Management Accounting Innovations and Financial Performance: The Role of Economic Crisis Perceptions and Business Strategy

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ABSTRACT
The purpose of this paper is to conceptually analyze management accounting innovation on financial performance through the role of economic perception and business strategy. Through a method based on conceptual studies (conceptual paper), the results of the analysis are expected to become thoughts as well as solutions for companies to refocus their business activities in order to be able to maintain their performance during the pandemic and decision-making processes. The result of the conceptual study is that in determining management accounting innovation, companies must consider internal and external factors in achieving financial performance. In the current condition of uncertainty, external factors in the form of anticipation of the emergence of economic risks are important. On the other hand, the choice of business strategy also determines management accounting innovation as an internal factor. This is indicated to have an effect on improving the company's financial performance.

Keywords: Management accounting innovations, Economic crisis perceptions, Business strategy.

1. INTRODUCTION
Today's business environment is constantly undergoing upheaval and change. Change is happening at an unprecedented speed and scale even though we are now entering the digital age [1]. Today many industries are affected and no longer have the ability to develop strategies for a long time and struggle for survival [2] Globalization, technological advances, environmental problems, demographic changes, urbanization, global pandemic crises, and other forces, make the market even more uncertain. However, every company must face it even in conditions full of uncertainty.

The impact of the current pandemic has developed into a world crisis or recession, and Indonesia is no exception. The economic crisis that has occurred in many countries must be addressed as a challenge to make internal changes to the company to deal with external factors that will disrupt the course of business activities. The economic crisis produces cash flow problems, a reduction in the availability of resources and demand, and political upheaval [3]. The decision-making process and management control implementation are also made more difficult [4] as a result of this increase in firm uncertainty [5].

Bank Indonesia revised the forecast for global economic growth in 2021 to 5.8% from 5.7% previously. (www.bi.go.id). Previously, Indonesia experienced fluctuations in economic growth which had an impact on the possibility of an economic crisis. Entering the period of implementation of the restriction on community activities (PPKM) the community is given flexibility in carrying out activities so that economic growth can recover and it is hoped that the community will not ignore health protocols. It still takes time to recover the economic stretch because the pandemic will continue to disrupt the running of business activities in the community. The possibility of crises will continue to arise so that people must continue to consider all things that indicate an indication of a crisis that has occurred. A business
strategy is needed that must be made by the company to anticipate business activities so that it can achieve better performance [6].

The issue of the company’s declining performance due to the economic crisis due to the Covid-19 pandemic has been released by various national media. 10 Indonesian SOEs affected by the pandemic caused a financial crisis based on declining stock values (manado.tribunnews.com). Based on the results of research by Arrbey Research, which is one of Arrbey Consulting’s business units, Indonesia is currently experiencing an economic crisis due to the COVID-19 pandemic. This can be seen from the decline in sales, availability of goods, delivery of goods and services, availability of labor, and increase in production costs. A survey related to the economic crisis as a result of the Covid-19 pandemic was conducted on 260 national private business leaders, micro, small and medium enterprises (MSMEs), state-owned enterprises (BUMN) and multinational companies in Indonesia in 2020. Based on the survey results, 67.6 percent of respondents said the crisis was occurring, 30 percent said the crisis had not yet occurred, and only 2.4 percent felt that there was no crisis. The survey results also show that as many as 36.5 percent of companies decreased sales of more than 60 percent and 24.1 percent of companies fell by 41-60 percent. In addition, as many as 22.9 percent of companies whose sales fell 21-40 percent, then 12.4 percent of companies fell below 20 percent, and only 4.1 percent of companies did not experience a decline in sales. Interviews with several executives who represent business leaders of medium to high-end companies in Indonesia, and yielded the results that the crisis that occurred was a matter of concern but still holds a glimmer of hope (gpriority.co.id).

The issue of the economic crisis due to the Covid-19 pandemic requires companies to refocus on business activities that have been made into programs and budgets for the next one to several years. Crisis management involves new management tools and a new operating environment for the management accounting system as the result of the impact of the threat of a crisis on the business environment [7]. The new economic environment is forcing companies to adopt Management Accounting Innovation (MAI) techniques, which should be investigated further [8]. MAI can handle external uncertainty and improve management control [9]. According to this view, it can be followed up with the assumption that this is an effort by the company to maintain and even improve the company's performance.

