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### **Value of decision control mechanisms in avoiding free cash flow drawbacks in the first place**

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## SUMMARY

<b>Title</b>	Value of decision control mechanisms in avoiding free cash flow drawbacks in the first place
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<b>Five Key words</b>	Free Cash Flow (FCF), Internal Control, Levers of Control (LOC), Pre-decision Control, Mid-level Managers
<b>Purpose</b>	This thesis examines the utilization of internal controls as means of facilitating effective use of free cash flow (FCF) by managers, with the aim of preventing potential issues that may distort their relationship with shareholders. The objective was to understand the means of mitigating FCF issues by identifying internal controls within the companies to guarantee the effective utilization of cash available while aligning decision making with companies' strategy and performance.
<b>Theoretical Perspectives</b>	In the theoretical framework, there are three dimensions. The starting point is that the FCF causes a potential agency problem between managers and owners of organizations (Jensen & Meckling, 1976; Jensen, 1986). Second, there is an interrelation between strategic control, management control, and internal control in the decision-making process (Pfister, 2009). Lastly, pre-decision controls and LOC serves as decision control mechanisms in regard to the effective use of FCF (Simons, 1995; Alkaraan and Northcott, 2007)
<b>Methodology</b>	We follow multiple case study approaches where we gather empirical data by conducting semi structured interviews complemented by surveys with five manufacturing companies in Uganda.
<b>Empirical Foundation</b>	The empirical data is structured as follows: 1) To what extent do companies effectively utilize their FCF, 2) how internal decision control help the companies to avoid investing in non-performing projects when excess FCF is present, and 3) how managers can enhance identified internal decision controls to prevent unwanted investment.
<b>Conclusion</b>	Our results of this study emphasize that stringent controls are essential to improve the effectiveness of cash utilization and eliminate agency problems. The use of pre-decision control enables managers to identify valuable investment projects. Moreover, the combination of diagnostic and boundary levers of control when carrying out exploitative activities guides companies in ensuring effective and efficient use of FCF.

## **PREFACE**

This thesis writing is done in order to meet one of the requirements to achieve a Master's Degree in Accounting and Finance at Lund University, School of Economics and Management. This thesis represents a significant milestone in our academic journey and would not have been possible without the guidance, support, and encouragement of individuals whom we would like to express our gratitude to in this preface.

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Anna Priscilla Namono

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## TABLE OF CONTENTS

<b>SUMMARY .....</b>	<b>1</b>
<b>PREFACE.....</b>	<b>2</b>
<b>TABLE OF CONTENTS .....</b>	<b>3</b>
<b>LIST OF FIGURES .....</b>	<b>5</b>
<b>LIST OF TABLES .....</b>	<b>5</b>
<b>GLOSSARY.....</b>	<b>6</b>
<b>1.0 Introduction.....</b>	<b>7</b>
<b>1.1 Background .....</b>	<b>7</b>
<b>1.2 Problematization.....</b>	<b>8</b>
<b>1.3 Research Purpose .....</b>	<b>8</b>
<b>1.4 Contribution.....</b>	<b>9</b>
<b>1.5 Outline .....</b>	<b>10</b>
<b>2.0 Theoretical Framework.....</b>	<b>11</b>
<b>2.1 Agency Theory.....</b>	<b>11</b>
<b>2.2 Free Cash Flow Hypothesis .....</b>	<b>12</b>
<b>2.3 Decision Control Mechanisms.....</b>	<b>13</b>
<b>2.4 Role of Decision Control Mechanisms in Firms .....</b>	<b>15</b>
<b>3.0 Methodology .....</b>	<b>21</b>
<b>3.1 Research Philosophy, Strategy, and Design .....</b>	<b>21</b>
<b>3.2 Case Study Selection .....</b>	<b>22</b>
<b>3.3 Case Selection .....</b>	<b>22</b>
<b>3.4 Data Collection .....</b>	<b>23</b>
<b>3.5 Selection of interviewees.....</b>	<b>24</b>
<b>3.5.1 Interviews.....</b>	<b>25</b>
<b>3.5.2 Survey.....</b>	<b>25</b>
<b>3.6 Data Analysis and Presentation .....</b>	<b>26</b>
<b>3.7 Research Limitations .....</b>	<b>27</b>
<b>3.8 Validity and Reliability .....</b>	<b>27</b>
<b>3.9 Ethics and Responsibility .....</b>	<b>28</b>
<b>3.10 Summary of research questions .....</b>	<b>29</b>
<b>4.0 Empirical Results .....</b>	<b>31</b>
<b>4.1 Introduction to case companies.....</b>	<b>31</b>

<b>4.2 Detailed Findings</b> .....	<b>31</b>
<b>4.2.1 Internal decision controls in current organizational settings</b> .....	<b>31</b>
<b>4.2.2 Free cash flow analysis in current practice</b> .....	<b>35</b>
<b>4.2.3 Impact of decision controls on FCF within the decision-making process</b> .....	<b>37</b>
<b>4.2.4 Integration of enhanced decision control mechanisms</b> .....	<b>39</b>
<b>4.3 Summary of Findings</b> .....	<b>40</b>
<b>5.0 Analysis and Discussion</b> .....	<b>43</b>
<b>5.1 Impact of internal control mechanisms on FCF</b> .....	<b>43</b>
<b>5.2 Reshaping the organizational setting and management</b> .....	<b>46</b>
<b>6.0 Conclusion</b> .....	<b>48</b>
<b>6.1 Conclusion and contributions</b> .....	<b>48</b>
<b>6.2 Limitations and Restrictions</b> .....	<b>49</b>
<b>6.3 Future Research</b> .....	<b>50</b>
<b>7.0 Appendix</b> .....	<b>51</b>
<b>8.0 References</b> .....	<b>53</b>

## LIST OF FIGURES

<b>Figure 1.</b> Agency Theory Diagram, Adopted from Muhib Islam (2014 cited in Jakpar, 2019).....	11
<b>Figure 2.</b> Interrelation of Strategic Control, Management Control and Internal Control (Pfister, 2009) .....	14
<b>Figure 3.</b> The influence of pre-decision control mechanisms on the strategic investment decision- making process (Alkaraan & Northcott, 2007) .....	17
<b>Figure 4.</b> Characteristics of four categories of management control system used by top managers (Simons, 1994).....	18
<b>Figure 5.</b> Data Collection Process.....	23

## LIST OF TABLES

<b>Table 1.</b> Details of Interviewees.....	24
<b>Table 2.</b> Summary of Research Questions .....	29
<b>Table 3.</b> Summary of Interviews .....	40
<b>Table 4.</b> Survey Results.....	42

## GLOSSARY

Free Cash Flows	FCF
Levers of Control	LOC

## **1.0 Introduction**

### **1.1 Background**

In recent decades and especially after the Great Recession of 2008-9, firms have been holding large amounts of cash (Welch, 2022). According to previous research from Wang (2010), the cash flows available in organizations are growing exponentially. With the increase in cash comes the increase in free cash available within organizations after all necessary operations have been funded (Jensen, 1986). This is where the management of cash comes into play, as it is critical to have outstanding cash management.

Cash management involves developments that occur in four areas: 1) Cash balances, 2) Cash collections, 3) Cash disbursements, and 4) Cash planning and budgeting (Gitman et al., 1979, p 33). The investment of cash, as a result of cash decisions made, is also an important aspect of a firm's cash management activities (Gitman et al., 1979). The responsibility of cash management typically falls on the mid-level managers of an organization. Harris and Raviv (2005) argue that, in most firms, cash management and related information are assigned and distributed across various levels of management. Hence, the role of mid-level managers is important as they are expected to make effective and efficient cash decisions considering they are answerable to both top management and shareholders and are also accountable to employees as their subordinates.

Advancing to cash management, it is clear that some organizations fall short of effective monitoring and administration. Abanis et al. (2013) found that cash management practices among small and medium enterprises are poor due to a lack of internal control over cash, separation of duties, and a lack of use of computer software. Further research found that most of the issues come from inadequate internal control in cash management practices (Ahmad, 2016). This, therefore, makes headway for a study on how implications and challenges brought about by having FCF can be managed.

Based on the developments in management and strategic control, the existing literature offers a gap to enhance control in the context of cash management to limit organizational inefficiencies and wasteful use of FCF. Previous research has highlighted the importance of internal control practices in avoiding overinvestment due to FCF (Jensen, 1986; Moez & Amina, 2018). Referring to Wang (2019), companies with better internal control mechanisms tend to have higher investment efficiency suggesting that effective internal control mechanisms can help firms avoid investing in projects that generate negative returns. However, the need for more research on the importance of internal control to avoid investing in non-performing projects is becoming a critical issue. Despite the importance of this topic, previous studies still need to explore this specific area properly. The gap in literature encourages the need for further research to better understand internal control practices and its potential impact on investing in unproductive projects (Haka, 2007). This gap will therefore be the focus of this thesis targeting manufacturing companies in Uganda.

## 1.2 Problematization

Managers of an organization are the agents of shareholders, an agent representing a principal, and serving the interest of the principal. The issue at hand is that the agent might have other goals and interests than the principal and could act to achieve these at the expense of the principal (Eisenhardt, 1989). Theories based on agency costs, which arise when the interests of the principal and the agent are misaligned, suggest that an increase in FCF provides managers with additional opportunities to engage in wasteful expenditures (Jensen, 1986). Agency problems that might arise between shareholder and manager concerns are also caused by the optimal level of cash holding. One of the major popular theories that try to explain and reduce the wasteful use of FCF by managers is the *free cash flow hypothesis*: which states that wasteful spending is more likely to occur when firms have high levels of cash flow in excess of what is needed after making all positive-net present value investments and payments to debt holders (Moursli, 2022). The FCF theory on the analysis of agency conflicts is now a major part of the financial literature (Tahir et al., 2016). With mid-level managers being agents of top management and shareholders, the principals should ensure that stringent monitoring is observed to align mid-level managers' actions in order to avoid wasting resources.

According to Gul (2001), in the absence of effective monitoring or disciplinary actions, mid-level managers, accountable to top management and shareholders, in firms with high FCF and low growth opportunities, are more likely to invest in marginal or even negative net present value projects and activities. Although an organization can never create an explicit set of rules that will cover every situation that could possibly confront its performance, it can cut some problems down to size by writing a relatively small set of rules and having effective control that will cover most situations (Ouchi, 1979). Based on Haka (2007), the analysis of existing research demonstrates that firms' internal control mechanisms do not help avoid excess expenditures of FCF in the first place. That is, upper management and boards of directors continue to fund capital projects that are likely to underperform based on Jensen's (1993) analysis.

## 1.3 Research Purpose

The overall aim of this thesis is to explore and elaborate on the use of internal controls of manufacturing companies in Uganda in order to ensure mid-level managers effectively and efficiently utilize FCF to avoid problems that could distort their relationship with shareholders and top management, who are the ultimate owners of organizations. Referring to Israeli (2007), the effectiveness refers to doing the right thing that helps the organization reach its goals, whereas the efficiency refers to doing things right by using least use of input and getting most output. Uganda, as a case study, is a true representation of an environment where FCF is present and is mainly utilized by mid-level managers. Moreover, the growing body of research on strategy and performance in some emerging economies, such as China and Latin America, has not been matched for other regions, such as Africa and the Middle East (Hoskisson et al., 2000;

Wright et al., 2005). To address this, our thesis analyzes the following research questions with Ugandan case companies:

**Q1:** *According to mid-level managers, to what extent do organizations effectively and efficiently utilize the FCF available to them?*

To analyze this question, companies with FCF in the manufacturing industry are assessed based on the FCF available and investments made. Carr et al. (2010) suggest that a financially constrained position tends to drive firms to use a very short perspective and focus on formal financial targets. Additionally, they propose that companies are likely to adjust their investment evaluation practices in response to a long-lasting decline in performance compared to their shareholders' expectations. Therefore, the limitations of FCF analysis are majorly related to non-constrained firms. Question one will therefore analyze guidelines that form a basis for the current use of FCF and establish the general accessibility to FCF through internal control assessments that will be conducted throughout this study.

