completing a task in order to gain a separable outcome, such as bonus pay. Ryan and Deci (2000) also highlight the fact that extrinsic motivation is highly tied in with financial incentives and therefore, encourages individuals to play games and not act collectively or strategically. In relation to previously mentioned Handelsbanken, Jan Wallander, the CEO, criticized the use of financial incentives and introduced a group-wide profit sharing scheme which goes hand in hand with the Beyond Budgeting philosophy:

Beating the competition or one's peers is a far more powerful weapon than financial incentives. Why do people need cash incentives to fulfil their work obligations to colleagues and customers?
(Hope and Fraser, 2003c, p.117).

The scheme is not intended to be an incentive scheme for employees to pursue financial targets but more of a reward for collective efforts and completed group projects, so in this sense, it makes no sense for employees to play games or manipulate data as they have no extra financial benefit to do so. The decentralized structure at Handelsbanken has enabled each and every branch to run as an independent profit center and thus focus on group targets of smaller segments of the organization, giving employees motivation for team collaboration (Goode & Malik, 2011).

Overall, the idea of the Beyond Budgeting model is to reach relative targets over fixed targets (Hope & Fraser, 2003b) and therefore, ensure strategic tools such as benchmarking and forecasting are in place. To

ensure the best out of these practices, full intrinsic motivation is desired within the strategic oriented organization (Bogsnes, 2009). If rewards are being presented purely on bonuses or cash incentives, this shows an instant clash with the nature of organization within a Beyond Budgeting view. The idea of being transparent and open to change is assisted by tools such as the rolling forecast to ensure relative targets are met. The above practices imply a potential reduction in all unfavorable behaviors in the workplace such as gaming, mainly due to intrinsically motivated employees, especially as there can be no manipulation for receiving a cash bonus if there is not one to manipulate.

3.5.3. Beyond Budgeting Criticism – How gaming could still be present

Even with the many benefits of the Beyond Budgeting model, an article published by Hansen, Otley and Van der Stede (2003) has in fact highlighted upon the potential issues with the Beyond Budgeting approach. The problems are as followed: *Relative and subjective performance evaluations, issues with the fixed performance contract and radical decentralization*. The problems stated could imply that the Beyond Budgeting process is not a perfectly flowing alternative and that asymmetric information in the process could be active. Its negative attributes could show that the short-termism and gaming problems could not be entirely removed from the organizational culture and that the way for employees to get around the issues with the performance evaluations could be subjective to further types of gaming to get the best out of an undesired situation.

Listed in their paper, Becker, Messner and Schäffer (2010) suggest a solution that organizations implement their own Beyond Budgeting model which suits their operational structure and culture instead of following the guiding 12 principles as outlined in literature. In this sense, they could pick, choose and even adapt the principles to fit the organizational structure. However, doing this implies that this is moving away from the Beyond Budgeting movement and that the 12 step process will lose its identity. Therefore, the adaptation could be something completely different from the Beyond Budgeting movement creating a new movement against budgeting. As mentioned before, Bogsnes (2009) implies that the Beyond Budgeting process is a holistic approach where all 12 principles guide and assist each other, so moving away from this completely defeats the purpose of the model.

In line with this, the positive attitudes toward the traditional budgetary process still seem to be present as many authors believe the traditional way is useful and advantageous for organizational use. Stated by Parker and Kyj (2006), the budgeting process creates strong links with people in the organization and is a good tool to communicate information between different organizational members. The idea behind this is that the budget is simple, easy to follow and is already embedded in the organizational culture, meaning everyone knows the process already (Otley, 2003). Tănase (2013) also continues to state that budgets provide clarity, coordination, reduces ambiguity and increases organizational commitment. Even though the negative perceptions of traditional budgeting generally outweigh the positives within the literature, Tănase (2013) states that instead of actually trying to disregard the budget, it may be more worthwhile to attempt to mend the budgeting process to eliminate the negative effects, almost making comparison with the less radical view, being Better Budgeting.

Lastly, Anthony et al (2014) question the Beyond Budgeting movement by stating that different contingencies require different management control systems and that when companies implement the new model, they do not adapt their control package to fit the new model. Additionally, they argue that Beyond Budgeting is just budgeting in disguise. Rolling forecasts, for example, are claimed to be a similar tool to budgeting and is certainly not an abandonment of it. This could be based on subjective views from authors but it is worth taking into account for the purpose of whether budgeting and Beyond Budgeting are similar concepts and to what extent they could differ in regard to misleading actions within the organizational culture.

3.6. Budget Gaming

Within the list of budget flaws listed previously, budgetary gaming has been highlighted particularly in the literature as a primary and major issue within the traditional budgetary view. The impact of traditional budgeting has led to high levels of adverse selection behavior which has been a result of asymmetric information between executives and management (Holmstrom, 1982). This has resulted in certain behaviors such as gaming which overall puts management in a better position in regards of having superior information over executives, thus manipulating the outcome of the budget process and recording false figures on paperwork. Such information asymmetries create a foundation for gaming and manipulation to happen in such business environments, however, there are of course ways to lower the damaging effects if this the desired outcome. However, researchers such as Bart (1988) conducted studies with managerial individuals who used various terms for their actions such as “flexibility, hedging and cookie jar”, implying that nothing was morally wrong with their actions.

3.6.1. Early Research on Budgetary Slack

The endless reasons for why gaming and manipulation of budgets occur are for ongoing debate and questioning. A valid reason for why budgets could be on the tail of excessive gaming is due to the uncertainty in the business environment. With this, Bart (1988) states that the concept of this and managers wanting to “play games” normally goes hand in hand, resulting in distorted and falsified information. In response to the above, it is said that senior managers must actively strive to discourage such behaviors and to think of alternatives for the uncertain environmental impacts (Bart, 1988). Merchant (1985) commented on a similar trend in such earlier studies in that management like to create budgetary slack in response to environmental uncertainties but questions to what extent this slack is actually used for a backup and not for unnecessary expenses within the organization. Looking at both pieces of early literature from the 1980s, it is quite evident that this idea of budgetary gaming was perceived more of a buffer, which should be used responsibly, rather than today where the focus is fully on manipulative, unethical and damaging behavior.

The early literature does give certain preventive methods to try and reduce the uses of such “slack” in order to identify ways in which it is being used for beneficial purposes. Holmstrom (1982) states that monitoring hierarchies would be a way to lower the impact of information advantages, thus lowering manipulation of the budgetary process. If executives monitor and follow actions of management’s decision making and day-to-day activities, there could be advantages in regard to noting incorrect data and could impact to what extent management is tempted to manipulate data. However, this would seem like an excessive and time-

consuming task, which then adds on to the flaw of the budgetary process already is a time-consuming activity. Additional to this, the paper by Merchant (1985) discussed that organizational slack can be reduced in the way the budgetary system is designed and thus implying a reduction in gaming. For example, if an “authoritarian top management budget control system” is implemented within the culture, the participation of ethical practices is relatively high and therefore, the desire to create slack is relatively low.

3.6.2. Sandbagging, Budget Ratcheting, Revenue Manipulation and Big Baths

Within the general sense of budgetary control, management is well aware that the outcome of the budgetary process is directly tied in with their own targets; managers are rewarded for meeting or exceeding targets and are set with disciplinary measures if they do not meet them, therefore various techniques are unethically implemented to ensure goals are met. Few of those techniques, namely *sandbagging*, *revenue manipulation*, *big baths* and *budget ratcheting*, are highlighted below and summarized in *Table 2*, whereas the subsequent section of the literature review will explain gaming within the performance measurement view.

Sandbagging – This process comes from the idea to lower expectations and set more attainable goals by lowering sales forecasts in order to set easier targets for the following years. Seng & Yew (2017) have even described sandbagging as the act of building slack within the budget which distorts the true estimates of revenues and expenses. This idea of thought is to compete in the opposite of setting lofty goals which force teams to stretch beyond their comfort zones and achieve the unexpected (Forbes, 2016). Forbes (2016) explains further that the benefits in which sandbagging can give a team motivation, investor confidence and reduction of company burn-rate. Although, setting aside the positive effects of sandbagging, the negative effects which encourage gaming should be considered to be more of importance and be threatening towards business operations. Steel and Albright (2004) argue that sandbagging is more costly than time-consuming to implement, thus shows how convincing it is for managers to implement. They also argue that sandbagging creates energy consuming internal debate between employees and leads to people, particularly management, being overpaid as bonuses are paid even when low budget targets are met.

Revenue Manipulation – A manager who knows he/she has reached performance targets will undoubtedly be interested to move revenues to the next calendar year. The reason why such manipulation is damaging is due to the influx of incorrect data and projections made available for certain individuals causing asymmetric information. Jensen (2001) also importantly states that when the manipulation of budget targets becomes a routine, it can undermine the integrity of the entire organization as a whole. Jensen (2001) states that an easy way to mitigate this is for executives willing to reduce manipulation to look further into the future and set bonus lines for many consecutive years based on long-term growth and profitability projections. Another similar method identified in Bart’s (1988) earlier work was the act of “rounding out effects” in their budgeting figures, possibly rounding down expenses in the budgets by potentially hundreds or thousands of dollars.

Big Baths – Relating to *revenue manipulation*, big baths are something of importance which need to be highlighted in the budgetary process. The idea behind this could be identified when management realize that their targets will not be made in the current year, postpone recognition of revenue until the next year

whilst moving costs to the present year. This overall practice means that management has a much higher likelihood of meeting next year’s targets.

In extension to the above three gaming techniques, the term outlined by Seng & Yew (2017) named “*budget ratcheting*”, which is closely linked to the sandbagging technique extends the problem by highlighting the problems of having additional slack built into the operating budget. Such techniques encourage managers to use already built in slack to make unnecessary end of period spending, just to ensure the budgeting amount remains the same for the next year (Seng & Yew, 2017). Such techniques are often heavily spotted in functional organizations and even extend to purchases which cannot be justified for work-related purposes. This slack assisting behavior could be due to Merchant’s (1985) view on management being prompted to obtain as much slack as possible if tight budgets are set from a top-down perspective. However, Merchants (1985) view on slack is that the more involved someone is in the budgetary process, the less desire to create slack, so this could create a contrasting view from Seng & Yew’s (2017) input that slack indirectly leads to unnecessary end of period expenditure.

