



# Breaking the budget chains: Empowering Iraqi smalland medium-sized enterprises through Beyond Budgeting



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**Background:** Traditional budgeting has faced criticism, leading researchers to explore alternative management control methods such as Beyond Budgeting. Despite its potential benefits, Beyond Budgeting adoption remains limited.

**Aim:** This research investigates Beyond Budgeting's effect on Iraqi small- and medium-sized enterprise (SME) performance, focusing on competitive advantage.

**Setting:** The study targets Iraqi SMEs, considering their diverse business landscape. A random sample of 353 accountants was chosen from a research community of 22 974 individuals. SPSS and AMOS 26 software and a custom questionnaire were used.

**Method:** The authors conducted multiple linear regression analysis and Structural Equation Modeling to address our study's objectives. Additionally, we utilised maximum likelihood procedures to assess factor loadings, construct validity and reliability.

**Results:** Beyond Budgeting implementation significantly affected both financial and nonfinancial performance. It demonstrated positive effects on cost leadership and competitive advantage differentiation. However, an indirect negative impact on nonfinancial performance was observed through the influence on cost leadership, suggesting a trade-off between cost reduction and other nonfinancial factors.

**Conclusion:** The study acknowledges limitations in sample size and the need for considering additional factors. Further research is required to understand Beyond Budgeting's limited adoption in Iraq. The study contributes valuable insights on Beyond Budgeting as a substitute for traditional approaches, benefiting managers and policymakers.

**Contribution:** This study emphasises Beyond Budgeting's significant impact on Iraqi SME performance, highlighting the relationship between Beyond Budgeting, competitive advantage strategies, financial and nonfinancial performance. The findings provide insights for enhancing budgeting practices in Iraqi SMEs.

**Keywords:** Beyond Budgeting; traditional budgeting; organisational performance; competitive advantage strategy; SMEs, small- and medium-sized enterprise; Iraq.

# Introduction

Organisations of all sizes and types utilise budget planning as one of their first steps towards increased productivity and profitability (Hansen, Otley & Van der Stede 2003; Libby & Lindsay 2007, 2010). Small- and medium-sized enterprises (SMEs) in Iraq play a pivotal role in the country's economic landscape, accounting for over 90% of the private sector and employing more than 70% of the workforce (International Finance Corporation, IFC 2021). The development and performance of these SMEs are essential for Iraq's economic growth, innovation, competitiveness, entrepreneurship and poverty alleviation (IFC). However, the traditional budgeting methods that many of these SMEs have relied on are facing significant criticism for their inability to adapt to the challenges of the dynamic market environment (Libby & Lindsay 2007; Lidia 2014). Budgets, according to some scholars (De Waal 2005; Hope & Fraser 2001, 2003; Libby & Lindsay 2003; Neely, Bourne & Adams 2003), have serious flaws and should be scrapped altogether. So scholars have

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been trying to find new methods of financial management to meet the constantly shifting requirements of SMEs.

An alternative approach to financial management that stresses decentralisation, flexibility and adaptation is the 'Beyond Budgeting' (BB) method (Libby & Lindsay 2007). With the help of Beyond Budgeting, SMEs in Iraq have a better chance of overcoming operational obstacles and establishing a responsive, flexible and decentralised financial management system.

By focusing on decentralisation, flexibility and adaptation, Beyond Budgeting challenges the established approaches to financial management. It provides a change from customary budgeting procedures that may not be appropriate for today's dynamic corporate climate. In essence, Beyond Budgeting encourages a more flexible and adaptive financial management approach, helping SMEs in Iraq to better manage their finances and better adapt to changing business conditions. In addition, while earlier studies mostly focused on financial success, our study takes a more comprehensive approach by taking into account both financial and nonfinancial dimensions of performance. In particular, our study will look at how Beyond Budgeting affects important financial indicators such as growth sales revenue and profit. In addition to measuring financial success, we will also evaluate nonfinancial performance (NONFP) indicators including job satisfaction, job participation and budget performance.

The purpose of this research is to shed light on the efficacy of Beyond Budgeting as an alternative to traditional budgeting procedures within the context of SMEs in Iraq from the vantage point of a competitive advantage strategy. By addressing these research objectives, we aim to contribute to the understanding of financial management practices in the SME sector and highlight the potential of Beyond Budgeting to enhance budgeting practices in Iraqi SMEs.