**Q2:** *What are the perceptions of mid-level managers on internal decision control practices that could be identified and implemented in firms to help avoid investing in non-performing projects when excess FCF is present?*

In identifying the guidelines that form a basis for the use of FCF, a deeper insight into how to mitigate its misuse is addressed by this question. The objective of this study is to assess controls that can be implemented by firms to curb FCF drawbacks and effectively utilize available cash resources as pointed out by Haka (2007).

**Q3:** *How can identified controls be improved by mid-level managers to ensure unwanted investment is avoided and effectively addressed?*

Lastly, on identifying the internal controls that can mitigate FCF problems, we shall enhance and make recommendations to the findings for improved control mechanisms based on relevant study literature. The efficient use of the suggested controls will then be evaluated to ensure effective implementation that curbs FCF problems.

## **1.4 Contribution**

Theoretically, the study contributes to the existing literature on the use of decision controls to improve decision-making. As a result, a contribution is made to the understanding of how to limit the FCF problems through the identification of internal controls that can be enacted in firms to ensure the effective use of cash when making decisions in line with organizational strategy and performance.

This thesis makes a practical contribution by assessing the use of controls in handling the FCF problem within non-constrained organizations, especially where mid-level managers are still seeking organizational growth. The study also contributes to the extensive field of internal controls. The empirical acumen gained from this study will lay the foundations for future research.

## **1.5 Outline**

This report is structured as follows. The *Theoretical Framework* presents the pertinent aspects of internal decision controls in line with FCF introduced from a theoretical point of view, and the concepts for the analysis are obtained. The *Methodology* section then follows, where the chosen method is introduced and discussed. In the *Empirical Results* section, general findings are analyzed, followed by a presentation of findings in relation to the concepts identified in the *Theoretical Framework*. The *Analysis and Discussion* further analyzes the findings in relation to existing literature, followed by a summary conveyed in the *Conclusion*.

## 2.0 Theoretical Framework

This chapter presents the literature and theoretical viewpoints chosen to agree with the purpose of this thesis. First, the relationship and roles among shareholders, top management and mid-level managers are discussed. A subsection thereafter follows on what FCF entails and the challenge of managing these cash flows by mid-level managers. The third subsection discusses the decision control mechanisms which brings to light the impact of monitoring in line with organizational strategy needed for mid-level management to effectively and efficiently utilize FCF leading to a discussion on the use of decision control mechanisms before and after investment decisions are made which addresses the research questions of this thesis.

### 2.1 Agency Theory

Jensen and Meckling (1976) define an agency relationship as a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf, which involves delegating some decision-making authority to the agent. In other words, agency theory is associated with situations where mid-level managers act as agents employed by principals who are shareholders and top management to act or behave on their behalf (Jakpar, 2019). Mid-level managers are the agents of shareholders and top management (Jensen, 1986) and are typically responsible for cash management. Specifically, agency theory is directed at the ubiquitous agency relationship, in which one party (the principal) delegates work to another (the agent), who performs that work. Agency theory attempts to describe this relationship using the metaphor of a contract (Jensen & Meckling, 1976). The principal, or the owners, invest their capital and take the risk to acquire the economic benefits, whereas the agents who manage the firm are risk-averse and concerned with maximizing their private benefits. Both the principal and agent have opposite risk preferences, and their problem with risk-sharing creates agency conflict, which is broadly covered under the agency theory (Panda & Leepsa, 2017).



**Figure 1.** Agency Theory Diagram, Adopted from Muhib Islam (2014 cited in Jakpar, 2019)

If both parties to the relationship are utility maximizers, there is good reason to believe that the agent will not always act in the best interests of the principal (Jensen & Meckling, 1976). Jensen and Meckling (1976) describe the relationship between the principal and the agent and discuss that agency costs arise when the interests of the principal and the agent are misaligned.

The sum of the principal's monitoring expenditures, the agent's bonding expenditures, and any remaining residual loss is defined as agency costs (Hill & Jones, 1992). Agency theory is concerned with resolving two problems that can occur in agency relationships. The first is the agency problem that arises when (a) the desires or goals of the principal and agent conflict and (b) it is difficult or expensive for the principal to verify what the agent is actually doing. The problem here is that the principal cannot verify that the agent has behaved appropriately (Eisenhardt, 1989).

Agency theory, therefore, discusses the problems that surface in the firms due to the separation of owners and managers and emphasizes the reduction of this problem. This theory helps in implementing the various governance mechanisms to control the agents' actions in jointly held corporations (Panda & Leepsa, 2017). The cornerstone of agency theory is the assumption that the interests of principles and agents diverge. According to agency theory, the principal can limit divergence from his/her interests by establishing appropriate incentives for the agent and by incurring monitoring costs designed to limit opportunistic action by the agent (Hill & Jones, 1992).

In reference to Mundy (2010), the simultaneous use of controls to direct and empower requires purposeful intervention by top management in order to create the conditions in which productive tensions can emerge. Balancing these competing demands represents a unique capability because each mid-level manager faces an individual set of choices in how they use management control to manage organizational challenges. Additionally, as highlighted by Widener (2007), businesses are competing with complex, rapidly changing, and knowledge-intensive business models driving the need to better understand the role of performance management systems and how they can better meet managerial needs. Widener (2007) further discusses that monitoring multiple control systems can require tremendous managerial attention, thus top management has to choose where to focus their attention. Top management attention is needed to process the information required to properly manage strategic concerns.

## **2.2 Free Cash Flow Hypothesis**

As Jensen and Meckling (1976) stressed, managers will act in their own economic self-interest. That self-interest can be redirected by share ownership, compensation schemes, or other devices, but the alignment between shareholders' and mid-level managers' objectives is necessarily imperfect. This brings us to Jensen's (1986) FCF theory. He defines FCF as cash flow in excess of that required in financing all projects that have positive net present values when discounted at the relevant cost of capital. However, FCF causes a potential conflict of interest between mid-level managers, shareholders and top management. Conflicts of interest

between shareholders, top management and mid-level managers are especially severe when the organization generates substantial FCF. According to Jensen (1986), managers prefer to hold high cash levels to enhance the volume of total assets in their control. They also try to gain distinctive powers in the firm's investment and financing decisions. Managers may prefer spending money internally on their pet projects and on building their own little empires instead of returning money to shareholders (Welch, 2022).

In reference to previous empirical studies, different financial factors have been incorporated to determine how much cash is deemed excess and available to be classified as FCF. They used the firm's profitability, dividend payout, leverage, firm size, and liquidity to understand the cash holding mechanism (Tahir et al., 2016). However, the groundbreaking study by Jensen (1986, p 323) defines FCF as:

*“the excess that is required to fund all projects that have positive net present values when discounted at the relevant cost of capital”.*

The estimated excess cash balance is determined by taking the total available cash and related assets (1) and subtracting from it both the working capital allowance (2) and the margin of compliance (3). If the remaining amount is negative, the entity does not have an excess cash balance. If the remaining amount is positive, that amount will be the excess available cash. The term broadly connotes the amount of cash over and above what a business requires to fulfill its daily operational cash requirements beyond what the company needs to perform its daily operations. FCF means cash flow that is genuinely available for distribution to all investors (shareholders and debt holders) after the company places all of its investments in fixed assets, new products, and working capital that is needed to maintain ongoing operations (Brigham & Houston, 2007).

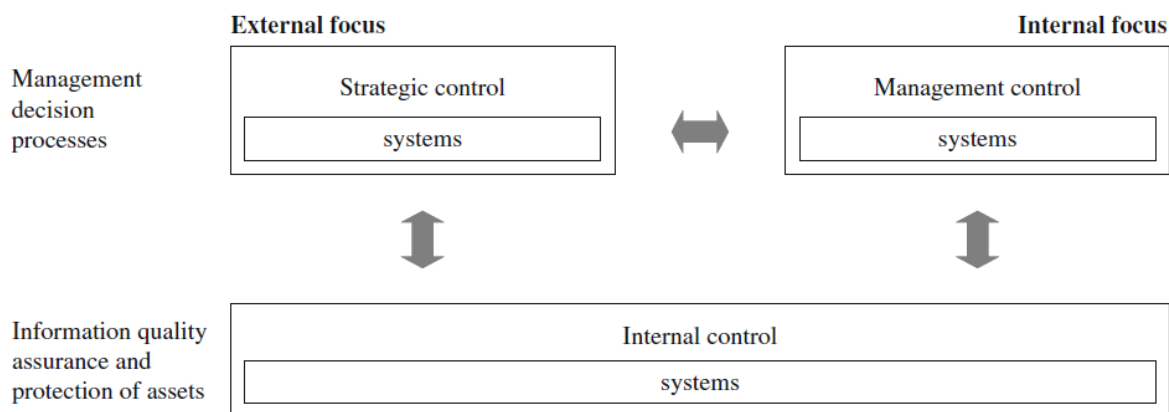
### **2.3 Decision Control Mechanisms**

Decision-making is the main driver of a company's performance (Alhawamdeh & Alsmairat, 2019), companies need to consider the appropriate control mechanism in order to achieve the desired outcomes (Frazer, 2020). Many researchers have explored various monitoring procedures as a control mechanism that aims to improve the quality of decision-making outcomes. Monitoring involves reviewing the internal and external environments, monitoring performance against targets, challenging assumptions, reassessing information needs and systems, establishing follow-up procedures and assessing the effect (Pfister, 2009). Referring to Jackson et al. (2016), monitoring provides detailed information on how the organization manages the initiation of actions, which can influence decision-making behavior. According to previous research, Paul and Lydenberg (1992) discussed how different kinds of corporate social monitoring systems can be used in the decision-making process. They proposed various categories of monitoring systems that have a significant influence on decision-making criteria for decision makers. Moreover, monitoring programs help mid-level managers recognize the

most cost-effective action strategy through the use of appropriate information (Zonta et al., 2014).

The concept regarding management control is often used in various research and literature review indicating that control mechanism is the process of ensuring the resources are utilized effectively and efficiently in order to accomplish the organization’s objectives, which provide a broader perspective (Langfield-smith, 1997; Simons 2000; Merchant & Otley, 2006; Ferreira & Otley, 2009). Through the use of adequate control mechanisms, an organization can monitor and keep resources on track in order to achieve desired outcomes (Simons, 2000). Moreover, it can also help the organization monitor the coordination between the use of resources and action plans. Aligning organizational strategy and internal control can also encourage resources to focus on converting distinct competences into competitive advantage (Langfield-smith, 1997). Within this context, mid-level managers recognize their ability to communicate a direction within the organization in order to achieve successful outcomes (Simons, 1994). Moreover, this control mechanism enables the leaders and mid-level managers to benchmark against the organizational objective in order to influence the behavior in the decision-making process (Widener, 2007).

Pfister (2009) explained the interrelation of strategic control, management control, and internal control in the management decision process, which can be seen in Figure 2. Internal control, located at the bottom of the figure, provides reasonable assurance that the information on which any system in the organization is based is reliable and that assets are safeguarded. He also highlighted that the quality of resources provided by internal control is incorporated into management control systems and serves as the basis for formal and management control decisions. Management control concerns internal focus, in opposition to strategic control, which is mainly focused on strategic choices. Additionally, management control is typically described as “a feedback process of planning, objective setting, monitoring, feedback and corrective action to ensure that outcomes are in accordance with plans” (Pfister, 2009, p 26). Hence, the main concern in management control is how corporate resources can be used by mid-level managers to contribute to organizational goals.