Overall, these techniques give managers the idea that they are manipulating for the benefit of the company and its shareholders, however, they are really gaming the operational data flow. Jensen (2003) states that on a personal level, no one within the organization consciously believes that they are lying or behaving unethically when using any of the above techniques. This is due to most corporate cultures accepting these values and that is it just what is expected in day-to-day life. Overall, when the above practices are put into effect, the integrity of the organization is ruined and will spiral into future damage in the long run (Jensen, 2001).

Table 2: Gaming Behavior Techniques Overview

Gaming Behavior Techniques	Gaming Field			
	Expenses		Revenues	
	Forecast	Actual	Forecast	Actual
Sandbagging	•		•	
Budget Ratcheting	•	•		
Revenue Manipulation				•
Big Baths		•		•

3.6.3. Gaming in Relation to Performance Measurements

The concept of performance measurement has often been emphasized upon and has become a fashionable topic in the literature of management accounting over recent years (Schiehll & Morissette, 2000), thus creating a suitable foundation when linking budgeting within the process. Factors such as global competition and information revolution are some of the many issues which raise the awareness on the subject and the reason why organizations tend to incorporate important changes in the way they assess their overall performance (Schiehll & Morissette, 2000). That being said, if budgets are used so highly within performance measurement for overall efficiency improvement, the question remains as to whether gaming manipulates a large part of the performance measurement system.

In line with the above, Walker and Fleischman (2013) state that budget-based performance measures are one of the most common causes of dysfunctional and manipulative behavior in the workplace. Such approaches which are supposed to motivate are in fact leading to behavior such as lying, cheating and shirking. The problematic conclusion from this was that employees do not know whether they are acting ethically or unethically and that dysfunctional behaviors are built into job requirements. The point being that if individuals manage to benefit from financial incentive schemes built within the firm's performance evaluation, then information could be biased and lead to sub-optimizational decision making, meaning data has been adjusted in favor of the individual. However, Walker and Fleischman (2013) conducted a study to identify when unethical behaviors occur the most. The results indicate that situation-specific ethics and financial bonus incentives tend to have the most prolific manipulative views. This could link in with Ryan & Deci's (2000) view on intrinsic motivation and non-financial rewards going hand in hand, lowering the chances of workplace manipulation. Summarizing the above, financial incentives such as budget based performance standards creates incentives for managers to sandbag, game and manipulate the overall budgetary process for their pecuniary benefits for salary increases, bonuses and commission.

The literature also states various insights in regard to the type of control system in operation by an organization and what performance measures are in place. In comparison with Merchant's (1985) early work on the authoritative budgetary control system, the later research discussed by Van der Stede (2000) on rigid budgetary control systems shows an alternative view as pressures can amount to potential information tampering. As managers are held fully responsible for their actions from more senior members of the organization's hierarchy, they are fully required to meet the targets; managers who miss targets face interventions from senior management, loss of their bonus and possibly loss of their job (Van der Stede, 2000). Under these circumstances, managers may look for ways to protect themselves from all of these possible downside risks which affect their outlook in the workplace.

Whether under an authoritative or rigid budgetary control system, the underlying image and view of budgeting remains the same. Jensen (2003) states that, in relation to performance measurement, most line managers realize such processes of control are a joke. Although, the underlying argument of his work was not to completely discourage the budgeting system or remove it completely but to change the way performance is measured and how rewards and punishments are issued. Jensen (2003) states that eliminating the use of targets or budgets in compensation systems solves all problems; if a bonus or promotion is a function of what an individual accomplishes over whether or not a target is met, there is no monetary incentive to hide information or game the budgetary process. This may come with a problem if targets are really challenging to be met and the management is aware of this. In this case specifically, future expenses are moved to the present and current revenues to the future (*big baths technique*), whereby a small loss may be made in the present but looking forward, large bonuses could be made in regard to future targets being met, or at least looking as if they have been met on paper in the eyes of the top management. To summarize, the pay-for-performance function is extremely harmful as the idea rewards managers for taking actions that are destructive for the organization (Jensen, 2003). Although, going back to the earlier point by Libby and Lindsay (2010), they state that it seems to accept why so many organizations continue to use budgeting for control purposes, especially for performance evaluation if the act itself is fundamentally flawed. It would seem more wise for the organization as a whole to remove the process of budgeting

especially from the act of performance evaluation, although, this could imply that all participants are involved in so-called “short-termism” or manipulation of data in some respect, being the possible reason why it still remains as a valid control tool to this day.

The underlying argument in the literature with the idea that slack and data manipulation is fully dysfunctional aspects are yet to be understood. Having slack can protect a company from unforeseen contingencies and improves the probability that the actual targets will be met. If the probability of the targets being met is so high, this implies that the desire for managers to game the system and manipulate data is coincidentally going to be much lower. Even though the targets may not be as ideal as a company desires due to slack, the point being is that the information presented is, in fact, truthful and realistic, unlike data which would have been manipulated due to unrealistic targets under a performance measurement view. Having a view with combining budgetary slack could be much more beneficial as under the fixed performance contract view (Van der Stede, 2000). Hope and Fraser (2003a) heavily criticize this standard view on holding fixed performance contracts with no leeway for budgetary slack as such targets represent a poor standard for performance evaluation when factors underlying the budget may have changed during the period. Also, they argue that the gaming issue is most predominant under this view as the more positive the performance evaluations are, the more impact it will have on pay increases.

3.6.4. Information Asymmetry between Agents and Principals (Agency Theory)

A small but crucial element towards the budget manipulation and deliberate slack literature is the agency theory, or in other words, the consequence of asymmetric information within the budgetary process which causes a difference in perceived knowledge between the agent (management) and the principle (superior) (Holmstrom, 1982). This idea explicitly states that as different parties within the organization have different information or have an information advantage, the actions are hard to observe and the outcome cannot be verified sufficiently as to whether the action was, in fact, truthful or ethical (Holmstrom, 1982). Within this sense, when a budget is set potentially in a bottom-up motive, the agents at managerial level could have an information advantage over their principles, who then sign off the proposed budget. The common budgetary gaming techniques previously mentioned (*sandbagging*, *budget ratcheting*, *revenue manipulation* and *big baths*) could have some impact on making such activities widely spread through the organization; if the principles are unaware of these unethical practices, or in fact, do not know how to identify any wrongdoing, then this indirectly creates adverse selection problem, resulting in high levels of asymmetric information between multiple parties.

As stated in the paper by Chong & Strauss (2017), the agency theory postulates that the presence of information asymmetry may have an impact on how budgetary participation causes agents to create budgetary slack or manipulate the data. Budgetary participation, therefore, could be a strong cause of production failure in this sense as the principle gives a right for the agent to corrupt the budget arrangement (Rayo, 2007). This then implies that budgetary participation leads to more of a team problem over a standard agent/principal conflict. Other prior researchers found similar observations to the above; Dunk (1993) empirically suggested that slack creation activities are extremely likely to occur when budget participation is high as it provides a good opportunity for agents to engage in such financial planning activities. On the contrary, Merchant (1985) concluded with both theoretical and empirical support that the idea behind

creating budgetary slack is not always high when participation is high, meaning budgetary slack could be seen as a managerial requirement. However, the more recent literature on budgetary slack could suggest differently from the view of Merchant in 1985.

However, it cannot be concluded that budget participation must essentially be the root cause of information asymmetry. Chong and Strauss (2017) stress the fact that information asymmetry occurs when management (agents) are able to possess information that affects the decision-making process between them and the superiors (principles), so in this case, the agency theory is only in effect when the private information of the agents exceeds that of the principles. This implies that to reduce the effects of information asymmetry turning into a potentially drastic problem, an open and transparent working environment needs to be in place, where both agents and principles have the same open information, giving a potential mitigation possibility for gaming and unethical behavior. If such effect is in place with high transparency, the detection of budgetary slack created by agents is likely to result in a loss of trust in their superiors, which is not desired by the agent. Although, asymmetric information is not always in favor of principles, meaning that superiors often tend to have more private information, which could cause problems in a top-down budgetary view. Chong and Strauss (2017) state that the agency theory here arises when budget participation is low, as agents wish to possess more information, or in fact feel that superiors have a higher advantage of budgetary control than they are aware of. If budgetary participation increases in this sense, both subordinates would have more transparent information which could lead to lower budget manipulation.

4. Empirical Findings and Analysis

The aim of this chapter is to provide an in-depth explanation of the empirical data collected and to fully outline the results identified. The basis of the findings will begin with results from the primary data and research gathered by the authors from the online questionnaire sent out to 100 Swedish companies. Secondly, we will outline the results from secondary data within the same subject from two previously conducted types of research. Lastly, a short summary of the most relevant results for comparison of primary and secondary data will be presented.

As the aim of the findings is to come to a conclusion of the three research questions that were presented at the beginning of the research, the content of the empirical findings will be presented to the best of ability in the same order as the questions are presented:

1. *How dominating is gaming behavior within financial planning processes?*
2. *Is gaming behavior more predominant in one financial planning process or approach over the others?*
3. *Is gaming behavior more dominant when financial planning targets are used for performance measurements?*

4.1. Findings – Primary Data

The primary data was collected with a questionnaire which was active for completion from April 23 to May 11, 2018. The results for each part of the questionnaire are presented in this section, starting with background statistics, moving on to financial planning perception, gaming behavior and lastly performance measures statistics.

4.1.1. Background Statistics

The questionnaire was answered and completed by 19 out of a 100 (19%) respondents; four participants opened the survey without answering any questions, which makes those answers unusable. Four emails were received from organizations that did not wish to participate in the research for various reasons. The 19 respondents represented organizations in six different industries, whereby one participant chose not to disclose their industry by selecting “cannot say”. Responses from organizations within up to five industries were therefore not received. Out of the 19 respondents, 17 organizations operated in the private sector and 2 in the public sector. Most of the organizations (84%) had more than 250 employees, whereby the other 16% had as low as 11 employees. The founding year of the organizations was asked in the survey, although due to low response rate, it was deemed irrelevant for further analysis.

Most of the participants, or 52.6 %, held a position of Chief Financial Officers (CFOs) or Chief Financial Controllers within their organization. Others were Corporate Controllers (15.8%), Financial Managers (10.5%), Chief Controller (10.5%), Executive Controller (5.3%) and VP Finance (5.3%), all presented in *Figure 1*.