Based on this, there are 2 (two) possibilities that must be viewed in different perspectives. First, the economic crisis resulted in the need for companies to innovate their management accounting systems, so that it had an impact on company performance. Second, the business strategy will support management accounting system innovation so that it is expected to have an impact on increasing company performance. Based on this perspective, this paper will describe conceptually about this phenomenon through systematic analysis to further become the basis for conducting empirical studies.

The crisis environment must be taken into account when conducting management accounting research [10]. Accordingly, this study provides information regarding the economic crisis and its adoption, as well as how management accounting innovations are applied. Research on the new order of life is given new impetus by the current economic downturn [10]. Before and after the economic crisis, there was a significant variation in the prominence and use of management accounting tools [11]. Traditional cost accounting procedures are said to have dropped in importance and use during the financial crisis, while activity-based cost accounting, planning, and strategic management tools have gained in prominence. The majority of budgeting approaches are still frequently utilized and deemed significant by businesses.

Companies that want to survive in times of increasing uncertainty like now (during a pandemic/crisis) require a supportive strategy with an adequate management accounting system and effective management control as well. However, there is no previous research that reveals the relationship between the crisis and business strategy that causes companies to innovate management accounting that affects company performance. Both are the basis for companies to innovate the use of management accounting tools [12]; [9]. Businesses that have been hit hard by the recession are more inclined to adopt and use management accounting advances [12]. Management accounting improvements provide more and better information to assist organizations cope with the current economic crisis. Accounting is one area where corporate strategy is expected to matter because each plan requires different skills from personnel. A company’s strategic goals may demand a specific management accounting function [6].

The purpose of this paper is to analyze conceptually as well as the problem in this paper that the role of perception of the economic crisis and business strategy on financial performance through management accounting innovation. Uncertainty (unpredictable environment) is a very disturbing thing for the management accounting system. The focus of corporate strategy which is the basis for innovation in management accounting systems in dealing with crises and the role of business strategy requires the role of individuals as human resources that support everything to run effectively. The importance of corporate strategy...
as a determinant of management accounting system effectiveness cannot be overstated. The company's reliance on its resources in identifying crises is the key to management accounting innovation's success in improving financial performance.

This article is a conceptual study, expected to provide a reference for companies/management in decision-making when conditions of uncertainty occur, the importance of carrying out management accounting innovations in maintaining and improving the company's financial performance through the role of economic crisis perceptions and business strategies.

2. LITERATURE REVIEW

2.1 Theoretical Framework

2.1.1 Contingency Theory

While there may not be a universally applicable accounting system, the contingency approach can be used by every company in any situation [13]. It's common for researchers in management accounting and organizational control to employ contingency theory [14].

In order for a business to be successful, it must be able to adapt to its surroundings, organizational size, and business plan if it is well-run [15]. The environment, technology, organizational structure, organizational size, strategy, and organizational culture all have a role in the design of a management accounting system. According to a contingency-based theory of organization, these are known as "organizational contextual variables" [15].

To be effective, an organization must have a structure and environment that are compatible with each other [16]. A corporation's controllable variables (which are owned by the company) can be regulated to establish an appropriate configuration in the face of contingencies [17]. In the context of business strategy and perceptions of the economic crisis that play a role in determining management accounting innovation, it is necessary to consider this theory as a basis for making strategic decisions so that companies are able to survive and improve their performance.

2.1.2 Resource Dependence Theory

According to Resource Dependence Theory (RDT), an organization's actions and decisions may be described by its dependence on resources [18]. This is the core assumption of RDT. A management accounting system that obtains and utilizes resources effectively and efficiently in order to achieve organizational goals is the subject of RDT, which in its development includes matters relating to planning, monitoring, performance measurement, and an integrative mechanism as strategic and operational control [19]; [20].

The context of the crisis, the company's dependence on the resources it has is very influential on the perception of each individual at every level of management in maintaining the company's performance. Changes in the management accounting system really need the support of individuals as the company's resources. Management Accounting System design has changed as a result of changes in business strategy and views of the economic crisis, resulting in improved quality information being provided for crisis management. In order to alleviate the uncertainty felt by the company as a result of the economic crisis, this knowledge must come from both the organization's internal and external environments [21].

2.2. Literature Review

2.2.1. Business Strategy

A well-known fact in the business world is the requirement for companies to be effective innovators in order to keep their competitive advantage [19], [22], [25]. Organizations are encouraged to innovate as a means of adapting to market, technological, and competition changes [23].