**Figure 2.** Interrelation of Strategic Control, Management Control and Internal Control (Pfister, 2009)

## 2.4 Role of Decision Control Mechanisms in Firms

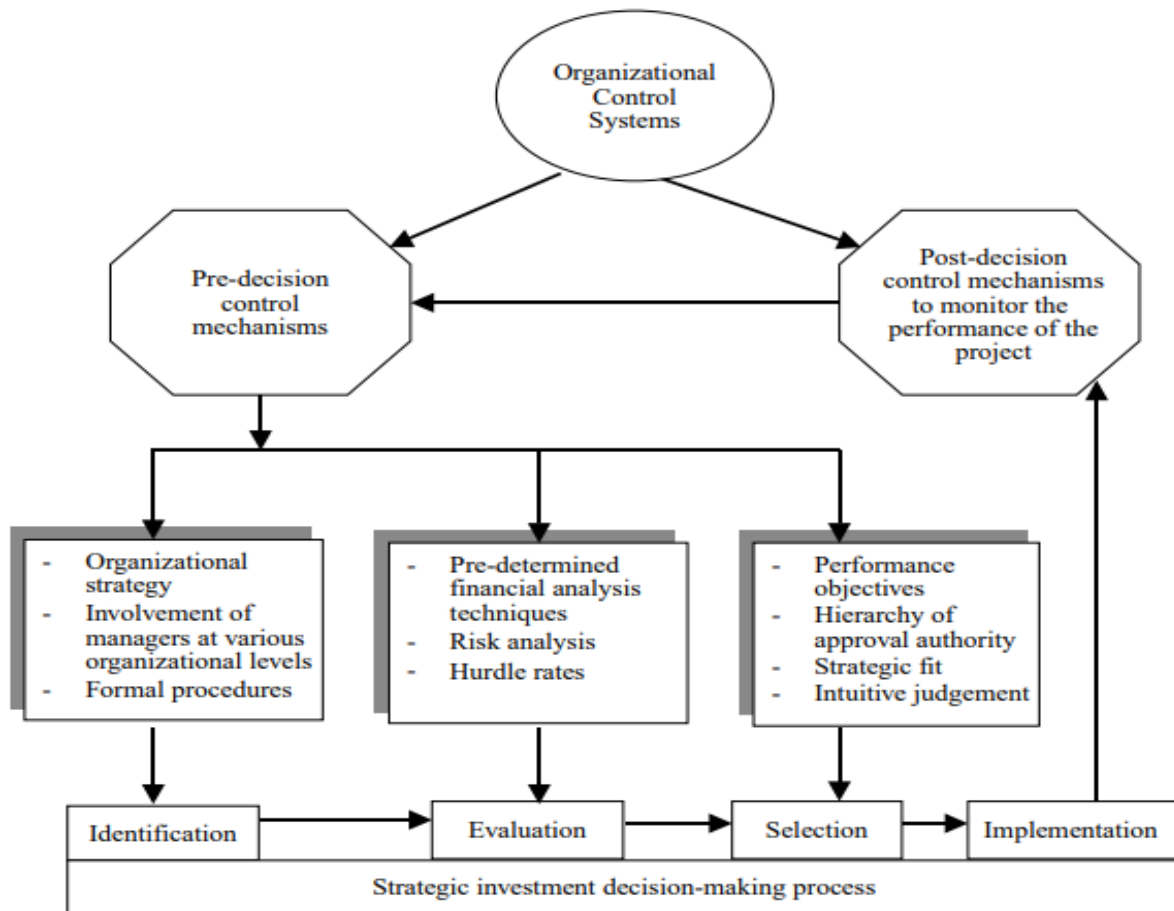
Establishing appropriate control mechanisms encourages the responsibilities and accountabilities of organization participants in their actions (Merchant & Otley, 2006), including the decision-making process. Referring to Merchant & Otley (2006), individual accountability is controlled through organizational objective congruence. This previously has been discussed by Slagmulder (1997) regarding the role of control mechanisms in achieving alignment between decision-making and the organization's strategy. He also emphasized that the control mechanism implemented by mid-level managers is designed to ensure that the decision-making supports the organization's strategic priorities and contributes to the achievement of its long-term objectives. This control mechanism in regard to the strategic alignment is communicated throughout the organization, which influences employees' behavior in the decision-making process. Thus, within this context, the appropriate use of control mechanisms contributes to the alignment between decision-making and organizational objectives, including the effective use of FCF.

Various researchers have agreed that internal control can reduce the risk of agency problems. According to the research result from (Yang, 2019), a strong internal control can effectively suppress agency costs between mid-level managers and shareholders, as well as between main shareholders and minority shareholders. This is also aligned with the previous research from Li and Suen (2004), where they conducted research on the role that control mechanisms can play in mitigating the effects of agency problems. Based on their research, controlling the decision-making process proves to be an effective means for decision-makers to establish a balance between protecting their own interests and the need to leverage expertise. As suggested by Jensen (1986), the problem is how to motivate and control mid-level managers to disgorge available organization cash rather than investing it below the cost of capital or wasting it in organizational inefficiencies. Pre-decision controls influence and shape capital investment decisions before analysis techniques are even applied by setting limits and criteria against which projects are evaluated (Alkaraan & Northcott, 2007).

Initially, before implementing an investment, Alkaraan and Northcott (2007) discuss factors that show an overview of how organizational pre-decision control mechanisms might influence managerial behavior at the various stages of the strategic investment decision-making processes. Given the nature and impact of most investment decisions, they must be closely aligned to strategy in order to advance intended objectives. Pre-decision controls establish pre-conditions that determine whether an investment is worthy of formal, financial evaluation and the criteria against which it will be evaluated and selected. The findings of Alkaraan and Northcott (2007) reveal that pre-decision controls, in a variety of forms, have a significant impact on how organizational actors view and evaluate strategic capital investment projects. The capital budget and capital expenditure limits at different hierarchical levels emerge those traditional accounting-based control systems most frequently used to guide the investment decision process. Formal project appraisal procedures, standard formats for investment proposals, hurdle rates, and pre-set authorization levels are also major pre-decision control

mechanisms that influence managerial behavior at an early stage in the investment process. Additionally, sound strategic decision-making requires the support of a large amount of varied information, a significant proportion of which is collected and analyzed prior to potential capital investment projects being considered, such as information related to strategic goal setting, risk-adjusted hurdle rates and the design of appropriate organizational decision hierarchies.

The capital investment literature has, over many years, pointed to aspects of the investment decision-making process that might be considered to act as pre-decision controls (Alkaraan and Northcott, 2007). First, the need to align the investment decision process with the firm's strategy is well recognised (Slagmulder et al., 1995; Slagmulder, 1997; Abdel-Kader & Dugdale, 1998). Also, formal organizational procedures dictate the approach taken in justifying and analyzing a potential investment by setting pre-determined expenditure authorization levels, specifying accepted financial and risk analysis tools, and setting project hurdle rates (McIntyre & Coulthurst, 1987; Pike, 1988; Arnold & Hatzopoulos, 2000). Further, organizational policies regarding who (by role and/or seniority) is involved in the decision-making process will go on to shape decision outcomes (Petty et al., 1975; Scapens & Sale, 1981). The style of intuitive judgment exhibited by key organizational decision-makers can also act as a pre-decision control, influencing which projects are perceived as having "strategic" merit (Alkaraan and Northcott, 2006). Drawing on these factors identified in the literature, Figure 3 derived from Alkaraan and Northcott (2007) shows an overview of how organizational pre-decision control mechanisms might influence managerial behavior at the various stages of the strategic investment decision-making processes.



**Figure 3.** *The influence of pre-decision control mechanisms on the strategic investment decision-making process (Alkaraan & Northcott, 2007)*

On implementation of investment projects, internal control mechanisms still have to be considered to ensure FCF assigned to the projects are efficiently and efficiently utilized. This is to be assessed with the use of Simon’s LOC based on Simons (1995). Underlying Simon’s framework is the idea of opposing forces that manage tensions between freedom and constraint, between empowerment and accountability, between top-down direction and bottom-up creativity, between experimentation and efficiency (Simons, 1995). These tensions are managed by what Simons calls positive and negative control systems. To manage these positive and negative forces, Simons identifies four LOC. Of the four levers, two are defined as positive (belief systems and interactive control systems), and two are defined as negative (boundary systems and diagnostic control systems). However, organizations should balance controlling and enabling the use of MCS, and how this balance facilitates the creation of dynamic tensions (Mundy, 2010). Therefore, the LOC framework focuses on the different uses of MCS in the achievement of strategic objectives, including the effective use of organizational resources, precisely FCF.

*Belief* systems consist of an explicit and formal set of organizational statements that managers use in order to communicate the organization’s values and provide a coherent strategic agenda (Ahrens & Chapman, 2004; Simons, 1995). They are created and communicated through

documents such as credos, mission statements, and statements of purpose. (Simons, 1995). Managers also use MCS to establish boundaries that restrict behavior in their search for strategic opportunities. The *boundary* lever of control is represented by an explicit set of organizational definitions and parameters, commonly expressed in negative or minimum terms, that support managers in their attempts to identify risks that must be avoided if the organization's objectives are to be achieved (Simons, 1995). *Diagnostic* use of MCS occurs when managers compare performance against targets in order to identify critical exceptions and deviations from plans (Abernethy & Brownell, 1999; Simons, 1995). Finally, *interactive* controls are formal processes that managers use to manage strategic uncertainties and identify opportunities. Strategic uncertainties are contingencies that could threaten or invalidate the assumptions underlying an organization's strategy (Simons, 1995). Figure 4 summarizes the basic features of the four categories of management control systems.

	Beliefs systems	Boundary systems	Diagnostic control systems	Interactive control systems
Nature of system:	Explicit set of shared beliefs that define basic values, purpose, and direction	Formally stated limits and rules that must be respected	Feedback systems used to monitor organizational outcomes and correct deviations from preset standards of performance	Control systems that managers use to regularly and personally involve themselves in the decision activities of subordinates
Purpose:	Provide momentum and guidance to opportunity-seeking behaviors	Allow individual creativity within defined limits of freedom	Provide motivation, resources, and information to ensure important organizational strategies and goals will be achieved	Focus organizational attention on strategic uncertainties and thereby provoke the emergence of new initiatives and strategies
Key design variables:	Core value	Risks to be avoided	Critical performance variables	Strategic uncertainties
Examples:	<ul style="list-style-type: none"> <li>— Mission statements</li> <li>— Vision statements</li> <li>— Credos</li> <li>— Statements of purpose</li> </ul>	Clear rules, limits, and proscriptions in: <ul style="list-style-type: none"> <li>— codes of business conduct</li> <li>— strategic planning systems</li> <li>— capital budgeting systems</li> </ul>	<ul style="list-style-type: none"> <li>— Profit plans and budgets</li> <li>— Goals and objectives systems</li> <li>— Project monitoring systems</li> <li>— Brand revenue monitoring systems</li> </ul>	Top managers can make any control system interactive by: <ol style="list-style-type: none"> <li>(1) ensuring that system is an important and recurring agenda to discuss with subordinates</li> <li>(2) ensuring that system is a regular focus of attention by operating managers throughout the organization</li> <li>(3) participating in face-to-face meetings with subordinates</li> <li>(4) continually challenging and debating data, assumptions, and action plans</li> </ol>

**Figure 4.** Characteristics of four categories of management control system used by top managers (Simons, 1994)

A central contention of Simons (2000), however, is that “the power of these levers” resides not in how they are used in isolation but “rather in how they complement each other when used together”. This leads to the expectation that there are complementary effects between control levers, that is, greater emphasis on one control lever increases the returns received from the use of another (Milgrom & Roberts, 1995; Widener, 2007). This also implies that control levers used in isolation may be insufficient to enhance performance. Rather, the reinforcing effects generated through using control levers in combination might be necessary to achieve significant performance benefits (Bedford, 2015). The preceding theory development suggests, though, that for exploitative innovation firms, diagnostic and boundary control systems have mutually reinforcing effects (Mundy, 2010). Referring to Bedford (2015), exploitative activities are directed toward increasing the efficacy of the technical system by leveraging experiential learning gained through the repetition of routines. Through successive iterations, the organization makes modifications to established processes to increase the proficiency and reliability of task performances (Bedford, 2015). As Mundy (2010) describes, diagnostic controls provide a crucial link with boundary systems by encouraging subordinates to search for performance improvements within an explicitly defined space, which is essential for successful exploitation.

Boundary systems also tend to improve the effectiveness of diagnostic controls. Diagnostic controls communicate desired organizational outcomes but leave unspecified how those targets are to be achieved. Without explicit boundaries, mid-level managers have the latitude to make significant changes to existing routines or engage in excessive search and experimentation, resulting in increased risk, operational discontinuity and wasted resources (Simons, 1995). By clearly articulating the risks and opportunities to be avoided, subordinate efforts motivated through diagnostic controls are more effective in exploiting existing product markets and firm capabilities. This leads to the hypothesis by Bedford (2015) that for exploitative innovation firms, the use of diagnostic (boundary) control systems has a more positive association with performance the higher the emphasis on boundary (diagnostic) control systems.