The scarcity of literature concerning budgeting methods employed by SMEs in Iraq poses a significant issue. This gap represents a missed opportunity to gain insights into the unique challenges and opportunities these businesses encounter. Addressing this gap would allow the development

of effective strategies that could benefit SMEs and contribute to overall economic growth.

# Literature and hypothesis development

Our theoretical framework, consisting of Agency Theory, Resource Dependency Theory, Management Fashion Theory, and Diffusion of Innovation Theory, provides the intellectual infrastructure for our study on the relationship between Beyond Budgeting (BB) and firm performance. An agency relationship is formed by (Jensen & Meckling 1976) refers to and illuminates the dynamics between principals and agents within organisation. This perspective enables us to analyse how BB's decentralisation and empowerment affect agent behaviour and alignment with company objectives. Resource Dependency Theory (Thompson 1967) guides our exploration of BB's impact on resource allocation, stakeholder interactions, and competitive advantage in an external context. Management Fashion Theory (Abrahamson 1991) aids our understanding of how and why BB spreads across organisations, with a focus on adoption rates and effectiveness. Finally, Diffusion of Innovation Theory (Rogers 2003) helps us to investigate how BB practices are adopted and diffused, aligning with our hypotheses. These theories collectively unveil the direct and indirect channels connecting BB and performance indicators, enriching our research hypotheses. An explanation of the research framework that led to the formulation of hypotheses was offered (see Figure 1).

# **Beyond Budgeting**

Beyond Budgeting emerged as an alternative to traditional financial approaches such as traditional budgeting driven by frustrations with its limitations. It is designed to enhance performance and organisational efficiency by reimagining management control within businesses. Hope and Fraser introduced the concept of Beyond Budgeting through the Beyond Budgeting Round Table (BBRT) in 1997. It is characterised by principles that break free from traditional budget constraints while enabling decentralised decision-making and performance monitoring.

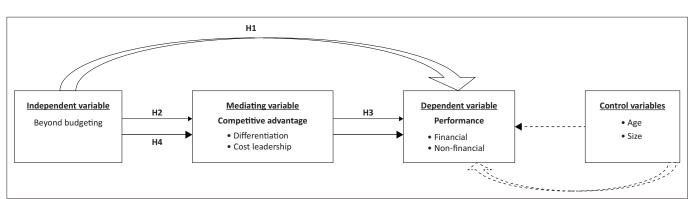


FIGURE 1: Conceptual framework.

A 5-year study by Hope and Fraser explored unique aspects of Beyond Budgeting across companies facing financial challenges. It revealed that eliminating the annual budgeting process was often the wisest course of action. This shift led to the decentralisation of power, increased individual responsibility, and a focus on long-term, relative objectives.

The evolution of BB and the BBRT movement over a decade. It shows diminishing enthusiasm for the concept, possibly indicating that budgeting remains vital for most businesses. Adopting BB is a process rather than a one-time decision, resulting in a transformed organisation and fresh leadership concepts.

The Beyond Budgeting Principles, as defined in the Beyond Budgeting White Paper, emphasise goals based on continuous relative progress, rewarding relative performance in the future, ongoing planning, resource allocation based on need, companywide coordination, and the use of key performance indicators (KPIs), relative indicators and trends for control.

Beyond Budgeting Leadership Principles focus on governance based on principles and limits, fostering an environment that rewards relative achievement, empowering front-line staff with decision-making authority, creating a network of small units responsible for outcomes, shifting attention to improving customer results and promoting open and shared communication.

In summary, BB challenges traditional financial practices and aims to foster a more dynamic and responsive approach to management in today's business landscape.

# **Beyond Budgeting and performance**

Management control systems (MCS) were shown to improve the efficiency and productivity of Australian enterprises, according to research conducted by Chenhall and Langfield-Smith (1998). In addition, Garengo and Bitici (2007) interviewed business owners and managers of Scottish SMEs to get insight into the contextual variables driving performance measurement adoption in MCS and then performed a comprehensive literature analysis based on those findings.