As a result of this, management accounting is all about how these companies really manage the process of formulating a strategy based on innovation [24];[25]. An analysis of the literature shows that management accounting is an integral aspect of the management process [25];[26];[27]. Researchers have looked at how strategy affects management participation [12] and how management accountants might help foster exploratory innovation in management accounting systems [27]. In the context of corporate strategy and innovation, the application of management accounting information for various objectives is still uncertain. The success of a corporation can be attributed to its business strategy [6].

2.2.2. Perception of Crisis (Economic)

Businesses are dealing with heightened uncertainty due to their perception of the current economic crisis [26]. The more severe the economic crisis, the greater the level of uncertainty felt by the firm [28]. As a result of the financial crisis, the distribution of limited resources was more uncertain than in the pre-crisis era. As a result, it is impossible to forecast how customers will spend their limited resources or if providers will be able to manage their orders [29]. It becomes more difficult to make a conclusion since more and more high-quality information is needed [30].

Certain aspects of the corporate environment are difficult to forecast due to a lack of information and uncertainty. An increasing level of uncertainty in the external environment means that a greater demand for
analytical knowledge for decision-making and management control [31]. Improved data quality is needed by businesses so that they can better plan and achieve their objectives [32].

2.2.3. Management Accounting Innovation

For a business to succeed, innovation is a necessity. An idea or behavior connected to a product or service or a technological technique that is unique to the firm that adopts it, according to relevant literature, is an example of innovation [31]. Management Accounting innovation is the first time a corporation adopts Management Accounting methods [31].

Many scholars have conducted empirical studies on management accounting concepts such as activity-based costing, goal costing, life cycle costs, economic value added, and the balanced scorecard [12]. There have been a number of studies that have focused on the basic characteristics of companies that influence the adoption of management accounting innovation. The adoption of management accounting innovations is affected by a variety of contingent elements within the scope of the firm.

2.2.4. Financial Performance

Early financial performance measurement was mostly based on an accounting or financial approach throughout the 1980-1990s period. Accounts and market performance assessments are used in the study, which each has its own set of constraints. Only historical components of firm performance can be measured by accounting-based performance measurement [22]. Risk, industry characteristics, and other variables must be taken into account when calculating accounting-based performance [21]. The evolution of empirical research advocates utilizing market-based performance measurements to avoid the accounting-based measurement dilemma. There are several advantages to market-based performance measurement over accounting-based measurement, including: (1) it is less susceptible to differential accounting procedures and managerial manipulation; and (2) it represents investors' evaluation of the company's ability to generate future performance as compared to past performance [31]. In comparison to the goal of accounting-based performance measurement, market-based performance measurement also has constraints. It is not adequate to use a single indicator to evaluate the firm's shareholders and investors because the company encounters a variety of stakeholders [29].

An understanding of performance in the context of [30]. Business performance reflects the strategic management perspective of the overall concept of organizational effectiveness. Every company has its business performance centers on the use of simple financial indicators that are assumed to reflect the fulfillment of the company's economic objectives. Based on this, business performance is classified as financial or accounting performance, such as: sales growth, profitability and earnings per share (EPS). Performance other than financial or accounting is called market performance or value-based performance. Market-based performance is considered a more precise measurement than accounting-based measurement. Market-based performance includes: market-to-book or stock-market returns and their variants (Montgomery and Sigh, 1984) [33] and Tobin's Q, which is the ratio of the firm's market value to asset replacement [34]. The second approach is categorized as a financially oriented approach and assumes that finance is the legitimacy and purpose of the system in the company. On the measurement of financial performance used in the context of management [14].

![Figure 1. Conceptual Framework](image)
2.3. Conceptual Framework

Based on the theoretical and empirical studies in the previous discussion, the conceptual framework can be presented in the following Figure 1.