Once the fundamentals of the business are in place, top managers focus their personal attention on one control system that becomes highly interactive. A control system, precisely diagnostic and boundary systems, associated with higher performance in exploitative companies, can become interactive when top managers use that system to personally and regularly involve themselves in the decisions of subordinates (Simons, 1994). Referring to Simons (1987b, cited in Simons, 1994), when systems are used interactively, four conditions are typically present:

- 1) information generated by the management control system is an important and recurring agenda addressed by the highest levels of management;
- 2) the process demands frequent and regular attention from operating managers at all levels of the organization;
- 3) data are interpreted and discussed in face-to-face meetings of superiors, subordinates, and peers; and,
- 4) the process relies on the continual challenge and debate of underlying data, assumptions, and action plans.

With the use of diagnostic and boundary systems integrated with interactive control, strategic uncertainties can be identified and incorporated within the management control system to steer clear of FCF uncertainties.

In conclusion, this chapter brings to light the dynamics of management control in line with the strategy used when FCF is available. The agency theory is discussed to comprehend the accountable parties in the agency relationship. Jensen and Meckling (1976) highlight that mid-level managers are agents of shareholders and top management, who are the owners of organizations. These mid-level managers are assigned management roles to keep organizational activities running. However, the mid-level managers' interests may not be aligned with those of shareholders and top management. With the presence of FCF, which has been described as *the excess that is required to fund all projects that have positive net present values when discounted at the relevant cost of capital*, this misalignment may become wider with mid-level managers not utilizing FCF effectively. Therefore, the role of decision control mechanisms has been elaborated to avoid this misalignment and to avoid wasteful investments. The decision controls have been discussed to fit organizational strategy in accordance with Pfister (2009), who explained the interrelation of strategic control, management control, and internal control (Figure 2). During the early stages of investment decisions, Alkaraan and Northcott (2007) present pre-decision control mechanisms that can be applied by mid-level managers (Figure 3). Additionally, Simon's four LOC, namely belief, boundary, diagnostic and interactive controls, are then discussed for management of investments on implementation with basic features described in Figure 4. These control mechanisms form the theoretical basis of this study.

### **3.0 Methodology**

In this chapter, the research methods used are elaborated. If case study research is to further develop as a principal qualitative method approach and make a valued contribution to the field of qualitative inquiry, issues related to methodological credibility must be considered. Researchers are required to demonstrate rigor through adequate descriptions of methodological foundations (Hyett et al., 2014). This chapter provides an insight of the research strategy, design and case studies chosen. The rationale behind the chosen data methods is also analyzed. This is followed by a further review of data collection, analysis, and presentation. The chapter is concluded with research limitations and an assessment of research validity. Ethics are the wrap-up of the chapter, considering it is crucial to be aware of the ethical principles involved and the nature of concerns about ethics in business research (Bryman & Bell, 2011).

#### **3.1 Research Philosophy, Strategy, and Design**

This thesis investigates the use of internal decision control mechanisms in preventing FCF drawbacks. We seek to analyze a real-life phenomenon of how organizations can put excess cash to effective and efficient use to achieve their strategies. Therefore, this thesis can be regarded as a qualitative study which Bryman and Bell (2011) describe as a research strategy that usually emphasizes words rather than quantification in the collection and analysis of data. This thesis is mainly based on empirical findings and theories on FCF and decision controls, therefore creating a relationship between theory and research, making it primarily inductive. With inductive research, the theory is the outcome of the research. We shall use a grounded theory approach to the analysis of data and generation of theory (Bryman & Bell, 2011).

A key influence on the research design is understanding the epistemological and ontological foundations of business research highlighted in Burrell and Morgan's (1979) four paradigms, which they suggest reflecting the assumptions researchers make about the nature of organizations and how we find out about them. For the epistemological considerations of what should be regarded as acceptable knowledge in a discipline, we follow the interpretivism approach as the research aims to determine differences among various companies and requires us to grasp the subjective meaning of control actions. Constructivism is the ontological position of the research since the empirical findings are based on the actions of mid-level managers regarding FCF.

Regarding the research strategy and design, we chose to follow the multiple-case design. We examine a number of cases within the manufacturing industry in Uganda. The focus on Uganda highlights a singular cultural analysis which entails deriving findings from one country. The main argument in favor of the multiple-case study is that it improves theory building. Moreover, the evidence from multiple cases is often considered more compelling, and the overall study is considered more robust (Herriott & Firestone, 1983). Within the scope of the study, the five case organizations that we are assessing serve as research objects. Regarding

the execution of case-study research, we were guided by Yin's (2009) attributes, namely question asking, listening, adaptiveness and flexibility, grasp of the issues being studied and lack of bias.

### **3.2 Case Study Selection**

Case companies were selected from Uganda, which is categorized as a developing country. In this context, mid-level managers are more likely to have misaligned goals with shareholders and top management since the investment environment is still developing. The increase in the number of many financial institutions in the region would indicate an increase in the access to finance which would mean more support for the growth of businesses (Abanis et al., 2013). Referring to PWC (n.d.), Uganda Industrial Manufacturing is relatively small. The sector is dominated by subsidiaries of multinational corporations. The presence of subsidiaries of multinational corporations is largely attributed to the Government of Uganda's privatization programme which commenced in the mid 1990's. The Government of Uganda is currently implementing both long term and short-term solutions that will mitigate the impact of the challenges faced by the industry thereby triggering growth in the sector. Therefore, we would like to assess what control mechanisms shareholders and top management have put in place within such an environment, having many opportunities for growth, to ensure that FCF is utilized efficiently and effectively by mid-level managers.

### **3.3 Case Selection**

Based on the questions of this thesis, we seek to analyze the use of internal decision controls in line with FCF, with a particular emphasis on manufacturing companies. The case companies will improve the conceptualization of different types of controls and their influence on limiting FCF problems. The sample size was set at five companies; the possibility of choosing a larger sample size was limited by the resources required to collect data through interviews. However, as noted by Gremyr et al (2003), the data collection method is considered more important than a larger sample size as it was assumed to increase the response rate.

The companies in the sample were chosen based on accessibility and availability. The case companies were selected and open to having interviewees respond to the research questions of this study. The categories chosen were different types of manufacturing industries, and the sample was stratified with respect to company size. The argument for preferring manufacturing companies is that they have more complex financial information and investments. This sample is assumed to be representative of the manufacturing industry and fits with the presence of FCF. Additionally, healthy manufacturing investment is notable in most economies and therefore provides a basis for this study.

### 3.4 Data Collection

This thesis adopted a mixed-method research approach suited to the needs of the research questions. The research evidence was collected using both semi-structured interviews and complemented by surveys from the same respondents. This combination of methods overcomes some of the inherent disadvantages of each individual method (Neuman, 1991; Miles & Huberman, 1994; Ryan et al., 2002).



**Figure 5.** *Data Collection Process*

The data collection process in Figure 5 is elaborated in the following procedures:

1. Formulation of research questions based on the research topic. With the three main research questions in place, sub-questions were then formulated to obtain deeper insight to be used within the study.
2. Five case companies in the manufacturing industry from Uganda were selected. The main criteria considered when selecting these companies include the following:
  - Turnover of the company
  - Asset turnover ratio
  - Profit margin
  - Number of years in existence

These criteria were selected because they represent the case companies' performance all round from growth, profitability, liquidity and leverage.

3. Questions were drafted into a template and shared with the case companies precisely to interviewees who were to be interviewed, that is mid-level managers and personnel who directly oversee the FCF process in the company.
4. Semi- structured interviews were then conducted with 6 interviewees who included finance managers, treasury managers, assistant finance managers and company treasurers. The data collected was further analyzed and discussed in line with the study literature.
5. Surveys were later sent out to the interviewees to ascertain how top managers could incorporate recommended changes based on the study literature and how they would efficiently apply and use these changes within their respective companies.

### 3.5 Selection of interviewees

Six interviewees from the finance departments of the sampled companies were selected. These were selected based on the experience and knowledge possessed in line with our research topic. Each of these interviewees are mid-level managers who are involved in the strategic decisions of the company within which they are operating. Contact was made through relationship managers who shared details of finance department managers, treasury managers, accountants and chief finance officers. Emails, as in Appendix 1, containing a short introduction to our topic, were then sent to each interviewee, and each interviewee agreed to have the interview, which was scheduled based on agreed terms. Therefore, all the interviewees indicated their interest and voluntarism before being interviewed.

**Table 1.** *Details of Interviewees*

Company	Product	Turnover (Ugx million) <sup>1</sup>	Role of respondents
Company 1	The company bottles some of the world's iconic non-alcoholic ready-to-drink beverages. Products include carbonated soft drinks (sodas), juices, mineral water, and energy drinks. Also operates a plastics recycling plant.	142,000	Interviewee 1 - Treasury Accountant Interviewee 2 - Finance Manager
Company 2	Largest milk processing company with many different types of milk.	260,000	Interviewee 3 - Assistant Manager of Finance
Company 3	The company prides itself in two breweries plus a malting plant.	450,000	Interviewee 4 - Accountant
Company 4	Authorized to distribute and sell new vehicles and parts in Uganda as well as offer the manufacturer's warranty. Official distributors for motorcycles, tractors, trucks, and buses as well as forklifts.	195,000	Interviewee 5 - Treasury Accountant
Company 5	Largest and fastest growing manufacturer of vegetable oils, fats, margarine, soaps, and detergents in East and Central Africa.	1,2,000	Interviewee 6 - Chief Finance Officer

<sup>1</sup> The currency denomination used in Uganda is Uganda Shillings (Ugx). Based on the Bank of Uganda website as at 31st March 2023, the buying rate was 1 Ugx = € 4,112.572 and selling rate was 1 Ugx = € 4,123.466. <https://www.bou.or.ug/bou/bouwebsite/bouwebsitecontent/ExchangeRates/scripts.MajorExchangeRates/index.jsp?year=2023&month=Mar&day=31>

### **3.5.1 Interviews**

Referring to Bryman and Bell (2011), there are several data collection methods, including interviews, questionnaires, structured observation, among others. The benefits and limitations associated with each method were assessed, and interviews together with surveys are the most suitable approach to gather data responding to the research questions. We based on guidance by Bryman and Bell (2011) and conducted semi-structured interviews where we had a list of questions on our topic, which served as an interview guide, but the interviewee had a great deal of leeway in how to reply. Questions were not followed exactly in the way outlined on the schedule. Questions that were not included in the guide were asked as we picked up on things said by interviewees. However, by and large, all the questions were asked, and similar wording was used from interviewee to interviewee.

While interviewing in qualitative research is usually of the face-to-face kind, time and money restrictions may mean that interviews be conducted in a less personal context (Bryman & Bell, 2011). Therefore, due to geographical distance and time limitations, all interviews were conducted via Zoom and Google Meet. The questionnaire used during the interviews consisted of eleven questions that were provided to the interviewee two days before the interview. The length of the interviews averaged 30 to 40 minutes. Overall, as discussed by Yin (2009), interviews are an essential source of case study evidence because most case studies are about human organizational affairs. Organizational affairs are therefore reported and interpreted through the eyes of the specific interviewees, and well-informed respondents can provide important insights in a situation.

### **3.5.2 Survey**

Statements on internal decision controls were obtained from a previous study of MCS across different modes of innovation (Bedford, 2015) and from our own experience while conducting the research. As discussed by Alkaraan and Northcott (2007), assessing questions from previous related studies was necessary to compare our findings with previous related studies and to allow reliability to be assessed. Questions concerning these statements required interviewees to indicate their level of agreement with a statement by assigning a score on a five-point Likert scale (where 1 indicated “strongly disagree” and 5 denoted “strongly agree”), which can be seen in Appendix 2. This survey is complementary to the interviews conducted and mainly relates to the third research question, which addresses how recommended controls identified within the research can be efficiently used to limit FCF problems from arising. The response rate was 100%, as all interviewees responded to the survey.