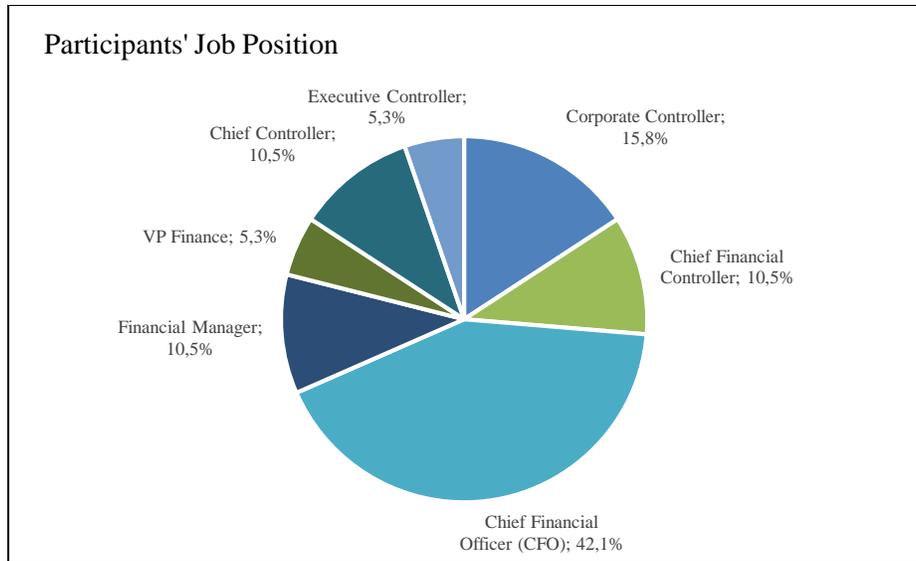


Figure 1: Participants' Job Position

The most applicable role for the respondent's participation within financial planning processes in their organization was reviewing the budget or rolling forecast proposal (47.3%). Thereafter, accepting budget or rolling forecast proposals (31.6%) and only 21.1% respondents prepare a budget or rolling forecast proposal.

The organizations used four different financial planning processes, presented in *Figure 2*. Most organizations that participated in the survey claimed that they are using budgets supplemented either with a forecast (47.4%) or a rolling forecast (31.6%). Only 10.5% of participants used traditional budgets and 10.5% of participants claimed that they have abandoned the budget and only rely upon a rolling forecast. Around 68.4% of the organizations prepare their budget annually, while 5.3% prepare budget bi-annually and lastly 26.3% prepare a budget or rolling forecast quarterly.

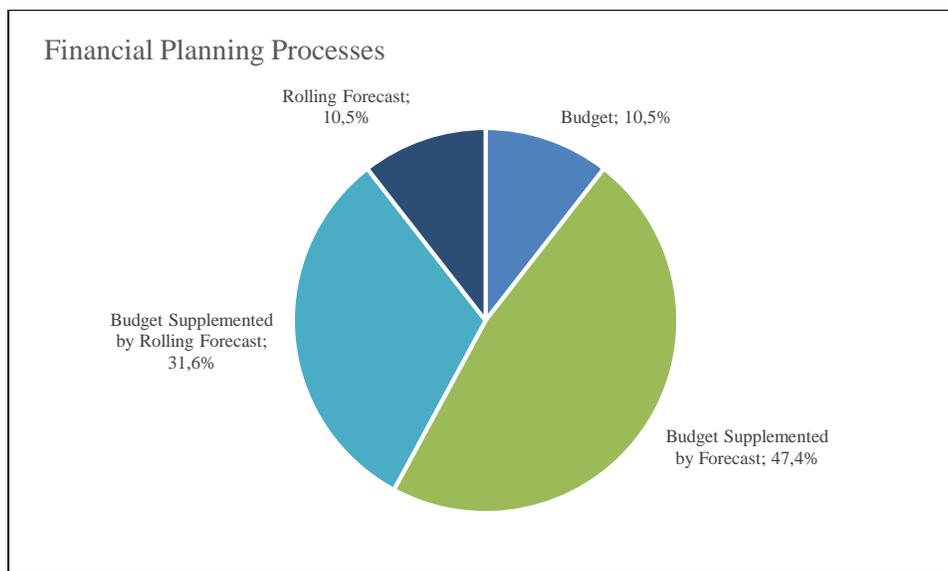


Figure 2: Financial Planning Processes

The participants were presented with three statements which described the approaches of top-down, bottom-up and iterative financial planning processes presented in the theoretical review of this research. The participants were asked to answer which one of the statements was most applicable to the financial planning process within their organization, results presented in *Figure 3*. Most of the respondents found the description of the iterative process the most applicable one, or 63.2%. Only 21.1% found the bottom-up approach applicable and 15.8% related to the top-down process.

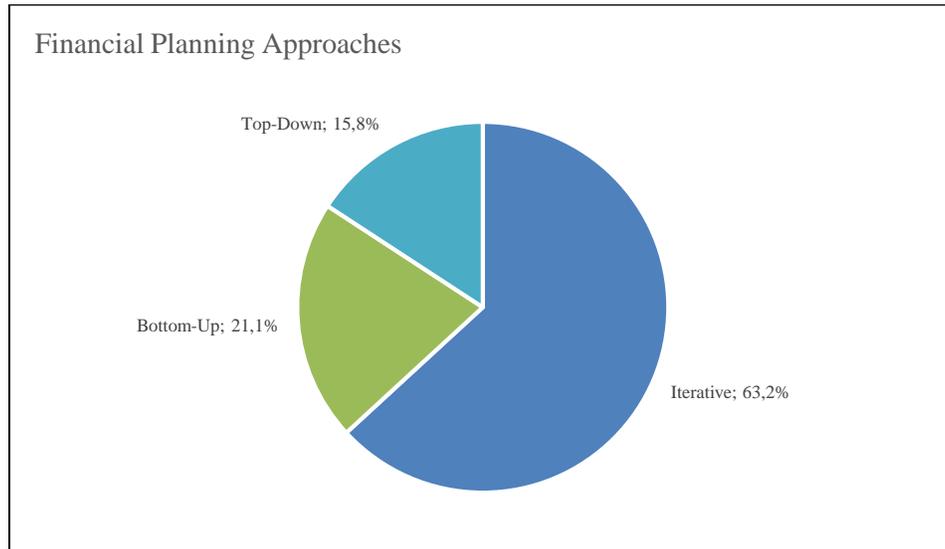


Figure 3: Financial Planning Approaches

One open question was in the questionnaire that asked participants of how much deviation, approximately, there was from the budget on last calendar year, 2017. A total of 14 respondents replied to the question, so the loss of answers to this question was 5. The average deviation for all responses (mean) was 7.44%, minimum 1% and maximum 20%.

4.1.2. Financial Planning Perception Statistics

Respondents were presented with a statement regarding the importance or unimportance of meeting the budget or forecast within their organization. For analytical processing of results, the number 5 represented *very important*, the number 3 was *neutral (neither important nor unimportant)* and the number 1 represented *very unimportant*. When all respondents were analyzed together, the mean was 4.16 (sd = 0.90) for this statement, which shows that respondents found it important to meet the budget or forecast.

When the organizations were compared, based on how the financial planning process is conducted (top-down, bottom-up, iterative) it was identified with an one-way analysis of variance (ANOVA) test that a difference was between groups regarding how important they found it to meet the budget or forecast, $F(2,16) = 3.525, p = 0.054$. Post Hoc Test showed that a difference was in mean between organizations that use top-down ($M = 4.67, SE = 0.333$) and bottom-up ($M = 3.25, SE = 0.629$), as well as between organizations that use iterative ($M = 4.33, SE = 0.188$) and bottom-up ($M = 3.25, SE = 0.629$) approach. This shows that while respondents from organizations that use top-down and iterative approach found it

important or very important to meet the budget or forecast, respondents that rely on bottom-up approach are rather neutral in their responses.

Respondents were presented with two statements regarding relevance and trustworthy of budget or forecast estimates. Respondents were asked to read the statements and answer to their best knowledge how much they agreed or disagreed with each statement. For analytical processing of results, the number 5 represented *strongly agree*, the number 3 was *neutral (neither agree nor disagree)* and the number 1 represented *strongly disagree*. When all respondents were analyzed together, presented in *Table 3*, the results showed that budgets or forecasts were perceived relevant within respondents' organizations, with the mean being 4.37 (sd = 0.60). Budgets or forecasts were perceived a little less trustworthy as the mean for that statement was 4.00 (sd = 0.67).

Table 3: Relevance and Trustworthy Sweden Results

Statement	Mean	Standard Deviation
Budget or forecast targets estimates within my organization are perceived as relevant.	4.37	0.60
Budget or forecast targets estimates within my organization are perceived as trustworthy.	4.00	0.67

4.1.3. Gaming Behavior Statistics

Respondents were presented with five statements about behavior of managers or others responsible for financial planning, which were all describing gaming behavior techniques although that connection was not given to the respondents. Respondents were asked to read the statements, one by one, and answer to their best knowledge how much they agreed or disagreed with each statement. For analytical processing of results, the number 5 represented *strongly agree*, the number 3 was *neutral (neither agree nor disagree)* and the number 1 represented *strongly disagree*. See *Table 4* for comparison of gaming behavior techniques results.

When presented with the statement that managers or others responsible for financial planning within the organization lower sales forecasts in order to lower expectations (*sandbagging I*), all respondents analyzed together were rather neutral as the mean for this statement was 3.11 (sd = 1.15). Similar results were to be found for the statement that managers or others responsible for financial planning in the organization deliberately build a slack within financial plans of expenses to create more flexibility on the upcoming calendar year (*sandbagging II*), as the mean was 3.05 (sd = 1.27). This shows that the respondents neither agree nor disagree that a *sandbagging* behavior is practiced by managers or others responsible for financial planning within their organization.

The respondents' perspective towards the *sandbagging* behavior was compared based on different financial planning processes (budget, forecast, rolling forecast etc.) used within their organizations and did a one-way ANOVA test show a difference between groups, $F(3,15) = 2.332$, $p = 0.115$ for *sandbagging I*, and F

(3.15) = 2.157, $p = 0.136$ for *sandbagging II*. Post Hoc Test showed that a difference was in mean between organizations using budget supplemented with forecast (*Sandbagging I*, $M = 2.56$, $SE = 0.377$, *Sandbagging II*, $M = 2.44$, $SE = 0.563$) and organization using rolling forecast ($M = 4.50$, $SE = 0.50$). This showed that while respondents using budget supplemented with forecast either disagreed or were neutral in their responses regarding the sandbagging behavior, organizations using rolling forecast agreed or strongly agreed that *sandbagging* behavior is practiced by managers or others responsible for financial planning within their organizations.