3. RESULTS & DISCUSSION

3.1 Conceptual Implementation in Indicators

In the conceptual study of management accounting innovation, crisis perception, business strategy and financial performance according to the form of factor measurement according to the previous conceptual framework, it is necessary to implement it in the form of measurement as an indicator with the individual perception response scale as follows:

3.1.1. Business Strategy

The conceptualization of strategy is based on a generic strategy taxonomy [24] which provides a rich overview of organizational arrangements associated with a particular strategy [6]. This typology is unique because it views the organization as a complete and integrated system that interacts dynamically with its environment. Prospector, defender, and analyzer are all viable strategies [24]. The key dimension underlying this typology is the organization's response to changing environmental conditions. Defender has a narrow product market domain and tends not to look for new opportunities outside of its domain. Prospectors as a strategy to seize market opportunities and tend to be the creators of change in the industry. Analyzer is a mixture of the two, operating within a relatively stable product market domain.

3.1.2. Management Accounting Innovation

The concept of 'management accounting innovation' is well-established. Management accounting tools, such as BSC, ABC, EVA, target costing, and life cycle costing, have been used to measure management accounting innovation in the relevant literature [9] and have been used to measure management accounting innovation. Innovation indicators are assessed based on their adoption rate, including: 1) past innovative tool experience and intention, 2) past experience and abandonment, 3) past experience and intention, 4) present use of innovative tool, and 5) intensive use of the innovation. Answers (4) and (5) are considered as adopters and others as non-adopters.

The measurement of management accounting innovation is an indicator of practice for companies in making steps or efforts made in accepting uncertain environmental changes. Company policy becomes important here in terms of companies in maintaining and even developing themselves according to the ability of their resources to support the company's financial performance when environmental uncertainty is both internal and external.

3.1.3. Economic Crisis Perception

An economic crisis is an economic condition caused by uncertainty regarding various factors such as market demand and capital availability [36]. The measurement of perception uses indicators of attitude towards the level of approval and disagreement with a certain scale on statements regarding the perceived impact of the economic crisis on business units: 1) affect of business due to the economic crisis, 2) impact of economic crisis to business (in terms of order, sales, customer’s payment, supplier, and capital control).

The above indicators will provide an assessment of perceptions of the perceived economic crisis facing the company. The various parties mentioned in the indicator are indicated to provide a reflection of the causality of conditions resulting from the impact of the crisis.

3.1.4. Financial Performance

Financial performance is defined as the achievement of goals that have been set by the company both from the financial aspect of the company for some time. Financial performance can be assessed based on indicators: net profit, product/service sales growth, return on investment, profitability, market share and overall performance. The higher the score of all question items, the higher the increase in the company's financial performance during the specified time. Financial performance shows most of the company's performance other than non-financial. through the measurement of financial performance, it shows how the company can manage it in the context of the company having the ability to anticipate crises that occur and determine business strategies

3.2. The Urgency of the Conceptual Framework and Previous Research Results.

The current destructive situation brought about by the global COVID-19 pandemic is basically the beginning of an economic crisis that affects the company's performance. The impact of the current pandemic has developed into a world crisis or recession, and Indonesia is no exception. The economic crisis that has occurred in many countries must be addressed as a challenge to make internal changes to the company to deal with external factors that will disrupt the course of business activities. Many industries are now harmed and unable to formulate long-term
strategies, forcing them to fight for their very existence. As a result of these conditions, the company's decision-making process and the implementation of its management control system become more challenging. Through the study of contingency theory and resource dependence theory as a grand theory and analysis of the conceptual framework, it is hoped that the results of the analysis will be a thought as well as a solution for companies to refocus their business activities in order to maintain their performance during the pandemic and the sustainability of their operations in the future.

Companies in maintaining their business processes strive to innovate that can be directed at many organizational processes. These innovations are related to the management accounting system which focuses more on maintaining stability in the face of uncertainty. There is a need for a business strategy role that directs how innovation in the management accounting system will be able to maintain and even improve financial performance [6]. Not something easy but also not a difficult thing to implement with the condition that management accounting design in the choice of business strategy will determine how direction of management accounting innovation in the company's business processes. Company performance is more strategic in its measurement system through management accounting innovation. The existence of control in management accounting innovation can be achieved by communication to assist integration across the value chain, and how innovation can be aligned with organizational strategy and goals.

Crisis-related accounting innovations tend to be adopted more widely by organizations that have more affected business units than those that have less affected business units. The economic crisis has had an impact on the company's operations and elevated the level of risk. As a result of the economic crisis, more and better information is needed to lessen the aforementioned uncertainty. Since the present economic crisis has interrupted operations, organizations have adopted and are increasingly using management accounting innovations in an effort to contribute to financial performance that can still be maintained or preserved despite these disruptions. Management accounting innovations tend to be adopted and used more frequently by companies that want to better understand their internal and external environments. Management control becomes more effective as a result of better decision-making.