### **3.6 Data Analysis and Presentation**

Based on Bryman and Bell (2011), qualitative research rapidly generates a large, cumbersome database because of its reliance on prose in the form of such media as field notes, interview transcripts, or documents. The researcher must guard against being captivated by the richness of the data collected. In other words, it is crucial to guard against failing to carry out a true analysis. We approached this qualitative data analysis by conducting what is referred to as a thematic analysis. However, unlike strategies such as grounded theory or critical discourse analysis, this is not an approach to analysis that has an identifiable heritage or that has been outlined in terms of a distinctive cluster of techniques.

Thematic analysis is a method for analyzing qualitative data that entails searching across a data set to identify, analyze, and report repeated patterns (Braun & Clarke, 2006). According to Kiger and Varpio (2020), it is a method for describing data, but it also involves interpretation in the processes of selecting codes and constructing themes. The themes focused on in this thesis mainly relate to internal controls centered on cash management and these include: storage of cash, approval of cash investment decisions, alignment of cash investment decisions to company strategy and monitoring of FCF. These themes provide a ground basis for the research questions formulated and are expounded with the empirical results of this thesis. A distinguishing feature of thematic analysis is its flexibility to be used within a wide range of theoretical and epistemological frameworks and to be applied to a wide range of study questions, designs, and sample sizes. Thematic analysis is an appropriate and powerful method to use when seeking to understand a set of experiences, thoughts, or behaviors across a data set (Braun & Clarke, 2006) and based on their method of analysis consists of six steps which we shall also apply in our data analysis. These steps include familiarizing with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and lastly producing the report/manuscript. During the data collection process, we assessed similarities and differences in the use of internal control mechanisms across the different case companies. However, there were no differences in the application of internal controls used to efficiently and effectively utilize FCF. Most control mechanisms within the case companies were similar.

All interviews were audio-recorded with the proper authorization of the interviewees. Referring to Bryman and Bell (2011), this procedure is important for the detailed analysis required in qualitative research and to ensure that the interviewees' answers are captured on their own terms. The recordings were then transcribed in order to make a written copy of interviews for easier reference. On taking notes during the interviews, it is easy to lose the phrases and language used. Also, because we were not following a strictly formulated schedule of questions of the kind used in structured interviewing, we needed to be responsive to the interviewee's answers so that it is possible to follow them up which prompted the audio-recordings. The collected data has been analyzed within the empirical findings section and discussed in detail in the discussion chapter.

### **3.7 Research Limitations**

This qualitative research method involved data collection from multiple-case studies using semi-structured interviews and the use of surveys to assess the use of internal control mechanisms studied. However, these data collection methods had a few limitations on execution.

In reference to Bryman and Bell (2011), quantitative researchers sometimes criticize qualitative research as being too impressionistic and subjective. These criticisms usually mean that qualitative findings rely too much on the researcher's often unsystematic views about what is significant and important. In addition, Yin (2009) highlights that interviews are subject to common problems of bias, poor recall, and inaccurate articulation. Therefore, we further corroborated the interview data with information from other sources, such as company annual reports and websites.

### **3.8 Validity and Reliability**

A further and in many ways the most important criterion of research is validity. Validity is concerned with the integrity of the conclusions that are generated from a piece of research (Bryman & Bell, 2011). Yin (2009) discusses four main tests of validity relevant to research studies; (i) construct validity, (ii) internal validity, (iii) external validity, and (iv) reliability. In designing and doing case studies, various tactics are available to deal with these validity tests, though not all tactics occur at the formal stage of designing a case study. Some of the tactics occur during the data collection and data analysis phases of the research (Yin, 2009). The sample from which data has been collected is selected, which strengthens external validity, as highlighted by Bryman and Bell (2011). Internal validity, by which they mean whether there is a good match between researchers' observations and the theoretical ideas they develop, as defined by Bryman and Bell (2011), was observed in our research study as our observations matched the theory developed. The general way we approach reliability is by making as many steps as operational as possible, as suggested by Yin (2009).

### **3.9 Ethics and Responsibility**

Discussions about ethical principles in business research, and perhaps more specifically transgressions of them, tend to revolve around certain issues that recur in different guises. (Bryman & Bell, 2011). The data collected was mainly based on interviews and a follow-up survey on how the research findings would be used by the interviewees in charge of FCF management. All interviewees knew they were going to participate in this thesis; there was informed consent and voluntary participation, because they were given full information about the nature of the research and its possible implications for them as guided by Bryman and Bell (2011). The confidentiality of interviewees was also maintained throughout, and anonymity was preserved.

### 3.10 Summary of research questions

**Table 2.** *Summary of Research Questions*

<b>Research Topic:</b>	Value of decision control mechanisms in avoiding free cash flow drawbacks in the first place.	
<b>Overall Purpose:</b>	To explore and elaborate on the use of internal controls in ensuring mid-managers effectively and efficiently utilize FCF to avoid problems that could distort their relationship with top management and shareholders, who are the ultimate owners of organizations.	
<b>Research Questions</b>	<b>Interview/Survey objective</b>	<b>Correlation with theoretical framework</b>
<p><i>According to mid-level managers, to what extent do organizations effectively and efficiently utilize the FCF available to them?</i></p> <ul style="list-style-type: none"> <li>➤ What is the definition of free cash available within the company?</li> <li>➤ Does the company possess the free cash flow described by the definition above?</li> <li>➤ If yes, where is this cash stored?</li> <li>➤ Which managers have access to this cash?</li> <li>➤ Describe the investments that can be financed by available FCF.</li> <li>➤ What criteria is considered when selecting investment projects that can be funded by FCF?</li> <li>➤ Does the company have a documented cash procedure? If yes, how often is this revised and approved?</li> </ul>	<p>Establishing causes and gaps that could lead to FCF drawbacks and create agency relationship problems.</p>	<p>On establishing the guidelines and accessibility to FCF, we can identify how to control mid-level managers to use available organization cash rather than wastefully using it as highlighted by Jensen (1986). Mid-level managers, who are agents of top management and shareholders should seek to act in the best interests of the principal. (Jensen and Meckling, 1976)</p>
<p><i>What are the perceptions of mid-level managers on internal decision control practices that could be identified and implemented in firms to help avoid investing in non-performing projects when excess FCF is present?</i></p> <ul style="list-style-type: none"> <li>➤ What is the monitoring procedure for the FCF stored and accessed by the mentioned managers? What decision</li> </ul>	<p>Investigating and elaborating on internal decision controls implemented in monitoring FCF and ensuring its effective utilization by mid-level managers.</p>	<p>A discussion is then centred on internal control mechanisms and the role these mechanisms play in minimizing wasteful use of FCF. The revised control framework includes all elements from Simon's (1995) precisely belief, boundary, diagnostic and interactive systems, and these are explicitly discussed. In addition, the controls that are applied before investment decisions</p>

<p>control procedures are applied to avoid misuse of FCF?</p> <ul style="list-style-type: none"> <li>➤ How many managers oversee the FCF monitoring procedure?</li> <li>➤ What are the advancements that have affected the monitoring procedure considering changes within company operations?</li> <li>➤ How have these advancements been incorporated within the FCF controls?</li> </ul>		<p>are made are also discussed mainly in line with Alkaraan and Northcott (2007).</p>
<p><b><i>How can identified controls be improved by mid-level managers to ensure unwanted investment is avoided and effectively addressed?</i></b></p> <p>To what extent do top management and shareholders:</p> <ul style="list-style-type: none"> <li>➤ rely upon codes of conduct to define appropriate behavior?</li> <li>➤ encourage and facilitate dialog and information sharing?</li> <li>➤ focus attention on strategic uncertainties?</li> <li>➤ acknowledge recommendations on control revisions that provide guidance to the organization?</li> <li>➤ integrate control systems that guide behavior with control systems that guide achievement of performance targets?</li> </ul>	<p>Exploring how recommended controls identified in this study can be effectively implemented and used.</p>	<p>The identified controls are then improved based on the study literature which mainly highlights the effects obtained through using control levers in combination to achieve significant performance benefits. (Bedford, 2015).</p>

## **4.0 Empirical Results**

This section is structured as follows: The first subsection comprises an introduction and overview of the case companies. The second section presents detailed findings, as perceived by interviewees, on how internal decision controls can be used to prevent FCF drawbacks and ensure cash is effectively and efficiently utilized. In addition, the efficient use and implementation of recommended controls is also discussed. The final section presents a summary of the study's findings.

### **4.1 Introduction to case companies**

The case companies used in the study are currently operating within the manufacturing industry with their products approved and being sold to consumers on the market. These companies have been in existence for more than ten years, collectively employing over 500 people. The goal of these companies is to maximize profit and earnings to shareholders who are their ultimate owners.

### **4.2 Detailed Findings**

#### **4.2.1 Internal decision controls in current organizational settings**

During interviews, all interviewees are of the opinion that FCF exists within most organizations and controls are required to be able to utilize this cash effectively and limit its wastage. These control mechanisms are implemented to ensure management decisions are aligned and executed in line with company strategy. One of the interviewees gives an example of what control mechanisms do:

*“We have the standard operating procedures (SOPs) and treasury policy to maintain FCF discipline and control both cashiers and managers who access cash. Our behavior in treasury is mainly guided by these SOPs, whatever we do has to be in accordance with the cash procedures.”* (Interviewee 1)

The mid-level managers with access to cash have strict guidelines with regards to cash management right from the storage of cash to how it is used.

*“All cash is kept in the banks. Even when there is FCF, the money will be in the bank. Unless there is a business decision to use it for an investment or project, it will be in the bank accounts. Our cash policy does not allow keeping cash, so we do not have petty cash. No cash is kept at the company premises.”* (Interviewee 4)

Interviewees 2, 3 and 4 also have a similar view on what decision control mechanisms entail and do within their organizations. These views are going along with Widener's (2007) perspective of control mechanisms enabling mid-level managers to benchmark against organizational objectives to influence behavior in the decision-making process. Additionally, the interviewees 1 and 3 agree with the fact that the decision-making process needs to be strictly guided and monitored to minimize agency problems. To support this argument:

*“The major cash decisions, if they pertain to short term, are approved by the Chief Finance Officer (CFO) and then the Chief Executive Officer (CEO). But if it is something related to implementation of long-term decisions, then that is approved by the board. Little is left to us in operations. Therefore, there is no room to misuse any FCF. The Assistant Finance Manager (FM) also has detailed visibility of anything happening on the finance system of the company and this is visible to the FM, Financial Controller (FC) and CFO. So, you cannot just wake up and hear that cash is missing or has been misused. All money should go through the bank and when it does, more than one person is involved. There is a trail of who initiated and approved the transaction.”* (Interviewee 3)

*“The company has work plans which are continuously reviewed every month, quarterly and then semi-annually and annually. The people in the key staffing operation will be implementing decisions which came from the planning meeting of the board in the quarter unless there is something that was unforeseen that would call for an emergency meeting or implementation which was not part of the plan. So, the board sits every quarter to review performance and the financial position of the company and then to work out strategic plans.”* (Interviewee 1)

Moving on, the interviewees talk about the various decision control mechanisms in place which limit the misuse of FCF.

*“Stringent reporting on FCF is observed on a daily, weekly, monthly, quarterly, semiannually, and annually basis so there is a constant eye on what is happening to the FCF. If there is an expansion going on, progress reporting is done every month vis-à-vis the cash flow statement and the budget. Cash spent is compared with what had been budgeted and with the progress of the work done on a project. Additionally, the annual budget involves all stakeholders from the bottom feeding into the budget, then at departmental level, and lastly everything is consolidated by the Chief FC and presented to the CFO who then presents it to the board for approval.”* (Interviewee 3)

*“Before you table any investment, you must justify that it is going to give you a return, otherwise if you don't expect any return, what would be your motive? So, before you even start a discussion with management, you have to justify that for the time we're fixing the money, this is the return we shall get. Otherwise, if there is no return on the interest rate that the bank is giving you, we'd rather keep the money in our accounts and maybe pay suppliers in advance especially our foreign suppliers since we pay them in foreign currency. Payment in advance mitigates the risk of forex.”* (Interviewee 5)

The major monitoring mechanisms used in internal control which contribute to the effective use of FCF are also highlighted.