The statement that managers or others responsible for financial planning in the organization use already built in slack in expenses to make unnecessary spending at the end of the year to ensure the budgeted amount remains the same for next calendar year was used to identify *budget ratcheting* behavior. Respondents were rather neutral in their responses as the mean for this statement was 2.68 (sd = 1.20) which shows that respondents neither agreed or disagreed that *budget ratcheting* technique is practiced by employees responsible for financial planning within their organization.

The respondents' perceptions towards the *budget ratcheting* behavior was compared based on different financial planning processes (budget, forecast, rolling forecast etc.) used within their organizations and did a one-way ANOVA test showing a difference between groups, $F(3,15) = 3.046$, $p = 0.061$. Post Hoc Test showed a significant mean difference at 0.05 level between organizations using budget supplemented with rolling forecast ($M = 2.11$, $SE = 0.351$) and organizations using rolling forecast ($M = 4.50$, $SE = 0.500$). This showed that while organizations using budget supplemented with rolling forecast disagreed with the *budget ratcheting* statement, respondents from organizations using rolling forecast are almost on the other end of the spectrum and agreed or strongly agreed that *budget ratcheting* technique is practiced within their organizations.

For identifying the *revenue manipulation*, respondents were presented with the statement that managers or others responsible for financial planning within the organization deliberately move current year's revenues to the next calendar year if revenue targets have been met on the current year. All respondents analyzed together disagreed with this statement as the mean was 2.11 (sd = 1.10). This perspective was compared based on different financial planning processes (budget, forecast, rolling forecast etc.) used within the participants' organizations. A one way ANOVA test showed a difference between groups $F(3,15) = 1.857$, $p = 0.180$ and a Post Hoc Test revealed that the difference was between organizations using traditional budget ($M = 1.50$, $SE = 0.500$) and organizations using rolling forecast ($M = 3.50$, $SE = 0.500$). This shows that respondents that conduct budgets disagreed or strongly disagreed that *revenue manipulation* occurs within their organization while respondents relying upon rolling forecasts within their organizations were neutral or agreed towards this statement.

The last budget gaming technique, *big baths* was presented with the statement that managers or others responsible for financial planning within the organization deliberately move revenues to the next calendar year and cost into the current year when realizing that current year's targets will not be met and therefore increase the likelihood of meeting next year's targets. All respondents analyzed together disagree that the *big baths* technique is practiced within in their organization as the mean for this statement was 2.21 (sd = 1.13).

The respondents' perspective towards the *big baths* was compared based on different financial planning processes (budget, forecast, rolling forecast etc.) used within their organizations and did a one-way ANOVA test show a difference between groups, $F(3,15) = 3.370$, $p = 0.047$. Post Hoc Test showed a significant mean difference at 0.05 level between organizations using budget supplemented with rolling forecast ($M = 1.67$, $SE = 0.333$) and organizations using rolling forecast ($M = 4.00$, $SE = 0.000$). This showed that while organizations using budget supplemented with rolling forecast disagreed with the *big baths* statement, respondents from organizations using rolling forecast agreed that *big baths* technique is practiced within their organizations.

Table 4: Gaming Behavior Techniques Sweden Results

Gaming Behavior Techniques	Mean	Standard Deviation
Sandbagging I	3.11	1.15
Sandbagging II	3.05	1.27
Budget Ratcheting	2.68	1.20
Revenue Manipulation	2.11	1.10
Big Baths	2.21	1.13

All gaming behavior techniques were analyzed in relation to difference in mean for financial planning approaches of top-down, bottom-up and iterative approach but no statistical difference was found. The analysis also did not show difference in gaming behavior perception based on whether organizations were operating within the private or the public sector. Finally, no correlation was found between high gaming perspectives and a high budget or forecast deviation from last calendar year.

4.1.4. Performance Measures Statistics

Respondents were presented with six statements regarding the budgetary or forecast targets in relation to performance measures. Respondents were asked to read the statements and answer to their best knowledge how much they agreed or disagreed with each statement. For analytical processing of results, the number 5 represented *strongly agree*, the number 3 was *neutral (neither agree nor disagree)* and the number 1 represented *strongly disagree*.

The former three statements were levelled at the usefulness of using budgetary or forecast targets for performance measures. The results for all responses analyzed together, presented in *Table 5*, show that participants agree that budgetary or forecast targets are useful for measuring the performance of employees responsible for financial planning as well as business units, but are however rather neutral when it comes to the usefulness of determining rewards with budgetary targets.

Table 5: Budgetary or Forecast Targets Usefulness Sweden Results

Budgetary or forecast targets are useful for:	Mean	Standard deviation
Measuring performance of managers or others responsible for financial planning.	3.84	1.07
Measuring performance of business units.	3.84	0.96
Determining rewards (bonuses, promotions etc.)	3.21	1.32

The latter three statements were then focused on the actual use of budgetary or forecast targets as performance measures within the sample organizations. The results for all organizations analyzed together, presented in *Table 6*, show that managers or others responsible for financial planning are held responsible for budget or forecast deviations as well as rewards are directly tied to budgetary or forecast targets. Punishments, on the other hand, seem to be less tied to budgetary targets than rewards within the participating organizations.

A correlation between the usefulness of budgetary targets and the actual use of budgetary or forecast targets as performance measures was examined with a Pearson correlation test which showed a positive and significant correlation at the level 0.01. This showed that within organizations where budgetary or forecast targets were perceived as useful for measuring the performance of employees responsible for financial planning as well as business units, managers were actually held responsible for budget or forecast deviation. Additionally, this showed that within organizations where budgetary or forecast targets are perceived as useful for measuring the performance of business units as well as determining rewards, rewards were actually directly tied to budgetary or forecast targets. A lower correlation at significant level 0.05 was however found between the usefulness of budgetary or forecast targets for performance measures and the actual use of punishments.

Table 6: Budgetary or Forecast Targets Actual Use in Sweden Results

Statement	Mean	Standard deviation
Managers or others responsible for financial planning are held responsible for budget or forecast deviation.	3.84	1.02
Rewards (bonuses, promotions etc.) are directly tied to budgetary or forecast targets.	3.63	1.07
Punishments (loss of bonuses, demotion etc.) are consequences of not meeting budgetary or forecast targets.	3.11	0.94

A correlation between employees being held responsible for budget or forecast deviation and the use of rewards and punishments was examined with a Pearson correlation test which showed a positive and significant correlation at the level 0.05. This showed that organizations that hold managers or others

responsible for budget or forecast deviations are more likely to use extrinsic motivations such as rewards and/or punishments. However, no correlation was found between organizations using budgetary or forecast targets as performance measures and the presence of gaming behavior techniques.

The results of holding employees responsible for budget or forecast deviation was compared with the use of different financial planning processes (budget, forecast, rolling forecast etc.) within the organizations and did a one-way ANOVA test showing difference in groups, $F(3,15) = 10.880, p = 0.000$. Post Hoc Test showed a significant mean difference at 0.05 level between all organizations using some kind of budget (*budget* $M = 4.00, SE = 0.00$, *budget supplemented with forecast* $M = 4.00, SE = 0.236$, *budget supplemented with rolling forecast* $M = 4.33, SE = 0.211$) and organizations using rolling forecast ($M = 1.50, SE = 0.500$). This showed that while organizations using some kind of budgets agreed or highly agreed with holding managers or others responsible for budget or forecast deviation, organizations using rolling forecast disagreed or highly disagreed with that statement.

A one-way ANOVA test additionally showed a difference in groups when comparing organizations using punishments as consequences of not meeting budgetary or forecast targets to the different financial planning processes used (budget, forecast, rolling forecast etc.), $F(3,15) = 2.411, p = 0.24$. Post Hoc Test showed a significant mean difference at 0.05 level between organizations using budget supplemented with rolling forecast ($M = 3.44, SE = 0.242$) and organizations only relying upon rolling forecast ($M = 1.50, SE = 0.500$). This showed that organizations using rolling forecast disagreed or highly disagreed with using punishments in relation to forecast targets while organizations using budget supplemented with rolling forecast agreed or are neutral in their responses.

4.2. Findings – Secondary Data

To complement the primary data, secondary data was collected from two studies which strengthened the discussion and assisted in answering the research questions. In this section, the studies are presented with a short introduction of research purpose, method and sample information. Relevant data from the studies is then presented. The secondary data will eventually be combined with the primary data in the following section of the empirical data.

4.2.1. Case I – Beyond Budgeting or Budgeting Reconsidered?

Libby and Lindsay's (2010) study set out with four specific objectives in what they wished to find out. Firstly, they wanted to update the literature on budgetary control and criticisms with the overall budget. Secondly, they wanted to get overall managerial perceptions on the modern view of the budgetary process, which was gathered from the data collection. Thirdly, they aim to find out what the main perceived criticisms of budgets are from the sample selection of managerial figures. Lastly, they aim to identify anything which will stand out for future research, something which possibly has not been identified previously.

They conducted an online survey for managers holding senior positions in medium to large-sized organizations in Canada and USA. The sample was gathered from the directory from CMA Canada and the membership directory of the Institute of Management Accountants (IMA USA). They selected potential

respondents based on holding the positions of Vice President, Chief Financial Officer, Controller, Director of Budgeting or Division Manager. The final target sample was 16295 members from both institutes. The overall amount of completed surveys was equal to 346 from CMA Canada (response rate: 13.6%) and 212 from IMA members (response rate: 1.5%).

Job titles differed on who was most likely to answer and complete the survey, although, the most frequent respondent came from Financial Controllers (44.6%). Approximately 51% of responding organizations were from the manufacturing sector while 49% were from the service sector. The total percentage of organizations which were classified as larger organizations was 55%.

To begin with, respondents were asked about their use of budgets for control within their business units. Using budgets for control is defined as use for managerial motivation and as a standard for performance evaluation purposes. For both Canada and USA sample, 79% of respondents agreed with using budgets for control, and only 1% plan to abandon the use of budgets for control. Although 21% do not use budgets for control purposes it might be used for resource allocation, planning and coordination purposes. Additionally, the Canadian sample was presented with a question of if they had any plans of making changes or adaptations to the budgeting systems over the next two years, which 46% agreed on. The main reasons for adaption or change was that budgets are time-consuming, lack flexibility, can be manipulated and provide incentives for management to adapt gaming behavior. The changes that would be made, were among others incorporating a bottom-up orientation and implementing the use of rolling forecasts.