In the light of these findings, we want to investigate how the 'Beyond Budgeting' method impacts company performance. The general belief is that traditional budgeting is a crucial instrument for carrying out business plans (Hansen et al. 2003; Nguyen, Weigel & Hiebl 2018). However, budgeting procedures have been criticised for encouraging 'budget games' and for being too strict, expensive and complicated (Hansen et al. 2003). When compared to traditional budgeting methods, the 'Beyond Budgeting' strategy represents a significant divergence (Hope & Fraser 2003; Hope, Fraser & Rosen 2003).

The 'Beyond Budgeting' method aims to improve organisational performance by putting an emphasis on operational procedures and the defined goals connected with them (Hansen et al. 2003).

Drawing from the research conducted by Melangen and Sofo (2019), which examined how organisations adopting 'Beyond Budgeting' principles, emphasising decentralisation, empowerment, and continuous improvement, manage performance. Their interviews with representatives from six Norwegian organisations revealed that these principles prompted changes in budgeting practices, an increased emphasis on NONFP measures, and more flexible performance management processes. However, it is crucial to note that implementing these principles necessitates substantial shifts in organisational culture and management practices. As a result, the first hypothesis might be stated as follows:

**H1:** There is a significant effect of the Beyond Budgeting approach on the Iraq SMEs' performance.

Two subhypotheses emerge from this main hypothesis:

- H1<sub>1</sub>: There is a significant effect of the Beyond Budgeting approach on the Iraq SMEs' financial performance (FP).
- H1<sub>2</sub>: There is a significant effect of the Beyond Budgeting approach on the Iraq SMEs' NONFP.

# **Beyond Budgeting and competitive advantage**

The 'Beyond Budgeting' practice offers several direct avenues through which it can bolster a company's competitive edge. To begin, it empowers businesses to swiftly adapt their plans in response to dynamic market conditions. Moreover, this approach cultivates a customer-centric focus by granting greater autonomy to lower-level managers (De Waal 2005; Hope & Fraser 2001). In today's customer-driven industry, this can be a pivotal source of competitive advantage.

Furthermore, the 'Beyond Budgeting' concept is renowned for its ability to attract and retain top-tier talent by providing a challenging work environment, as observed by Hope and Fraser (2001). This kind of environment fosters self-determination, innovation and creativity, ultimately leading to enhanced productivity and, consequently, a competitive edge derived from a more engaged and motivated workforce.

In addition, the 'Beyond Budgeting' approach's self-regulating control method equips local managers with access to competitive, strategic and market-oriented data, as observed by Libby and Lindsay (2003). This, in turn, not only improves performance but also bestows upon the organisation a competitive advantage in the market because the decisions made align more closely with the company's objectives.

Lastly, the 'Beyond Budgeting' approach promotes a culture centred on customer service by facilitating coordination between central services and operational units. This fosters shared responsibility, collaboration and a unified approach to achieving common goals. Consequently, aligning all levels of the organisation with the same objectives can offer businesses a substantial competitive advantage. Thus, the second hypothesis is as follows:

**H2:** There is a significant effect of the Beyond Budgeting approach on competitive advantage in Iraq SMEs.

Two subhypotheses emerge from this main hypothesis:

- H2<sub>1</sub>: There is a significant effect of the Beyond Budgeting approach on competitive advantage (differentiation) of Iraq SMEs.
- H2<sub>2</sub>: There is a significant effect of the Beyond Budgeting approach on competitive advantage (cost leadership) of Iraq SMEs.

# Performance of small firms and competitive advantage

Prior research has established a clear connection between differentiation and the entrepreneurial strategies and characteristics of enterprises (Sandberg & Hofer 1987; Teal & Hofer 2003; Tzokas, Carter & Kyriazopoulos 2001). Achieving cost leadership, on the other hand, relies on financial resources, particularly for investing in physical assets and is founded upon process innovation, learning curve advantages, economies of scale and manufacturing design (Allen et al. 2006; Chaganti, Cook & Smeltz 2002; Grant 1991). For smaller businesses, cost leadership becomes less feasible because of limited available resources.

However, late entrants can potentially benefit from cost leadership if cost-effective designs are available in the market (Dowling & McGee 1994). This implies an increased relevance and effectiveness of both general strategies. The performance of small businesses is contingent upon the successful adoption of a single, well-suited strategy (Borch, Huse & Senneseth 1999; Thornhill & Amit 2003).