*“The company has signatories that are classified against classes. We have class A signatories and class B signatories and those classes are differentiated by the limits. Class A can authorize Ugx. 100 million and above, anything below can be done by class A and B. For bank payments, all checking is done but even the signatories according to their classes, the payments will appear on their screen when they log on onto their online portal for payment and will authorize that payment. If they are not supposed to authorize that payment, it will not even come to them because the bank will already know the signatory class. When the signatories authorize, the payment will be released. If one person authorizes, the payment will still be pending until the second signatory authorizes it. But all this is after the bank mandate is registered, stamped and a copy given to the bank showing that these are the staff of the company supposed to authorize. The mandate is also signed off by the directors of the company, so they will be aware of who authorizes payments and of which amounts.” (Interviewee 1)*

*“According to the policy, the board of directors (BOD) chooses personnel that are tasked with approving cash transactions. So, it is basically the Finance Director (FD), the Managing Director, FC and other signatories that might be appointed by the BOD. Once someone has been appointed to approve transactions, this approval is done once until the person leaves the company. Unless there are some changes within the structure, then the amendments can be done. But the appointment is done once subject to annual reviews.” (Interviewee 5)*

*“Daily liquidity reports that quickly alert us of what we have in the bank, what we have in cash, basically the flow of how money is managed. Let me say the opening balance of what happened yesterday for us to monitor and make any emergency plans that need to be done the following day.” (Interviewee 1)*

Interviewee 4 agrees that the control mechanisms guide mid-level managers as highlighted by interviewee 1. The controls in both companies are more or less the same, especially regarding approval of FCF for investment. However, when making significant investments that require a substantial amount of FCF and have a higher risk impact on the company, high level approval and monitoring is executed.

*“Depending on the amounts, different approvals will be required before an investment takes place. The head office where the Head of Treasury sits, approves most of the substantial cash decisions. When it comes to the local operations that are not so significant, the head of finance in the country handles these. There are different levels that look at the investment projects until a final decision is reached at. When it comes to our company, the zone president makes the final decisions. But it also depends on the amount like I mentioned earlier, so if an investment is less than 10 million dollars, he may not be involved as there are other people who can approve such an amount. But if you need say 100m dollars, then the zone president has to approve.” (Interviewee 4)*

Additionally, the investments that are well aligned to company strategy also act as controls because these investments usually use the available FCF which in turn minimizes the opportunity of it being used by mid-level managers for their own interests.

*“The company has quite a number of investments depending on the company’s objectives. But one of them, that we have been utilizing, is lending out FCF to banks in the form of FD and lending it out to sister companies. Those investments are the most common. But there are some other investments that may be taken for example we may decide to expand by acquiring other entities, or decide to increase investments by investing in capital investments. We can also decide to pay dividends, if we have a lot of FCF, companies can also decide to do early repayment for debts.”*

*“When it comes to expansion projects, you’ll have so many meetings reviewing such decisions even before approval. There will be meetings specific for that and in those meetings, giving feedback on how far the projects have gone, what the target was, if we are not at the set milestone, assessing what has happened and why we are not at the set milestone. Progress is always reviewed, even when you start a construction, there are lots of meetings going on to review how much we had budgeted for that project, how much we are spending so far and why. So many monitoring questions are asked until answers are given. For all decisions that will be taken whether lending to a bank or sister company, we have review meetings monthly to look at this. We assess how much we lent, what is the interest rate, are they paying back the interest as agreed, if not why. So it is more of monitoring, aside from sitting on a laptop not knowing what’s happening.” (Interviewee 4)*

The impact of the investments on organizational strategy is always assessed before FCF is assigned to the investments.

*“.....For example rolling out of a product that can suffocate a similar product that is already on the market so you need to think about that. You will find that you are competing within yourself. We exist to produce products that are mainly required for consumption by children so we need to assess what category of children we are targeting. We recently rolled out a fortified milk powder but before that we had instant milk powder, packed in small sackets which are consumed by children. Will the parent buy one or both products? If the parent buys one and not the other, what happens to the resources that you had aligned to produce the original product. So that is competition within yourself, we had to halt the production of one product.” (Interviewee 3)*

Interviewee 6 agrees to monitoring companies through internal reviews:

*“Through the reviews, it is easy to identify where the problem is coming from and you deal with them. If it’s internal, we have disciplinary procedures.”*

When in an arrangement with external organizations, decision control mechanisms are still applied to ensure that FCF is efficiently used.

*“Of course, when entering into some partnerships there are set guidelines each of the partners should follow, so you expect each of the members to follow what was set up in the partnership deed. And in most cases, there are penalties well set up in the agreements, making it difficult for people to run away with mistakes.”* (Interviewee 4)

Overall, all these control mechanisms are aimed at cutting back on the agency problem to ensure FCF is utilized effectively. However, the controls cannot be exhaustive.

*“The controls are so many and therefore not exhaustive within this interview but these are the most significant ones.”* (Interviewee 2)

The interviewees also mention changes that have impacted the internal control mechanisms. These have to be considered in light of our research study so they are reshaped to eliminate any chances of mid-level managers wastefully using FCF.

#### **4.2.2 Free cash flow analysis in current practice**

To supplement on the FCF defined in Chapter 3.2, interviewees discussed what FCF regarding their respective organizations. The definitions within these terms are not far from what has been defined in the FCF hypothesis.

*“What is left after receiving collections from sales made, paying all vendors and any capital expenditure (Capex), which should agree to the bank balance and any petty cash balance depending on the petty cash limits.”* (Interviewee 1)

*“That cash after settlement of all operational expenses and short-term obligations which are required to run the day-to-day affairs of the business.”* (Interviewee 2)

*“FCF is whatever cash equivalents that are at the company’s disposal, after the company has settled all its obligations. And by obligations this means operating expenses, capital expenditures, any loan principal or interest payment and salaries. Basically, all the obligations, suppliers have been paid. So that balance of the cash amount that we have is what would be defined as FCF and this is sometimes possessed by the company.”* (Interviewee 4)

*“Cash not committed to anything. Cash that remains after the company has settled all its outstanding obligations.”* (Interviewee 5)

Interviewee 1, 2, 4, 5 and 6 do have FCF within their organizations and discuss where this FCF is deposited and stored.

*“The company possesses free cash. And the company possesses a number of bank accounts. Some accounts are under overdraft especially operations accounts. The other accounts of investments are in a positive position. Free cash is stored in the bank and also petty cash at the cash office. This has a strong room safe, and security controls on the access door/entrance.”* (Interviewee 1)

*“Yes, we possess FCF most of the time. The free cash is stored in the bank. 99% of it is in the bank. The 1% is in transit, from our premises on its way to the bank.”* (Interviewee 5)

However, interviewee 3 explained the absence of FCF in the organization:

*“Currently no, we do not have FCF. The company last possessed FCF in 2019, before COVID 19 and trade embargos being encountered. Right now, the company is on a recovery trend. The FCF, when we had it, was temporarily stored in the bank within the current bank accounts pending implementation of investment decisions.”*

All interviewees are in companies that exist to make profits and maximize FCF. Shareholders and top managers have therefore put in place control mechanisms to have mid-level managers, who are their agents, to perform duties in a manner that is well aligned with the company strategy. With this environment, it becomes quite easy to lessen the agency problem and even prevent it from happening at all.

*“Our entity mainly exists to maximize profits and the control mechanisms we have in place are mainly linked to financial aspects. This is because the company seeks to maximize profits. Therefore, when we have FCF, there are several things we think about including the payback period, return on investment, risks associated with the project which could be legal, strategic or operational risks.”* (Interviewee 6)

Even in the absence of FCF, when an organization is constrained, the decision control mechanisms still need to be applied in the daily operations that require the use of cash. All mid-level managers are well informed of what is expected of them and mostly report to the shareholders and top management, who are the principals within this agency relationship.

### 4.2.3 Impact of decision controls on FCF within the decision-making process

All the interviewees agree to the influence that decision control mechanisms bring about in organizations. They limit and guide the behavior of mid-level managers in a more strategic manner. According to interviewee 1, the control mechanisms are amended annually in an ad hoc manner because changes happen at any time as organizational activities are being carried out. With these changes in place, the decision controls are also amended to suit the change that is happening. This amendment is prominent following changes that have impacted most organizations mainly after the COVID 19 pandemic.

*“Many changes have happened due to COVID 19 for example when it comes to handling physical cash, a lot of business started being done online hence the change in handling cash. Before physical vouchers were prepared and signed. But with working from home, things changed. We now use digital banking; a mobile money account needs to be managed by the company according to the setup of the telecom company. Changes have occurred within our documentation to suit digital banking. However, the business has gone back to normal, we are now back to the mainstream way of doing business because that provides better controls than what we had for mobile banking. Digital banking was to minimize physical cash, it was a backup because of the way we were dealing at the time. The procedure has not been hashed; it is still existent but rarely used. But now, the main one is the mainstream where everything goes through the bank.”* (Interviewee 1)

However, interviewee 3 has a differing opinion:

*“Operational cash flows have a documented procedure revision which has happened once in the last three years. The procedures are done with some bit of flexibility.”*

The investments that are taken up by various organizations in an effort to utilize FCF and limit its wastage result in increased profitability.

*“When it comes to early repayment of loans, it means that you will get rid of interest expenses which will improve company profits which is what we are looking for in the strategy. If money is lent out, of course it is lent out on an interest, so you are earning interest on that money which is improving your earnings, the profit to the shareholders and that is the main objective of the company, so they are all aligned with the company objectives. The investments all have to be restoring earnings to the shareholders.”* (Interviewee 3)

Decision control mechanisms have also evolved with the technological changes that have happened in the recent past. These have resulted in digital banking, and more focus onto system controls as opposed to monitoring mid-level managers in person.

*“The technological advancements have changed very many things and now almost everything is electronic unlike in the past, where you would go pick cash from the customer and bring it to the cash office, but now everything is electronic, even when you want Ugx. 10,000 from the*

*company, it will go through a certain system then to the company bank account. It has created some costs of course such as bank charges.” (Interviewee 4)*

*“Collections are handled online and there is no physical handling of cash. The person who does the collections does not have access to touch the money. And even if the SIM card is lost for the phone collections, the money is not lost as the company can work with telecom companies to recover it. The system is configured in a way that the online deposits at the end of the day are transferred to a bank account.” (Interviewee 2)*

Interviewee 6 has a similar opinion and highlights how trust has now become part of the company. Mid-level managers have to be trusted more when executing transactions based on their experience and integrity.

*“You now have to trust people. For example, managers who promise to make bank transfers and not make them. Sometimes, managers use the advantage of technology and say the bank did not have a proper network, or a cheque wasn’t processed. Even when it comes to payments, we have had challenges with the system such as when it comes to telecom companies, we use for payments having a network problem, everyone will suffer. It is the same network we are using to process all transactions online.” (Interviewee 6)*

Interviewee 2 explains how easy it is to obtain approval from executive directors and shareholders before considering to use FCF.

*“So, all strategic applications of funds are ideally approved by the board. There is nothing outside that. For example, the CEO cannot on their own decide that they are going to use the available FCF to expand the company or buy a major unit to be used in production, that must come from the board. If it’s urgent, then an extraordinary meeting needs to be called. And now we are in a digital environment so it does not take long for people to convene for a meeting if required.”*

The efficiency and effectiveness of controls in utilizing FCF is also noted. Interviewee 1 discusses zero budgeting:

*“We cut costs using zero budgeting. Zero budgeting helps us to look into each cost head. You pull out whatever was paid last year, depending on the category, and then track down expenditure to zero. And not looking at it from an overview and by doing this, it enables you to look at something from the start. You track down what cost goes into each category and when compared to prior year, you’re able to pull out extra costs and make better informed decisions. You focus on that expenditure category and you are able to make your strategic decisions.” (Interviewee 1)*

#### **4.2.4 Integration of enhanced decision control mechanisms**

All respondents, 1 to 6, agree that top management and shareholders rely upon codes of conduct to define managerial behavior. The survey clearly highlights that boundary control is in place. However, it is regarded more as a general basis for behavior and not a ground principle when executing transactions and using FCF by mid-level managers. Based on the survey results, codes of conduct exist within all case companies but require more emphasis when mid-level managers are using FCF.