An increasing amount of information is needed to help deal with the current economic situation. In research, for example, better information can minimize uncertainty [18]. It is possible for organizations to manage their limited resources by adopting and implementing the findings of management accounting advances [9]. The company's ability to innovate across all aspects of its operations, including its accounting system, is directly tied to its overall business strategy and how it perceives its current predicament. Companies are being compelled by the new economic climate to develop new methods of management accounting [8]. Businesses that have been touched by the economic downturn are more likely to adopt and employ management accounting innovations than those that have not. Management accounting advances help companies cope with the uncertainty created by the current economic crisis by providing more and better information.

At times of crisis, efforts are made to improve budgeting as a way to assist management accounting innovation. However, budgeting is becoming more crucial for planning and resource allocation in organizations that have been adversely affected by the economic crisis [36]. Companies are more concerned with how they performed in the aftermath of a catastrophe than how they performed during the crisis itself. Although the use of traditional cost accounting procedures declined during the economic downturn but budgeting techniques were still frequently employed, this confirms the findings of a survey indicating ABC systems, planning, strategy, and strategic management accounting techniques grew throughout the crisis [11].

The description above is an empirical study that is expected to strengthen the conceptual study of the previous conceptual framework. Although research linking business strategy and crisis perception and management accounting innovation has not been widely associated with the company's financial performance, under any circumstances the company's business activities will end up achieving work results within a certain period. This is supported by several studies on strategy and crisis perceptions and linking them to performance so that based on the conceptual framework, it can be further analyzed its influence on performance, especially financial for the company. This of course takes into account the grand theory that builds the conceptual framework, namely contingencies and RDT seen in the effectiveness of the management accounting system and the role of the company's resources when determining business strategies and steps to deal with crises and innovation efforts that are carried out so that they have an impact on performance. Based on the contingency theory that when a management accounting system cannot run itself effectively, this requires the role of business strategy and crisis perception in carrying out management accounting innovations in improving the company's financial performance. RDT shows that the
ability of the company's resources plays a very important role in detecting the emergence of crises facing the company, especially during the Covid 19 pandemic so that through its synergy in carrying out management accounting innovations, it is expected to be able to shape the company in creating good financial performance.

The result of the conceptual study is that in determining management accounting innovation, companies must consider internal and external factors in achieving financial performance. In the current condition of uncertainty, external factors in the form of anticipation of the emergence of economic risks are important. On the other hand, the choice of business strategy also determines management accounting innovation as an internal factor. This is indicated to have an effect on improving the company's financial performance.

4. CONCLUSION

Based on the conceptual framework, it is expected that management accounting innovation can assist companies in refocusing in determining changes in management accounting techniques. This requires the support of a business strategy and crisis perception so that it can defend itself from the uncertainty caused by the pandemic as a source of crisis while maintaining business processes to determine the company's financial performance. Companies can adopt a conceptual framework for the business decision-making process because it has considered the external (crisis) and internal (business strategy) aspects of the company that affect management accounting innovation so that it has an impact on financial performance. This paper is still a conceptual study. The existence of empirical studies, theoretical support and indicators of each variable and reality that occurs thus provides a great opportunity to conduct research on empirical concept studies.