Few statements describing gaming techniques were presented in a list and were respondents asked to indicate how often each of the gaming behaviors occurred in their business unit in previous two years. The results are presented in two tables, the Canada sample in *Table 7* and the USA sample in *Table 8*.

The gaming technique of *sandbagging* by negotiating easier targets was identified as the most occurring gaming techniques within the Canada sample, or 77%, while other gaming techniques were identified in less than 50% of occurrence. When however looking at the USA sample, more respondents reported gaming behavior than in the Canada sample. The gaming technique *budget ratcheting* of spending money at year-end to avoid losing it, along with *sandbagging* were reported as the most prevalent gaming activities, with 80% and more of respondents indicating that those activities occur occasionally or frequently. Other gaming techniques for the USA sample were identified as occurring occasionally or frequently by around 60% of respondents.

Table 7: Gaming Techniques Canada Results

Gaming Techniques Canada	Never Occurs	Occasionally	Frequently
Sandbagging	23%	62%	15%
Budget Ratcheting	58%	34%	8%
Revenue Manipulation	57%	36%	8%
Big Baths	53%	44%	3%

Table 8: Gaming Techniques USA Results

Gaming Techniques USA	Never Occurs	Occasionally	Frequently
Sandbagging	14%	60%	26%
Budget Ratcheting	20%	57%	23%
Revenue Manipulation	40%	41%	20%
Big Baths	30%	56%	14%

Additional to identifying gaming behavior within both samples, the respondents were presented with a question regarding to what extent these gaming behaviors impaired the long-run performance of the business unit. The aim of this question was to identify a correlation between the gaming behavior and performance and the results suggest that increased gaming behavior does, in fact, impact a long-term business unit performance negatively.

The research highlights four key criticisms of budgeting and examines to what extent such criticism is shared by the respondents that use budgets for control purposes within their business units. One of the criticisms regards performance measures and is listed as: “the use of the budget as a fixed performance contract leads to unreliable performance evaluation and promotes budget gaming” (Libby & Lindsay, 2010, p.61). For examining the gaming in connection with fixed performance contracts, respondents were first asked about the emphasis that is placed on meeting budget targets. Among the statements used for measuring budget emphasis were statements regarding the managers’ performance being judged based on budget goals as well as statements regarding manager’s promotion being dependent on the ability to meet budget. The results show that 52% of the Canada sample and 71% of the USA sample do have, what is described as high budget emphasis in relation to performance measures. The results are simplified and presented in *Table 9* for a further analysis.

Table 9: Budget Goals and Targets in Relation to Performance Measures in Canada and USA

Statement	Canada	USA
A manager’s performance is judged by his/her superiors predominantly on the basis of attaining budget goals.	52%	71%
A manager’s promotion prospects depend heavily on his/her ability to meet the budget.	52%	71%
Punishments are related to meeting to budget targets.	N/A	N/A

4.2.2. Case II – Budgeting Practice in Singapore

Seng and Yew (2017) conducted a study to better understand budgeting practice in Singapore with regard to what is critical for increasing competitiveness and productivity for firms and increasing value-adding contribution for accountants in particular. They conducted an online survey and sent to members of the Institute of Singapore Chartered Accountants. Overall, 356 responses were received from participating members. Different factors such as firm type and firm size were used in regard to a subgroup level analysis. Where an agreement to a statement was required, a 4-point Likert scale was used.

Initially, it was examined how much of the sample prepare a budget, which was 93.3% of the firms. Those firms that do not prepare a budget, 6.7% of the sample, were required to give a reason for why a budget is not prepared by the firm. The most common response was that their firm was too small and if anything, a one man show, although some said they had a moral problem with the budget preparation. Out of the firms that do prepare budgets, 15% hold a top-down approach whereas 42.2% operate a bottom-up approach. The remaining 42.8% engage in top-down target settings.

Out of the respondents whose firms prepared budgets, questions were asked regarding the prevalence of budget manipulation problems. The results, presented in *Table 10*, show that about 87% of the respondents agreed or strongly agreed with the statement “*Managers who develop a budget and are responsible for its achievement often build slack into the budget*”. This problem relates to the identified problem of sandbagging the budget which distorts true estimates on revenues and expenses. Budget ratcheting is also prevalent in a high number of responses as about 83% of the respondents agreed or strongly agreed with the statement “*Managers who review and approve budgets often increase the targets over time when targeted performance has been achieved in the past*”. Other known gaming technique problems such as *revenue manipulation* and *big baths* were not examined in this study and results therefore presented as not applicable (N/A).

Table 10: Gaming Techniques Singapore Results

Gaming Technique Singapore	Strongly Disagree	Disagree	Agree	Strongly Agree
Sandbagging	1%	12%	72%	15%
Budget Ratcheting	3%	14%	69%	14%
Revenue Manipulation	N/A	N/A	N/A	N/A
Big Baths	N/A	N/A	N/A	N/A

The usefulness of budget in performance evaluation and reward was examined and was it perceived useful to use budget as a tool for measure performance and determine rewards as 83% of respondents agreed or strongly agreed with that statement. Meeting the budgets was also perceived important when it comes to evaluation of employee’s performance as the results in *Table 11* shows.

Table 11: Budget Usefulness for Performance Measures in Singapore

Statement	Strongly Disagree	Disagree	Agree	Strongly Agree
Budgets are a useful tool for measuring performance and to determine awards.	1%	15%	75%	8%
Meeting the budget is very important in evaluating and assessing an employee’s performance.	2%	24%	64%	9%

Lastly, the question was asked regarding if performance bonuses in their firm are linked to budgets; 58% indicated that performance bonus was linked to budget performance. Within the questioned recipients, common features of their bonus plan include the presence of a cap when target reached (70%), bonus increasing with performance (67%) and a guaranteed bonus payable after exceeding a minimum target (59%).

4.3. Summary of Findings

Overall findings of primary and secondary data are summarized within the following section to see any comparisons between the author’s primary data findings and previous researcher’s findings. It is firstly important to note the different scope of the conducted researches. The findings from the primary data were concluded with a total of 19 respondents whereas case I for the secondary data totaled 558 respondents and case II totaled 356 respondents. Secondly, a different response scale was used in each research which results in a different presentation of data. For the primary data collection, a 5-point Likert scale was used, ranging from “strongly disagree” to “strongly agree”, with a neutral point in the middle. For case II in the secondary data, a 4-point Likert scale without the “neutral” aspect is presented. The options given to answer ranged from “strongly disagree” to “strongly agree”. As for case I, results were presented on a 3-point scale regarding frequency (“never occurs”, “occurs occasionally”, “frequently occurs”) regarding gaming behavior, but 6- and 7-point Likert scale ranging from “strongly disagree” to “strongly agree” for results related to performance measures.

First of all, gaming behaviors are displayed in *Figure 4* to identify the level of occurrence between different gaming techniques between the different samples within the three studies. Second of all, the different performance measurement perceptions are displayed in *Figure 5* between the various studies. The statements are used from the primary data and paired with results from the most similar statements in case I and case II.

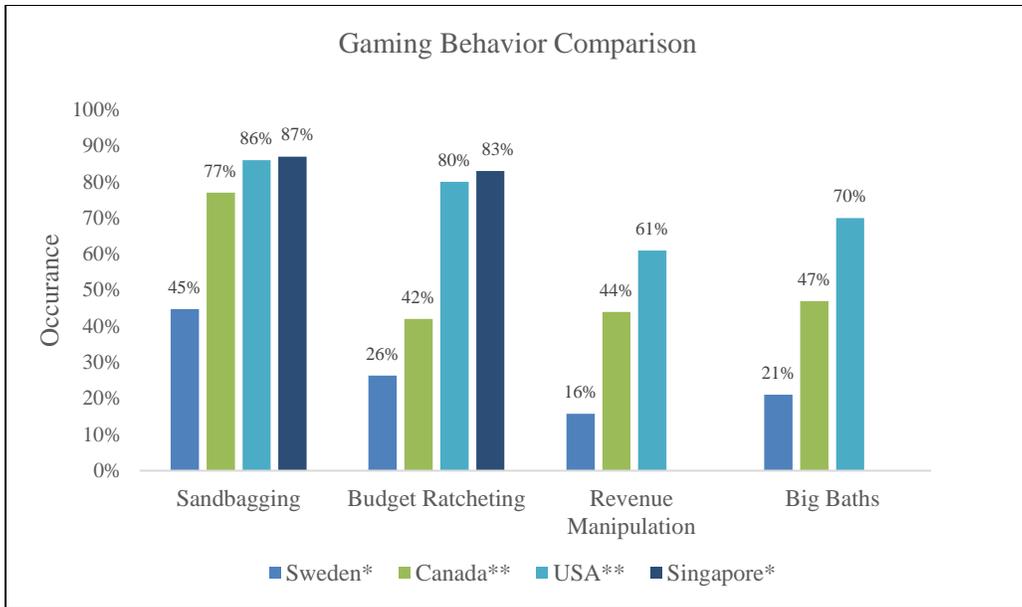


Figure 4: Gaming Behavior Comparison All Samples

*Sweden and Singapore: answers of “agree” and “strongly agree”

**Canada and USA: answers of “occurs occasionally” and “occurs frequently”

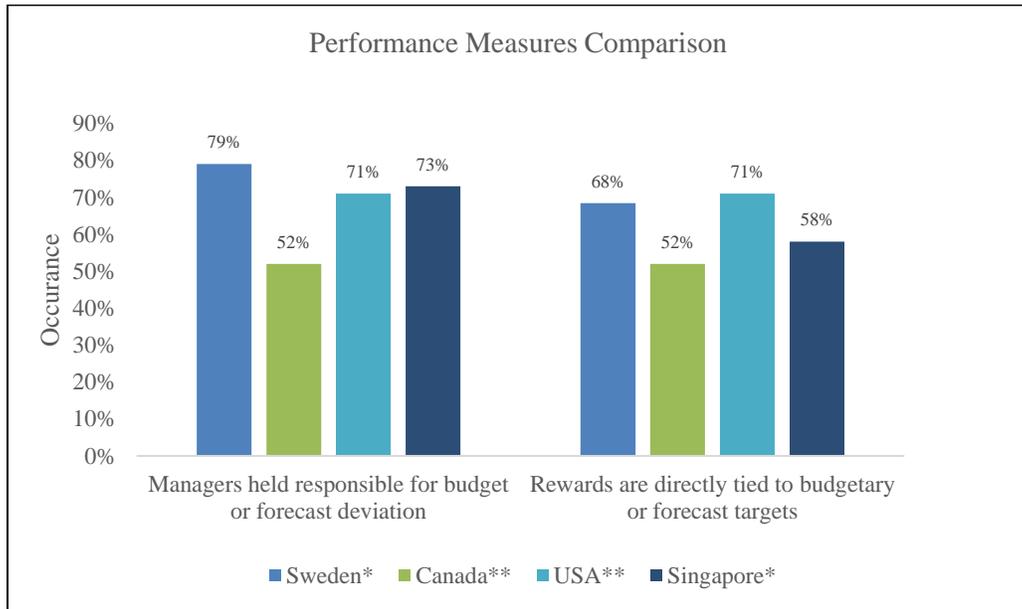


Figure 5: Performance Measures Comparison All Samples

*Sweden and Singapore: answers of “agree” and “strongly agree”

**Canada and USA: answers of “somewhat agree”, “moderately agree” and “strongly agree”

5. Discussion

5.1. Gaming Behavior

The purpose of this section is to come to a conclusion of the first and second research question; *How dominating is gaming behavior within financial planning processes?* and *Is gaming behavior more predominant in one financial planning process or approach over the others?* The following will identify and discuss how substantial gaming appears to be within the findings as well if a difference is identified between different financial planning processes (budget, forecast, rolling forecast etc.) and approaches (top-down, bottom-up, iterative). The two research questions are discussed together as they are interrelated and when combined, they give more richness to the discussion. Firstly, the findings from primary data are discussed, compared to secondary data and the section will then conclude with discussion and comparison of all findings to the theoretical view.