To a large extent, respondents agree to using budgets and performance measures to facilitate dialogue and information sharing, which in turn leads to continually debating and challenging action plans through interactive control. Respondents also agree to budgets facilitating dialog and agree with shareholders and top management using budgets and performance measures to focus attention on uncertainties that can be identified through interaction. This indicates that the suggested combination of control levers is in practice considering interactive controls are intended to identify uncertainties affecting the use of FCF. This shows that strategic uncertainties are incorporated in the performance and use of FCF.

The survey results indicate shareholders and top management of the case companies acknowledge that it is important to have guidance in order to ensure the efficient use of FCF. To a large extent, respondents agree with the integration of different control systems to better the use of controls to limit FCF drawbacks and also agree with integration. With the combination of diagnostic and boundary systems, as recommended in this thesis, the FCF drawbacks can be controlled, and FCF can be used efficiently and effectively. Respondents agree to the integration of control systems to guide behavior and performance as recommended in this thesis. However, one respondent is neutral to this.

### 4.3 Summary of Findings

**Table 3. Summary of Interviews**

Interview Questions	Company 1		Company 2	Company 3	Company 4	Company 5
	Interviewee 1	Interviewee 2	Interviewee 3	Interviewee 4	Interviewee 5	Interviewee 6
Does the company possess free cash flow?	Yes	Yes	No	Yes	Yes	Yes
Where is this cash stored?	Cash Office and Bank	Cash Office and Bank	Bank	Bank	Bank	Bank
Who approves cash decisions within the company?	Budget head of department	Department head	Short term: CFO & CEO  Long term: The board	Head Office operation: Head of treasury  Local operation: Head of finance	FD, Managing Director, FC and other signatories that might be appointed by the BOD	Senior management
What investments that can be financed by available cash flows	Capital Expenditure	Capital Expenditure	Short term & long-term investments	Fixed deposits, acquisitions, capital investments, dividends, debt repayment,	Fixed deposits, call deposit	Capital expenditures, acquisition, dividend payments
What criteria is considered when selecting investment projects that can be funded by free cash flows available in the company?	Budget, cash savings, approval form groups	Budget, risks and uncertainties	Payback period, ROI, strategic risks, and operational risks	The amount of investment, demand, technical analysis, and risk assessment.	Flexibility of the option, returns and risks involved	Payback period, risks and uncertainties
How are investments assessed in line with achieving company strategy?	Assessing cost, the people going to use the system, system comparisons, collective decision, and turnover of sales	Monthly meeting of performance evaluation	Impact on cash flow, impact on entire investment, timing, and the availability of cash flows	Monthly review meetings of progress and performance	Justify the return, motive, and time for fixing the money	Define investment criteria, identify investment opportunities, and monitoring investment
In the presence of investments not aligned with strategy, what course of action is taken by management?	Evaluate and take corrective action	Stringent procedure	Not to invest	Disciplinary procedure and penalties	The main approval is done before the investment	Disciplinary procedures

Interview Questions	Company 1		Company 2	Company 3	Company 4	Company 5
	Interviewee 1	Interviewee 2	Interviewee 3	Interviewee 4	Interviewee 5	Interviewee 6
Does the company have a documented cash procedure? If yes, how often is this revised and approved?	Yes. It will be revised whenever there is change.	Yes. It will be revise as needed	Yes. Operational cash flow revised once in three years and approved by the officer or CEO	Yes. Approved by zone treasury team	Yes. Treasury policy rarely changes. SOPs change depending on changes in the way the company operate	Yes. It will be revised as necessary.
What is the monitoring procedure for the free cash flows available? What decision control procedures are applied to avoid misuse of free cash flows?	SOPs, treasury policy, managing working capital, daily liquidity reports, long payment terms, weekly cash forecast report, cutting costs by using zero budgeting	Cash budgeting, cash flow monitoring	Stringent reporting on cash flows, limits for spending, expense variance analysis, petty cash accountant reports	Avoid to keep cash, deposit cash in bank, daily bank reconciliation, segregation of duties	Daily monitoring, daily bank reconciliation, and recording all transactions	Regular tracking and reporting of cash inflows and outflows, segregation of duties
How many managers oversee the free cash flow monitoring procedure?	5 Cashier, treasury accountant, finance manager, finance director, and risk and control manager	5 Cashier, treasury accountant, finance manager, finance director, and risk and control manager	4 Assistant FM, Financial controller, CFO, and CEO	7	3 Finance Director, Financial Controller, and Treasury Accountant	3 CEO, CFO, Finance Manager
What are the advancements that have affected the monitoring procedure considering changes within company operations?	Going cashless, stringent arrangement with vendors and customers, micro-managing	Transforming to cashless	Digitization of cash handling	Technology advancement on financial transaction	Advancement in technology	Digitalization of financial transaction
How have these advancements been incorporated within the cash controls?	Cash collections are handled online. Amending SOPs, treasury policies, evaluation of more banks to buy treasury bills	Becoming cashless and not having limited physical cash transactions	Cash collections are handled online	Online transaction through bank transfers. Additional bank charges.	Online transaction, online approval by different signatories, review transaction in anytime from everywhere	Online transaction

**Table 4. Survey Results**

Questions	1	2	3	4	5
To what extent do shareholders rely upon codes of conduct to define appropriate behavior?				6	
To what extent do shareholders use budgets and performance measures to encourage and facilitate dialogue and information sharing?				5	1
To what extent do shareholders and top management use budgets and performance measures to focus attention on strategic uncertainties (i.e factors that may invalidate current strategy or provide opportunities for new strategic initiatives)?				5	1
To what extent do shareholders acknowledge recommendations on control revisions that provide guidance to the organization?				3	3
To what extent are shareholders willing to integrate control systems that guide behavior with control systems that guide achievement of performance targets?			1	4	1

\* 1 = To small extent, 5 = To large extent

## **5.0 Analysis and Discussion**

In this section, the results and analysis from the case companies are discussed in relation to the study's research questions and relevant literature. The section first analyzes the impact of pre-decision controls and Simon's LOC on management control regarding FCF. A discussion follows on the effect of controls on managerial behavior. Lastly, the role of internal control mechanisms in reshaping the FCF controls and whether the use of these controls will lead to the elimination of the agency problem is deliberated.

### **5.1 Impact of internal control mechanisms on FCF**

The general opinion of interviewees from all companies is that the use of internal controls can limit the misuse of FCF and eliminate the agency problem. As a matter of fact, the agency problem can be completely dealt with when stringent monitoring is in place. The resultant effect is that internal control mechanisms are always required when handling FCF, even when an organization is financially constrained. However, the interviewees from the case companies acknowledge the benefits of internal controls are enhanced when each mid-level manager is well informed and aware of their duties and whom to report to.

Specifically, regarding the use of internal controls, the empirical findings of this thesis recognize the importance of monitoring in the FCF decision-making process, particularly when conducting projects and investment decisions. Also, the greater insights derived from the board of directors and shareholders during investment approvals assist mid-level managers in planning and evaluating the use of FCF by assessing any investments not aligned with company strategy. This is in line with Pfister (2009, p 26), who highlights that management control is typically described as "a feedback process of planning, objective setting, monitoring, feedback, and corrective action to ensure that outcomes are in accordance with plans.

An enhanced understanding of the role of MCS in managing FCF may be attained by investigating the use, rather than the existence, of specific accounting tools and mechanisms. The current study thus employs Simons' (1995) LOC framework and pre-decision controls as analytical tools to address the research questions investigated in this thesis. Generally, all case companies have different approval levels when it comes to handling investments, which serves as a pre-decision control mechanism in regard to FCF. This has clearly been explained by interviewee 5, who highlights the different approvals that mid-level managers have to obtain to execute FCF transactions. Cash investment decisions that are mainly operational require authorization from top management as they have more detailed knowledge of the specific operations and are better equipped to evaluate the feasibility of smaller investments. However, when it comes to material and significant cash decisions, approval from higher top management levels is essential in the view of the fact that top management always has a broader perspective on the firm's objectives and strategy, and is better equipped to evaluate the risks and returns of large investments. This also aligns with the previous research regarding different approval authorities based on the amount of investment (Harris & Raviv, 2005; Graham et al., 2015).

In addition to the use of monitoring and reporting control mechanisms, the general view of interviewees is that pre-decision controls allow mid-level managers to determine worthwhile investment projects. As Alkaraan and Northcott (2007) discuss, these controls establish pre-conditions that determine whether an investment project is identified as worthy of formal, financial evaluation and the criteria against which it will be evaluated and selected. Importantly, ensuring strategic alignment has been reported as a key prerequisite for a strategic investment decision (Alkaraan & Northcott, 2006; Carr et al., 2010; Slagmulder, 1997), and all the interviewees agree to this as well. Our empirical results show that the organization's strategy is a major consideration when the board of directors approves investments that use FCF. The formulation of strategic goals and priorities can be seen as an influential pre-decision control in the strategic investment process, having a significant impact on investment choices before projects are even evaluated and often superseding the importance of financial analysis outcomes (Alkaraan & Northcott, 2007).

The evaluation and higher-level approvals derived from the use of pre-decision controls present several benefits. First, are the greater levels of risk assessment and FCF earnings analysis. As interviewee 3 indicates, an organization that is mainly financial and seeks to maximize profits focuses on ensuring each project that mid-level managers take is giving back to top management and shareholders and has been critically assessed against operational, legal, and regulatory risks. As discussed by Alkaraan and Northcott (2007), the notion of "risk" in this context refers to the fact that managers are uncertain about the cash flows to be generated by investment projects, which may involve adverse consequences or losses. Strategic investments are often highly uncertain and tend to present high levels of risk. Financial risk, operational risk (for example concerning new products or new technologies), commercial risk (related to suppliers and customers), strategic risk, political risk and contingent risk all surround strategic capital investment projects. Interviewee 6 highlights the different types of risk associated with investment projects that are critically analyzed to ensure the effective use of FCF.

Efficiencies are also noted because of using FCF for only what has been approved. The approvals only happen after every bit of FCF has been analyzed. Interviewee 1 discusses the aspect of zero budgeting, which narrows down every expense category when applying FCF. Also, the high-level assessment assists mid-level managers to determine the impact of using FCF on the aggregate cash flows in the organization. Interviewee 6 points out the use of hurdle rates in methods like the payback period and return on investment when evaluating investments to determine when investments are expected to be concluded to avoid further use of FCF on them.

As shown in Figure 3, various pre-decision controls are essential, from identifying a project to its implementation. The findings of Alkaraan and Northcott (2007) reveal that pre-decision controls, in a variety of forms, have a significant impact on how organizational actors view and evaluate strategic capital investment projects. The capital budget and capital expenditure limits at different hierarchical levels emerge as among those traditional accounting-based control systems most frequently used to guide the investment decision process. Formal project

appraisal procedures, standard formats for investment proposals, hurdle rates, and pre-set authorization levels are also major pre-decision control mechanisms that influence managerial behavior at an early stage in the investment process. A key insight from this thesis is that the achievement of integration between the firm's strategic investment projects and the overall organizational strategy forms a critical pre-decision control on managerial behavior at an early stage in the investment process, since organizational strategy is usually set in advance of capital projects being considered.

The LOC framework identifies four key processes – beliefs, boundaries, diagnostic, and interactive – as a way of analyzing how organizations leverage their management control systems to implement business strategies. The full potential of the four levers of control is realized when they are mobilized together so that they facilitate the implementation and attainment of an organization's strategic objectives (Bruining et al., 2004; Henri, 2006; Mundy, 2010; Widener, 2007). Simons (1994) indicates that earlier studies in research suggest that management control systems can be clustered usefully into four different types of formal information-based systems according to their (1) relationship to strategy and (2) use by top managers. The four types of control systems are precisely Simon's LOC as illustrated in Fig 3. Based on Simons (1994), diagnostic system goals are used to demand accountability: new and existing diagnostic control systems were used to focus attention on the critical performance variables that would drive the new strategy. These diagnostic goals are in turn used by shareholders and top management to monitor performance of mid-level managers on various investment projects.