REFERENCES

[1] S. Lee and S. Trimi, “Convergence innovation in the digital age and in the COVID-19 pandemic crisis,” J. Bus. Res., vol. Vol 123, p. pp 14-22, 2020.
[2] S. Blackburn, L. LaBerge, C. O'Toole, and J. Schneider, “Digital strategy in a time of crisis,” McKinsey Digit. April 22, 2020.
[3] E. H. James, L. P. Wooten, and K. Dushek, “Crisis management: Informing a new leadership research agenda,” Acad. Manag. Ann., vol. vol 5(1), p. pp 455–493, 2011.
[4] M. Mangena, V. Taurina, and E. Chamisa, “Corporate boards, ownership structure and firm performance in an environment of severe political and economic crisis,” Br. J. Manag., vol. vol 23, p. pp 23–41, 2012.
[5] C. M. Pearson and J. A. Clair, “Reframing crisis management,” Acad. Manag. Rev., vol. vol 23(1), p. pp 59–76, 1998.
[6] L. Gani and J. Jermias, “The Effects of Strategy-Management Control System Misfits on Firm Performance.,” Account. Perspect., vol. 11(3), pp. 165–196, 2012.
[7] P. J. Arnold, “Global financial crisis: The challenge to accounting research.,” Accounting, Organ. Soc., vol. 34, pp. 803–809, 2009.
[8] N. H. M. Zawawi and Z. Hoque, “Research in management accounting innovations: An overview of its recent development,” Qual. Res. Account. Manag., vol. 7(4), pp. 505–568, 2010.
[9] R. Chenhall and F. Moers, “The role of innovation in the evolution of management accounting and its integration into management control,” Accounting, Organ. Soc., vol. 47, pp. 1–13, 2015.
[10] W. A. Van der Stede, “Management accounting research in the wake of the crisis: Some reflections,” Eur. Account. Rev., vol. 20(4), pp. 605–623, 2011.
[11] O. Pavlatos and X. Kostakis, “Management accounting practices before and during economic crisis: Evidence from Greece,” Adv. Account., vol. 31(1), pp. 150–164, 2015.
[12] O. Pavlatos and H. Kostakis, “Management accounting innovations in a time of economic crisis,” J. Econ. Asymmetries, vol. 18, pp. 1–12, 2018.
[13] D. Otley, “The contingency theory of management accounting: Achievement and prognosis.,” Accounting, Organ. Soc., vol. 5(4), pp. 413–428, 1980.
[14] D. Otley, “The contingency theory of management accounting and control: 1980–2014,” Manag. Account. Res., vol. 31, pp. 45–62., 2016.
[15] R. Chenhall, “Management control systems design within its organizational context: findings from contingency-based research and directions for the future,” Accounting, Organ. Soc., vol. 28, pp. 127–168, 2003.
[16] K. Duncan and K. Moores, “Residual analysis: A better methodology for contingent studies in management accounting,” J. Manag. Account.
S. T. Sari, E. N. Dp, and Rusli, “Pengaruh Financial Stability, External Pressure, Financial Targets, Ineffective Monitoring, Rationalization pada Financial Statement Fraud dengan Perspektif Fraud Triangle (Studi Empiris pada Perusahaan Perbankan periode 2012-2014 yang Terdaftar di Bursa),” J. Online Mhs. Fak. Ekon. Univ. Riau, vol. 3, no. pp. 664–678, 2016.

J. Pfeffer and G. R. Salancik, The external control of organizations: A resource dependency perspective. 1978.

M. Porter, Competitive strategy: Techniques for analysing industries and competitors. New York The Free Press, 1980.

K. Langfield-Smith, “Management Control Systems and Strategy: A critical review,” Accounting, Organ. Soc., vol. 22 (2), pp. 207–232, 1997.

R. J. Anthony, “Planning and Control Systems: Framework for Analysis,” Harvard University, 1965.

R. E. Miles and C. C. Snow, Organizational strategy, structure, and process. New York: McGraw-Hill, 1978.

J. Bisbe and D. Otley, “The effects of the interactive use of management control systems on product innovation,” Accounting, Organ. Soc., vol. 29(8), pp. 709–737, 2004.

J. Birkinshaw, G. Hamel, and M. J. Mol, “Management innovation. The Academy of Management Review,” vol. 33(4), pp. 825–845, 2008.

S. Hofmann, A. Wald, and R. Gleich, “Determinants and effects of the diagnostic and interactive use of control systems: An empirical analysis on the use of budgets,” J. Manag. Control, vol. 23(3), pp. 153–182, 2012.

P. Hughes and B. Pierce, “The accountant’s contribution to new product development,” Irish Account. Rev., vol. 13(1), pp. 47–68, 2006.

B. Jørgensen and M. Messner, “Accounting and strategising: A case study from new product development,” Accounting, Organ. Soc., vol. 35(2), pp. 184–204, 2010.

Z. Lin, Z., Xia, K. M. Ismail, and K. M. Carley, “Organizational design and restructuring in response to crises: Lessons from computational modeling and real-world cases,” Organ. Sci., vol. 17(5), pp. 598–618, 2006.

S. Becker, M. Mahlendorf, U. Schäffer, and M. Thaten, “Budgeting in times of economic crisis,” Contemp. Account. Res., vol. 33(4), pp. 1489–1517, 2016.