5.1.1. Findings of Primary Data

The various gaming behavior techniques were analyzed and the findings showed that the overall mean for all respondents was very neutral for both *sandbagging* statements as well as *budget ratcheting*, meaning the average answer was “neither agree nor disagree” on whether gaming occurs within the organization. The results for *revenue manipulation* and *big baths* were then more negative as on average, the respondents disagreed with the statement that those behaviors occurred in their organizations. As the latter two gaming behavior techniques include manipulation of actual revenues as well as cost, this behavior might have been less accepted than the former techniques, which mainly touch upon cost and sales forecasts in addition.

Looking into the role of the participants within the financial planning processes, a very low proportion of the respondents actually prepared the budget or forecast proposal. As there was a low proportion of agreement with gaming behavior, this might imply that, as most of the respondents were not directly involved in preparing the budgets, they might not be aware of the behavior occurring before the budget or forecast proposal is reviewed and accepted. The agency theory could be highly evident in regard to the above as those preparing budget or forecast proposal could have a significant information advantage in regard to ways to manipulate the proposal. This means that managers or others accepting or reviewing are none the wiser of the misleading figures in the prepared budget or forecast proposal.

The low proportion of agreement with the gaming behavior made an interesting base for discussion as to whether Swedish organizations on average are moving away from the traditional budgeting approach, which tends to have the most manipulative behavior evident. This implication was supported as many of the respondents held a budget supplemented by a forecast or rolling forecast which is in line with the Better Budgeting alternative, which according to literature, aims to reduce gaming as part of the flexibility which comes with it. However, an interesting factor was that the respondents who stated they use traditional budget without any supplements were neutral in their responses and even disagreed in with the presence of gaming techniques within their organizations.

In contrast, the respondents that admitted to having eliminated budgets altogether and moved to a stand-alone rolling forecast stated that all gaming techniques such as *sandbagging* are highly noticeable within

financial planning processes in their organizations. This implied that these organizations were operating a budget in the past, noticed the problematic effects with regard to gaming and a move towards the rolling forecast and possibly a full Beyond Budgeting alternative was favored.

These adverse perceptions of the presence of gaming behaviors between different financial planning processes opened a possibility for discussion whether those who operated a traditional budget may not have answered truthfully or have not yet recognized the presence of the gaming behavior within their organization. The truth might therefore have been presented from organizations with firsthand experience of gaming behavior and adapted to a rolling forecast, although this is fully down to subjectivity.

Moving from the formally defined gaming behavior techniques to a general perception of financial planning, the data presented showed that respondents did perceive budget or forecast estimates highly relevant, although a little less trustworthy. With an indication of a lower level of trust than relevance, although both were above neutral point, this implied that gaming might indeed be present in one form or another although results on gaming behavior techniques were rather neutral. With CFOs as a large percentage of respondents, the results could be highly covered from the truth, meaning that if gaming was present and carried out by those answering the questionnaire, the respondents may not have wanted to disclose any unethical behavior occurring in their organization.

5.1.2. Comparison of Primary and Secondary Data

As all findings from both primary and secondary data were combined, it was highly evident that gaming was present within financial planning processes of all samples (see *Figure 4* in the previous chapter for a breakdown). When the samples were compared, it must be understood that firstly, the sample size was on a larger scale in the secondary case studies than in the primary data. Secondly, both secondary case studies focused on budgeting as a financial planning tool and did not include a forecast or rolling forecast within their data collection.

The findings showed that the *sandbagging* technique was the one gaming behavior technique that seemed to be the most dominant within all samples, with *budget ratcheting* and *big baths* thereafter. *Revenue manipulation* was on average the least dominant technique within the four samples. The outcomes for all gaming behavior techniques showed that the responses from Singapore and USA have the highest ratio of agreement (61-87%) as to whether gaming techniques are evident within organizations. However, within the Singapore study, findings for *revenue manipulation* and *big baths* were not conducted. The Canada sample comes thereafter, with the highest ratio of agreement for *sandbagging*. The Swedish sample from the primary study, on the other hand, has a relatively low evidence of gaming behavior compared to the other sample countries, which could imply different organizational cultures between the samples.

With regard to financial planning processes and approaches used, the data from the secondary case I showed that most of organizations in both USA and Canada used budgets for control. An interesting discovery was made within the Canadian sample as 46% of the organizations had plans to change or adapt their budget over the next two years due to lack of flexibility and to reduce manipulation and gaming. Most of the responses implied that the changes would include incorporation of a bottom-up orientation and implementation of rolling forecast. This is in fact relates closely to the Better Budgeting alternative as the

intention here is to try and improve the budget rather than trying to eliminate it entirely (Uyar, 2009). As gaming is identified dominant within the budgeting processes in Canada this implies that the problematic budgetary process is, in fact, a top-down approach. However, the gaming behavior was identified less dominant than in USA and Singapore and in some cases, the responses were quite similar to the responses from the Swedish organizations.

Comparable data regarding the financial processes approach was not present for the USA sample, although due to demographic similarities, a similar percentage of organizations aiming for budget restructuring could be assumed. Additionally, the literature from Hope and Fraser (2003a) was rather revolutionary within the USA, therefore was even a higher chance that Beyond Budgeting has been implemented into some organizations, just as it has been in Sweden.

Within the Singapore sample, just under half of the respondents claimed to have a bottom-up budget approach within their organization, where if compared to the Swedish sample, the bottom-up approach showed a neutral view on the importance of meeting the budget which leads to less inclination for manipulating the budget. However, gaming was highly dominant within the Singapore sample as results were presented for the whole sample, which indicated that gaming behavior was indeed present within the bottom-up approach in Singapore.

As the results from all samples were not consistent, an absolute conclusion of what financial planning process or approach had the highest evidence of gaming incorporated was impossible to make. However, findings from all data imply that a gaming behavior is present within all financial processes and approaches, although the findings gave indications of a reduction of manipulative behavior from a bottom-up approach as well as the Better Budgeting alternative. For a conclusive result on which financial planning perspective influences higher gaming, further research focused primarily on gaming will need to be conducted.

5.1.3. Comparison of Findings with the Literature

Overall, the findings from primary and secondary data implied that gaming is heavily dominant within financial processes despite many mitigations and resolutions for such problems. The most dominant gaming techniques within the literature which are most often referred to within academic texts focusing on budgetary limitations are *sandbagging* and *budget ratcheting*. Both techniques had the highest ratio of agreement within the primary research and were highly evident in all secondary case studies, and especially within the samples of USA and Singapore. Out of these two techniques, *sandbagging* stood out, being the more dominant one for all samples and was this acknowledgement of sandbagging behavior especially interesting as Steele and Albright (2004) stated that techniques such as *sandbagging* are not intentionally implemented, rather management reflect a lack of skill and strategic observation. On the other hand, *budget ratcheting*, implies that such technique is the outcome of much deeper flaws, where management know exactly what games they are playing (Steele & Albright, 2004).

Different criticisms were to be found toward the structure of the three financial planning approaches of top-down, bottom-up and iterative (Anthony et al. 2014). The literature states that top-down budgeting is likely to lead to reduced gaming while with a bottom-up approach the figures might not be in line with top management's predictions or ambition and might indeed increase the risk of managers including buffers in

the figures to make goals more accessible (Anthony et al. 2014). Additionally, the literature also stresses the information asymmetry issue within the bottom-up and iterative budgeting approach where gaming is at its peak due to managers and executives having access to different information. However, in the primary data, a low agreement of gaming behavior was identified although most organizations used bottom-up or iterative approach, and the organizations in the secondary data wished to move to a bottom-up approach, implying gaming was heavily found in the existing top-down approach. As most of the literature focuses on the financial planning approaches of top-down, bottom-up and iterative mainly from a budgeting perspective, these adverse findings versus the literature might be related to the fact that most of the organizations participating in the primary research do supplement their budget with forecast or rolling forecast which the literature regarding the different approaches does not take into account.

Finally, the direction to Better Budgeting by adding supplements to the traditional budget, which Swedish and Canadian organizations seemed to put emphasis on, implies that the Better Budgeting does indeed reduce gaming behavior as these samples had the lowest rate of acceptance of gaming behavior of the four research samples. This is consistent with Hope and Fraser (2003a) statement that gaming should be more prolific within a traditional budgetary view although that Jackson and Starović (2004) state that most companies are simply trying to improve their budgeting process to meet the demands set for management and agreeing with Hope and Fraser (2003a) in regards of abandoning the traditional budget.

Reflecting on the previously stated research question of *how dominating the gaming behavior within financial planning processes is*, the results from the findings showed that gaming behavior and manipulative activities are indeed evident in all researched samples and even dominant in some. For the second research question of *if the gaming behavior is more predominant in one financial planning process or approach over the others* the findings show a very insignificant difference between financial planning processes and approaches which opens up the question if the issue of gaming behavior could, in fact, be an over critical assumption from previous literature in regard to traditional budgeting. Despite numerous organizations within the samples implementing supplements and alternatives to budget, the results yet indicate above-average levels of gaming. As alternatives such as Better Budgeting attempt to focus on and mitigate to the best possible outcome the overall inefficiencies with the budgeting process (Uyar, 2009), but do not have a particular focus on gaming behavior, it could explain the high level of respondents who agreed that gaming was active and dominant. Additionally, the Better Budgeting alternative promotes flexibility, which in fact could just be a way of gaming, but in disguise.