Based on the empirical results of this thesis, the most practiced control system is the diagnostic system. This is expected of the case companies considering all of them exist to maximize profits, as discussed by interviewees 1,2,3 and 6. The companies carry out routine tasks during their day-to-day operations to manufacture the same products for the market making them exploitative companies. Additionally, the prominent use of diagnostic controls in the case of companies is in line with Bedford's (2015) hypothesis of emphasis on diagnostic control systems having a positive association with performance for exploitative innovation firms.

The findings of our thesis also highlight that work plans, budgets, performance targets, and financial position are continuously reviewed as the information from such controls plays an important role in decision-making in regard to FCF. By building specific key performance indicators, which are aligned with the organization's goals, diagnostic control encourages manufacturing firms to measure progress against companies' objectives in maximizing profits and the effectiveness of FCF control mechanisms and identify areas where performance is lagging and allocate resources to those areas for improvement. This aligns with the previous research where performance measurement can encourage company improvement by identifying the root cause of the problem and developing a plan to address it (Caruth & Humphreys, 2008). This also provides the information mid-level managers need to make informed decisions about resource allocation and strategic planning. The information and data from the monitoring system facilitate the company for continuous improvements by identifying

areas of improvement, setting goals, and implementing action plans to drive progress towards desired outcomes.

The empirical findings of this thesis indicate all case companies were faced with uncertainties pertaining to the effects of the global COVID 19 pandemic. In the LOC framework one type of environmental variable is strategic uncertainty, which is defined as “the emerging threats and opportunities that could invalidate the assumptions upon which the current business strategy is based” (Simons, 2000, p. 215). The uncertainty faced has caused a change in the internal controls mainly following the transition from physical to online transactions such as use of visa cards and telecom companies for mobile money transactions with customers. With the ease of transacting online and executing duties by mid-level managers comes the threat of misusing cash. Therefore, the controls for these online transactions are now emphasized considering all case companies are handling cash payments and collections online and having minimal physical dealings.

## **5.2 Reshaping the organizational setting and management**

Information gathered by control mechanisms and systems may be used to question the existing rationales for action and if the current strategies and structures are appropriate in a new environment. The characteristics of control mechanisms and systems, such as the level of environmental scanning or surveillance (actively seeking external information), or the degree of participation in the decision-making process (actively both seeking and communicating internal information), can partly determine the response of an organization to change. The interactive or diagnostic use of different parts of the control system can also partly determine the response to environmental change (Simons, 1990; Simons, 1991; Simons, 1995).

This thesis suggests that regardless of the FCF control procedures in most organizations, aspects of change within internal controls will always be encountered, and mid-level managers need to apply these changes during the decision-making process. The general opinion of the interviewees is that FCF controls, procedures and SOPs are documented and applied in all transactions. The findings of the study resonate with this opinion. According to Pfister (2009), the changes in internal control and other conditions serve as a feedback and follow-up mechanism for the management decision process. Additionally, the use of control systems in combination as suggested by Bedford (2015) should be considered. The findings indicate the use of diagnostic control systems; however, the boundary systems are not emphasized. Having boundary systems that are clearly tied to enforceable sanctions are particularly important when mid-level managers are set challenging performance targets as it is in these circumstances that individuals are most tempted to bend the rules (Simons, 2000).

The findings of this thesis infer that mid-level managers will need to develop control mechanisms in line with the advancing technologies that affect FCF. The adaptive nature of change implies that organizational processes and controls require significant and perhaps frequent modification during the implementation of change. The tracking of performance that

occurs as part of management control system activity permits mid-level managers to take the pulse of an implementation effort and diagnose the extent to which actual outcomes are consistent with the goals of the change initiative. A significant performance gap signals the need for corrective action and prompts mid-level managers to subsequently modify organizational processes, goals, or both (Ford & Greer, 2005).

This thesis also highlights that the internal control mechanisms have reshaped the relationship between shareholders, top management and mid-level managers by approaching the agency problem that has been in existence for such a long period of time based on the ground-breaking research by Jensen and Meckling (1976). Combined with the new technological advancements, accountability to top management and shareholders is made easier through virtual meetings, as highlighted in the empirical results. Therefore, the quality of internal controls with these technological solutions has to be enhanced with the incorporation of Simon's LOC and pre-decision controls (Alkaraan and Northcott, 2007). However, if mid-level managers are not well versed with technological advancements on cash and change within internal controls, there will be a limited improvement in utilizing FCF and handling the agency problem.

## **6.0 Conclusion**

### **6.1 Conclusion and contributions**

This thesis explores the dynamics of internal control in the context of FCF, which assessed three research questions. The first questions explored the extent to which organizations effectively and efficiently utilize the available FCF, which this question supported by the previous research regarding agency problems and the control on cash utilization (Jensen & Meckling, 1976; Jensen, 1986). The agency theory is used to understand the potential misalignment of interests between mid-level managers, shareholders and top management when FCF is available (Jensen & Meckling, 1976). To avoid this misalignment and ensure the effective use of FCF, decision control mechanisms are discussed, including pre-decision controls and Simon's four types of control mechanisms (Alkaraan & Northcott, 2007; Simons, 1994), which leads us to the second research question aimed to identify internal decision control practices that could help organizations avoid investing in non-performing projects when excess FCF is present. Lastly, the third research question focused on how mid-level managers can effectively use the identified and recommended controls to ensure the avoidance of unwanted investments and effective utilization of FCF.

The results obtained from analyzing several company cases suggest that implementing stringent controls is necessary to enhance the efficiency of cash utilization and mitigate agency problems. The stringent control on executing monitoring on financial evaluation, the criteria against it, and strategic alignment play a crucial role in the FCF decision-making process. This serves as a pre-decision control that enables mid-level managers to identify investment projects that are deemed valuable. Moreover, the approval from different levels of authorities also serves as a pre-decision control as the different level authorities have different capacities in evaluating cash decisions.

The primary objective of the companies that we interviewed is to maximize profits, which requires the enhancement of exploitative activities through the implementation of boundary and diagnostic systems. This aligns with the findings of Bedford's (2015) previous research. The companies engage in repetitive activities as part of their regular operations to produce products for the market, thereby exhibiting exploitative tendencies. The implementation of diagnostic control in manufacturing firms involves the development of key performance indicators that are congruent with the organization's objectives. This approach facilitates the measurement of progress towards the maximization of profits and the effectiveness of free cash flow control mechanisms. Additionally, it enables the identification of areas where performance is suboptimal, and the allocation of resources towards enhancing performance in those areas. The effectiveness of subordinate efforts motivated through diagnostic controls in exploiting existing product markets and firm capabilities can be enhanced by clearly defining the boundaries that consist of risks and opportunities to be avoided.

This thesis also demonstrates that internal control mechanisms have reshaped the relationship between shareholders, top management, and mid-level managers by addressing the agency problem. In this regard, mid-level managers are required to incorporate aspects of change within internal controls into the decision-making process during the course of dealing with agency problems. Therefore, top management will need to build control mechanisms that are consistent and compatible with the development of technologies that have an effect on FCF.

Our thesis offers perspectives on implementing internal controls within organizations to optimize cash utilization in accordance with organizational strategy and performance while mitigating the misuse of free cash flow. The research provides a contribution by evaluating the implementation of controls in utilizing FCF in unconstrained entities, particularly those with a growth-oriented managerial approach. This thesis expands upon the vast domain of internal controls and provides empirical insights that can serve as a basis for further investigations. Therefore, this thesis enhances comprehension of decision controls and their pragmatic implementation in addressing the FCF issue. The findings of this thesis have implications for mid-level managers who aim to enhance decision-making processes and increase the value of shareholders and top management.

## **6.2 Limitations and Restrictions**

Despite the fact that this study provides valuable insights into the use of decision control mechanisms in managing FCF in organizations, there are several limitations to consider. First, the significant limitation of this study is the lack of cross-cultural analysis. The cases were chosen based on a singular cultural context, which curbs the generalizability of the findings and results. Conducting a singular cultural analysis may not be applicable to entities that operate in different cultural contexts. Moreover, cultural diversity can affect how decision control mechanisms are perceived and implemented within the organizations, which can influence the effective use of decision-making and control mechanisms.

The second limitation of this study is that it only used a relatively small sample size. Despite the fact that the cases were chosen to reflect a specific business sector in manufacturing, a bigger sample size would have produced more in-depth results and made it possible to generalize the findings to a greater extent. Additionally, the case companies used in this study are from a developing country therefore some customers are still laid back on using online cash payment methods which results in having cash on company premises and poses a high risk of fraud and misuse of cash. The presence of actual cash is more challenging to handle and requires a lot of monitoring as compared to FCF in the bank.

### **6.3 Future Research**

This thesis has given contributions of valuable perspective regarding the implementation of internal controls to optimize cash utilization within organizations. However, additional research is still required in a few areas. Future research should first consider employing cross-cultural analysis to investigate the implementation of internal controls within organizations in order to maximize cash utilization in various cultural contexts. Hantrais (1996) has suggested that cross-cultural examines issues in two or more countries with the express intention of comparing their manifestations in different sociocultural settings (institutions, customs, traditions, value systems, lifestyles). It also enables us to gain a greater awareness and a deeper understanding of social reality in different national contexts. This would assist in identifying any cultural factors that may impact the organization's internal control and provide a more nuanced understanding of the study.

Second, the sample size of this thesis was relatively small, which may limit the generalizability of the findings and analysis. Future research should investigate increasing the sample size to improve comparative research and the generalizability of the results. In addition, there is still room for further research to enhance our understanding by obtaining the perspective of shareholders and top-level managers regarding the use of decision controls in handling FCF available within the organization.

## **7.0 Appendix**

### **Appendix 1:**

Hello Sir/Madam,

We are writing to you to request for your assistance during our thesis data collection process which is to be conducted by having an interview and answering a follow up questionnaire survey. We are requesting your assistance based on the experience and knowledge you possess in line with our research topic concerning cash in your organization.

By way of introduction, we are Anna and Cattleya, from the Accounting and Finance master's programme at Lund University. We are currently writing our thesis paper whose topic is "Value of decision control mechanisms in avoiding free cash flow drawbacks in the first place" and are in the initial preparation process of gathering data. We would like to better understand how to limit ineffective use of available organizational cash. This will be through identification control weaknesses which our research will address by suggesting recommendations of internal controls that can be enacted in firms, to ensure cash is efficiently utilized when making decisions within organizations.

On carrying out interviews, we anticipate gathering more detailed information, based on actual practice, on how available cash within a company is maintained, monitored, and effectively used in alignment with company strategy. The interview can be held online and is estimated to take 40 minutes. We shall then use this collected data to better understand our topic, identify weaknesses in cash controls, and enhance the findings based on our research and class studies to have a concrete empirical analysis.

Further, we shall follow the interview with a questionnaire survey to elaborate how the identified and recommended controls from our research can be applied in practice to ensure efficient and improved use of controls.

The interview questions are attached for review. Kindly assist us with this request.

Thank you.

## Appendix 2:

### Free Cash Flow Control Systems

The free cash flow control systems assessed are based on control systems that guide performance and behavior. The survey also aims to assess how recommended controls from the study are to be adopted to create an environment where free cash flow problems are completely eliminated.

All answers provided in this survey are ANONYMOUS.

Questions	1	2	3	4	5
To what extent do shareholders rely upon codes of conduct to define appropriate behavior?					
To what extent do shareholders use budgets and performance measures to encourage and facilitate dialog and information sharing?					
To what extent do shareholders and top management use budgets and performance measures to focus attention on strategic uncertainties (i.e factors that may invalidate current strategy or provide opportunities for new strategic initiatives)?					
To what extent do shareholders acknowledge recommendations on control revisions that provide guidance to the organization?					
To what extent are shareholders willing to integrate control systems that guide behavior with control systems that guide achievement of performance targets?					

\* 1 = To small extent, 5 = To large extent

## 8.0 References

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