5.2. Gaming Behavior in Relation to Performance Measurements

The purpose of this section is to come to a conclusion of the third and last research question; *Is gaming behavior more dominant when financial planning targets are used for performance measurements?* The following will identify and discuss gaming behavior in relation to performance measures within the primary data as well as compared to the findings from the secondary data. *Figure 5* in the previous chapter showed a breakdown of the use of performance measures in relation to budgets or forecasts between all samples in both primary and secondary data which will be used for discussion in this section. A discussion and comparison of all findings to literature regarding the domination of gaming behavior in the presence of performance measures will then conclude this section.

5.2.1. Findings of Primary Data

The primary results showed that respondents found budgetary or forecast targets both useful for measuring the performance of employees responsible for financial planning as well as the performance of business units. A significant correlation was found between that opinion and the actual use of budgetary or forecast targets by holding managers or others responsible for budget or forecast deviation. Additionally, results showed that rewards, such as bonuses and promotions, were tied to budgetary or forecast targets within the participating organizations, giving huge incentives for management to ensure they receive rewards such as end of year bonuses. Punishments, on the other hand, seemed to be less tied to budgetary or forecast targets than rewards.

An interesting finding was that respondents were rather neutral with regard to whether budgetary or forecast targets were useful for determining rewards, showing that not all respondents that actually had rewards tied to budgetary or forecast targets, find that tie useful. This could imply that those respondents who use budgetary or forecast targets to determine rewards in their organization, are aware of the gaming behavior, therefore do not agree that they are useful. Although, the difference in the mean of these responses is not significant, meaning the above statement is very subjective.

In contrast with this, no correlation was found between organizations using budgetary or forecast targets as individual performance measures and respondents agreeing that gaming behavior was present within their organizations. This could imply that either the gaming behavior effect of having individual performance measures tied to budgetary or forecast targets is not as drastic as believed to be or that some type of gaming behavior is present within the organizations that was not identified and described in the questionnaire.

5.2.2. Comparison of Primary and Secondary Data

As all findings, primary and secondary, were combined, it was evident that managers or other employees were held responsible for budget or forecast deviations, as over 50% of participants in all samples agreed on that. Additionally, the use of budgetary or forecast targets for determining rewards was highly evident in all samples (see *Figure 5* in the previous chapter for a breakdown).

When results regarding gaming behavior within all samples, as well as results on the use of budgetary or forecast targets as performance measures is observed, a symmetry was identified between the two as both received a high level of agreement from respondents. Although compared to the primary data, neither of the secondary data cases observed the correlation between budgetary or forecast targets as performance measures and gaming behavior, which only leaves room for speculations as to whether the high dominance of gaming behavior within the research samples stems from the established performance measurement structure.

5.2.3. Comparison of Findings with the Literature

Overall, the findings from primary and secondary data showed that participating organizations rely heavily on financial planning processes, such as budgets, as a performance measurement tools. This raises concerns, as well-known authors within the literature, such as Hope and Fraser (2003a) and Jensen (2003) have often stated that organizations tend to have budgets for coordination, measuring performance and motivation,

although, often punish employees for taking actions which benefit the organization. So, the budget or forecast based performance system actually rewards employees for lying or gaming while punishing them for trying to act with integrity (Jensen, 2003). Additionally, the findings showed that managers' performance and therefore rewards, were highly based on budgetary or forecast targets and under these circumstances, managers may look for ways to protect themselves from possible downside risks which affect their outlook in the workplace. To prevent such a behavior Jensen (2003) even goes so far stating that eliminating the use of targets or budgets within the compensation system solves all problems as if a bonus or promotion is a function of what an individual accomplishes whether or not target is met, there is no monetary incentive to hide information or game the budgetary process.

On the opposite of what the literature suggests, a correlation between gaming behavior and the use of budgetary or forecast targets for performance measures was not to be found within the findings from the primary data. A possible explanation could be that punishments seemed to be less used than rewards within the organizations in the primary data, therefore there are fewer downside risks of not meeting the targets which might reduce managers' incentive of protecting themselves by gaming.

Finally, the use of budgetary or forecast targets as performance measures was compared between different financial planning processes. The results showed that organizations using a budget, either standalone or supplemented with a forecast or rolling forecast, had a high ratio of agreement with holding employees responsible for budget deviation. On the other hand, organizations using a standalone rolling forecast highly disagreed with the same statement as well as disagreeing with having forecast targets tied to punishments. This implied that those who have completely abandoned the traditional budget have as well abandoned the link between individual performance and forecast targets. This comported with the literature regarding the Beyond Budgeting view of eliminating the uses of financial targets tied with performance measures and focus on intrinsic motivation over extrinsic (Bogsnes, 2009) as intrinsically motivated employees are not inclined to require financial rewards (Ryan & Deci, 2000).

Reflecting on the third and last research question of *whether gaming behavior is more dominant when financial planning targets are used for performance measurements*, it was evident that although budgetary or forecast targets were tied to performance measures, an absolute correlation with gaming behavior was not identified. As gaming behavior was thoroughly evident within all research samples, there might be multiple factors causing the already present gaming behavior within the participating organizations which the performance measures tied to budgetary or forecast targets surely adds on to, although not being the preliminary cause.

6. Conclusion

Before concluding this research, it is appropriate to reflect upon the research purpose put forward to begin with. The purpose was to look into different financial planning processes and approaches and see whether gaming behavior is more predominant in one financial planning process or approach over the other as theory suggests. Additionally, the research aimed to identify whether performance measures directly tied to financial planning targets are evident and whether this could be the root cause of the continuous gaming behaviors.

The objective was reached by looking into financial processes and approaches in four different samples and overall, this research confirmed that gaming behaviors are evident within organizations, even dominant in some samples. The gaming behaviors are nonetheless independent of the type of financial planning process or approach exercised, or whether budgetary or forecast targets are tied to performance measures or not. Although gaming behavior was certainly identified, no decisive cause nor solution for gaming behavior was found in this research. This conclusion from the empirical findings therefore, opens up further questions on why different financial planning alternatives do not manage to mitigate this behavior.

A part of the literature claims that gaming behavior is simply too embedded within the organizational culture, and despite all sorts of different budgeting alternatives it shows no change in the near future. The agency theory then implies that as long as some sort of information asymmetry is present, gaming behavior might be a continuous problem. So as for now, there seems to be no budgeting alternative in place which effectually minimizes gaming behavior, although these budgeting alternatives may reduce other traditional budgeting flaws besides gaming. Reflecting on the literature review on budgeting, it was identified that budgets contribute to multiple different purposes within organizations, other than being a financial planning tool. So, could it be that organizations accept the presence of gaming behavior as a trade-off for other advantages of budgets or other financial planning alternatives?

An important factor in this study was that most organizations still used budgets, although supplemented with other tools, and the organizations that have taken the most drastic steps away from the traditional budget were those using a rolling forecast, which is one of the Beyond Budgeting tools. Going back to the idea of Beyond Budgeting, it is much more than just set of tools, it's a practice which forms a coherent management model and requires a complete shift in the organization's culture and management style which aims to reduce ineffective and unethical practices. This Beyond Budgeting view, gives an interesting hint on how the gaming behavior problem might need to be approached as different financial planning processes or approaches in this study did not seem enough for mitigation.

As the problem seems so embedded in the organizational culture, the changes in financial planning processes or approaches might need to be followed up with a different way of thinking and a cultural change which doesn't accept unethical behavior such as gaming. The question then arises if organizations truly see the benefit of going through such a drastic follow-up, if other benefits of the financial planning processes are currently in place?

Anyhow, gaming behavior was certainly present within the financial planning processes of the observed organizations and the answer to what mitigates such behavior was not be found within the perspectives of this research. What truly affects and mitigates the gaming behavior within financial planning processes is therefore left for further research.

6.1. Contribution

Within the previous literature on budgeting, the focus has mainly been on the overall problems where the criticisms are usually listed together and show emphasis on moving away from the traditional budget. Unlike the previous literature, the focus of this research has been diverted from focusing on the budgeting problems as a whole to focusing primarily on the problem of gaming. By that, the research has contributed towards existing theory within the subject area of financial planning, budgetary critique as well as Better and Beyond Budgeting. As the findings in some way contradict existing theory, this study has additionally opened up opportunities for new research possibilities.

It was identified that the four gaming behavior techniques presented within the literature (*sandbagging*, *revenue manipulation*, *big baths* and *budget ratcheting*) were not combined as a group within other academic publications. The different terms were presented separately throughout multiple publications and not summarized overall as a group of techniques. As this research presented all terms together within section 3.6.2 of the literature review, it has contributed by highlighting the importance of recognizing the various gaming behavior techniques as a group and opens up opportunities for other researchers to consider focusing their studies on.

With only few previous studies to be found that mainly focused on the problems of gaming behavior in the context of financial processes and approaches, this study contributes by adding another sample country, in this case, Sweden, towards the available studies. As far as the researchers were aware, the sample from this research was the only one within Europe with such focus, which gave evidence of how dominant the gaming behavior was compared to previously researched samples from other continents.

Lastly, a questionnaire with a focus on gaming behavior in relation to financial planning processes and approaches was developed for this study as a questionnaire with a similar focus was not found in previous studies. Therefore, the questionnaire is a contribution to future researchers on this matter as it can be used with or without modifications.

6.2. Limitations

Limitations regarding issues prior to the findings were presented within the methodology chapter of this research, however it is essential to present and bring to attention post findings limitations of the research which little or no control was over.

Firstly, the response rate was evidently low and therefore gave a lower than desired data outcome for each group, meaning a comparison between those using different financial planning processes was less conclusive. Secondly, within the responses received, there was a much higher number of respondents who accepted and reviewed the budget or forecast proposal and very few who actually prepared it. Due to this factor, a rather one-sided view was given from the responses received and would have been more conclusive

with a spread of those with different roles within the financial planning processes. Additional to this, the time frame given for a research scope of this nature is rather short, therefore, the time respondents were given to reply to surveys was on average low compared to what is recommended.

Lastly, it is essential to comment on the sensitive nature of the subject of gaming behavior, not just for the findings in this study but also for future potential research, as it could result in findings which the respondents just want the public to believe rather than the true nature of the problem.

6.3. Future Research

This study has focused primarily on the issues and dominance of gaming behavior within financial planning, yet concrete answers for some of the research questions outlined were not identifiable. As reflected on within the discussion, there are possibilities that other factors not observed within this study do affect or even cause the gaming behavior which would be worth researching even further. Additionally, it is not ruled out that there are some gaming behavior techniques occurring, apart from the four observed in this research, that have not yet been discovered within the literature and if researched further would open up a completely new focus on the subject.

Over the years, literature with regard to criticism of budgets has been expressed to a great extent, which has even aided the newer publications on Better and Beyond Budgeting as a reason for the implementation of these newer practices. However, narrowing the limitations down to a particular focus, especially on budget gaming has been almost nonexistent. An interesting approach would be for more in-depth, larger quantitative studies, focusing on similar countries to see if anything revolutionary can be identified, especially studies which focus on organizations who have implemented Better or Beyond Budgeting. Although this would show relevance as an addition to the budgeting literature, the same limitations are assumed with such future research as the subject of gaming is particularly sensitive, especially to organizations who are guilty of gaming on a regular basis.

Thirdly, it would prove beneficial to link more studies on the implementation of Beyond Budgeting but to ensure the arguments favoring it are due to games within the traditional budgeting approach. Due to gaming being such a sensitive subject, it is believed that more readers would want to take interest in the Beyond Budgeting movement. This could benefit the Beyond Budgeting Round Table (BBRT) and widen the literature on nearer methods of financial planning as more companies would be willing to participate in studies. If the number of organizations operating a Beyond Budgeting structure are willing to cooperate on later gaming studies, new and revolutionary findings could completely widen the available literature.

Lastly, a completely different view could be taken on the research subject of the gaming behavior and examine how important organizations find it to mitigate or eliminate it. As mentioned earlier, the gaming behavior might simply be perceived as a trade-off for other advantages of the financial planning controls, and the lengths that organizations would go to eliminate it might vary drastically.

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Appendices

Appendix A – The Questionnaire

Part 1 – Focus Questions on Financial Planning Process

1. Which of the following is most descriptive for financial planning process within your organization?

- Budget.
- Budget supplemented by forecast.
- Budget supplemented by rolling forecast.
- Forecast.
- Rolling forecast.
- There is no use of financial planning within my organization.

2. How frequently is a budget/forecast/rolling forecast prepared within your organization?

- Quarterly
- Bi-annually
- Annually
- Every other year
- Cannot say

3. How important or unimportant is it to meet the budget/forecast/rolling forecast within your organization?

- Very important
- Important
- Neither important nor unimportant
- Unimportant
- Very unimportant

4. Approximately, how much did the actual figures for last calendar year (2017) differ from the budget/forecast/rolling forecast? Please state in percentage terms.

_____ %

Part 2 – Focus Question on Financial Planning Approach

5. Please read the following statements and answer which one of the three statements is most applicable for the financial planning process within your organization.

1. Top management draws up a financial plan and breaks down the relevant parts for the managers who are responsible for different items in the financial plan. The relevant department/manager checks the figures and sends back to the top management if accepted.

2. Managers create financial plan under their own assessment ensuring they follow the guidelines received from top levels. Each department sends their figures to a control department who consolidates all departmental financial plans, which is then finalized and sent to top level management.

3. *Managers financial plan under their own assessment ensuring they follow the guidelines received from top levels. Each department sends their figures to a control department who consolidates all department financial plans which is sent to top level management. The cycle is repeated one or more times until top management is satisfied with the figures.*

- Statement number 1 is the most applicable to my organization.
- Statement number 2 is the most applicable to my organization.
- Statement number 3 is the most applicable to my organization.
- Cannot say which of the statements is most applicable to my organization.

Part 3 – Focus Questions on Budgetary Relevance, Usefulness and Performance Measures

Please read the following statements and answer to your best knowledge how much you agree or disagree with each statement.

6. Budget/Forecast/Rolling Forecast estimates within my organization are perceived as relevant.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

7. Budget/Forecast/Rolling Forecast estimates within my organization are perceived as trustworthy.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

8. Budgetary/Forecast/Rolling Forecast targets are useful for measuring performance of managers or others responsible for financial planning.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

9. Budgetary/Forecast/Rolling Forecast targets are useful for measuring performance of business units.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

10. Budgetary/Forecast/Rolling Forecast targets are useful for determining rewards (bonuses, promotions etc.).

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

11. Managers or others responsible for financial planning in my organization are held responsible for budget/forecast/rolling forecast deviation.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

12. Rewards (bonuses, promotions etc.) are directly tied to budgetary/forecast/rolling forecast targets within my organization.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

13. Punishments (loss of bonuses, demotion etc.) are consequences of not meeting budgetary/forecast/rolling forecast targets within my organization.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Part 4 – Focus Questions on Gaming Behavior

Please read the following statements and answer to your best knowledge how much you agree or disagree with each statement.

14. Managers or others responsible for financial planning in my organization lower sales forecasts in order to lower expectations and make goals more attainable.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

15. Managers or others responsible for financial planning in my organization deliberately build a slack within financial plans of expenses to create more flexibility on the upcoming calendar year.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

16. Managers or others responsible for financial planning in my organization use already built in slack in expenses to make unnecessary spending at the end of the year to ensure the budgeted amount remains the same for next calendar year.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

17. Managers or others responsible for financial planning in my organization deliberately move current year's revenues to the next calendar year if revenue targets have been met on the current year.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

18. Managers or others responsible for financial planning in my organization deliberately move revenues to the next calendar year and cost into current year when realizing that current year's targets will not be met and therefore increase the likelihood of meeting next year's targets.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Part 5 – Background Questions

19. Which of the following job titles best describes your current position?

- Chief Controller
- Chief Financial Controller
- Executive Controller
- Corporate Controller
- Chief Financial Officer (CFO)
- Other_____.

20. Which of the following roles are descriptive for your participation in the financial planning process within your organization? If more than one option is applicable, please select the primary role.

- Preparing budget/forecast/rolling forecast proposal.
- Reviewing budget/forecast/rolling forecast proposal.
- Accepting budget/forecast/rolling forecast proposal.
- I do not participate in the financial planning process within my organization.
- Cannot say.

21. Does your organization operate within the public or the private sector?

- Public sector.
- Private sector.
- Cannot say.

22. Within what industry does your organization operate?

- Basic materials (paper, general mining, iron, steel)
- Conglomerates
- Consumer goods (clothing, accessories, recreational products, food, brewers, household, automobiles, tobacco)
- Consumer services (retailer, wholesalers, gambling, broadcasting, publishing, airlines, travel, hotels)
- Financials (banks, investment services)
- Health care (biotechnology, pharmaceuticals, medical equipment, health care providers)
- Industrials (machinery, supplies, defense, delivery services, railroads)
- Oil & gas
- Technology (software, internet, telecommunication equipment)
- Telecommunications (fixed line, mobile)
- Utilities (conventional electricity)
- Cannot say

23. What is the size of your organization in terms of staff headcount? If your organization is international, please limit your answer to operations in Sweden.

- Less than 10 employees
- 11-50 employees
- 51-250 employees
- More than 250 employees
- Cannot say.

24. When was your organization founded?

- Before 1900
- 1900-1960
- 1961-1980
- 1981-2000
- 2001-2010
- 2011-2018
- Cannot say.

Appendix B - Cover Letter for Survey Introduction

Dear participant,

This survey is a part of a final degree project for MSc in Accounting and Finance at Lund University, Sweden. The aim of the survey is to look into what kind of financial planning processes are used within organizations in Sweden and if the use of them differ between organizations.

Please note that participation in this survey is optional and participants have a right to withdraw participation at any moment. Answers cannot be retraced to individual participants nor organizations. The more participants, the more likely that the results will be significant and therefore is your participation highly appreciated.

The questionnaire includes 24 questions, 17 multiple choice and 1 open question directly related to the research subject as well as 6 background questions for analytical purpose. The completion of the survey takes approximately 10 minutes. Please answer all questions with integrity.

While answering the survey, please have in mind following terms:

***Budget** is an estimate of both revenues and expenses stated in monetary terms used to estimate a potential profit of a business unit and organization. Budgets covers a certain period, such as one year, and the budgeting preparation takes place before the period begins.*

***Forecast** is a prediction of what most likely will happen, can be for any time period and is updated as soon as a change in conditions is realized. Forecasts are not necessarily stated in monetary terms.*

***Rolling forecast** is an estimate of both revenues and expenses used to estimate a potential profit of a business unit and organization. A rolling forecast is not bound to the calendar year, is usually planned 12 months ahead and revised every 3 months in which a new forecast overlaps the last one.*

Appendix C - Email to Organizations

Dear financial officer / communication officer / recipient / investor officer / manager,

We are two students at Lund University working on a research which is a part of our final degree project in Accounting and Finance (MSc). The aim of our research is to look into what kind of financial planning processes are used within organizations in Sweden and if the use of them differ between organizations. In our research sample are 100 Swedish organizations in eleven different industries, and is your organization a part of that research sample.

The research is conducted from April 23 to May 11 with an online survey (see link below) and is participation highly appreciated, as more participants give more significant results. The survey is aimed at persons responsible for developing and controlling the financial planning processes within the organization.

It would therefore be much appreciated if you could participate yourself or forward the survey to the person(s) responsible for developing and controlling the financial planning process within your organization. This could include Chief Controller, Chief Financial Officer (CFO), Executive Controller, Corporate Controller, general financial employee etc. If you are unsure of which person is the most applicable in this context, it is perfectly acceptable to send the survey to two or more employees that you find relevant in this context as the survey includes background questions which sorts participants after financial planning responsibility.

The completion of the survey takes approximately 10 minutes for each participant.

Full data confidentiality is applied to all completed surveys. Please note that the questions in the survey are very general so the answers can neither be traced to individuals nor individual organization.

Link to survey: <https://www.surveygizmo.com/s3/4315995/Financial-planning-processes>

Please let us know if your organization will participate or not and approximately how many employees received the survey.

With thanks in advance and please don't hesitate to contact us if any further information is needed from us.

Best regards,

Samuel James Drummond-Brown (sa1541dr-s@student.lu.se, +44 7568 523693)

Sonja Sófusdóttir (so3822so-s@student.lu.se, +354 848 9668)