In today's dynamic marketplace, competitive advantage has become a focal point for businesses, given its substantial impact on their financial and market performance (Alsheikh 2020; Batista et al., 2016; Elkhaldi & Abdullah 2022; Kang & Na 2020; Mitroulis & Kitsios 2017). According to Porter (1980), organisations employing a differentiation strategy offer unique products to their market, leading to a competitive edge over their competitors. This, in turn, allows these businesses to command higher prices, contributing to enhanced profitability. Similarly, businesses employing a cost leadership strategy minimise expenses related to materials, supplies, product development and operations, resulting in increased profitability. This strategy also attracts consumers to make bulk purchases. Firms with a strong competitive advantage tend to perform well in the market, whereas those with a weak competitive advantage may experience performance setbacks and market insecurity (Kakati & Dhar 2002). Consequently, businesses offering distinctive and innovative products can generate substantial profits, as customers perceive these products as novel. Simultaneously, some price-sensitive customers prefer lower-priced items and bulk purchases, reinforcing the importance of pursuing a competitive strategy. A body of research indicates that a competitive advantage significantly bolsters the performance of SMEs (Bapat & Mazumdar 2015; Lechner & Gudmundsson

2014; Melangen & Sofo 2019; Saeidi et al. 2015; Valdiansyah & Augustine 2021). Thus, the third hypothesis is as follows:

**H3:** There is a significant effect of the competitive advantage on the Iraq SMEs' performance.

Two subhypotheses emerge from this main hypothesis:

- H3<sub>1</sub>: There is a significant effect of the competitive advantage (differentiation, cost leadership) on the Iraq SMEs' financial performance (FP).
- H3<sub>2</sub>: There is a significant effect of the competitive advantage (differentiation, cost leadership) on the Iraq SMEs' NONFP.

The literature on post-budgeting emphasises that budgeting should be geared towards enhancing organisational performance, especially in the context of a rapidly changing economy, as traditional budgeting methods lack the necessary flexibility (Bogsnes 2016; Hope & Fraser 2003). Developing a business strategy requires a comprehensive consideration of pertinent stakeholders, including the company's financial aspects, necessitating the implementation of an integrated performance management framework (Bogsnes 2016).

Budgeting plays a crucial role within the realm of performance management; however, companies need to be cautious about exceeding spending levels that can be effectively measured. To ensure effective overall performance management and attain positive performance outcomes, companies should skillfully leverage available information in their decision-making and control processes (Bogsnes 2016; Melangen et al. 2019; Valdiansyah & Augustine 2021). As a result, we put the following fourth hypothesis:

**H4:** There is a significant effect of the Beyond Budgeting approach on the Iraq SMEs' performance (nonfinancial) through competitive advantage.

Two subhypotheses emerge from this main hypothesis:

- H4<sub>1</sub>: There is a significant effect of the Beyond Budgeting approach on the Iraq SMEs' business performance (nonfinancial) through competitive advantage (differentiation).
- H4<sub>2</sub>: There is a significant effect of the Beyond Budgeting approach on the Iraq SMEs' business performance (nonfinancial) through competitive advantage (cost leadership).

Finally, a large body of research has examined the impact of Beyond Budgeting on performance. However, after a thorough search, no research was found that examined the impact of Beyond Budgeting on the performance of SMEs in a developing country such as Iraq, with a focus on the mediating function of competitive advantage. For the most part, previous studies have ignored NONFP in favour of focusing only on financial ones when assessing success.

This research offering fresh perspectives on Iraqi SMEs. Looking at the function of Beyond Budgeting in SME, we find that it is essential for gaining access to various resources, which in turn helps with both monetary and nonmonetary improvements that are vital to the venture's long-term viability.

Using a competitive advantage-based theoretical framework, our research deconstructs the web of connections between performance, competitive advantage and Beyond Budgeting. We contribute to a more sophisticated understanding by discerning the subtle effects of low-cost advantage and differentiation advantage on company success.

Our findings provide context-specific insights for newly founded enterprises throughout Iraq's SME ecosystem, making a substantial contribution to comparable nature studies. Scholars and researchers may use this study as a springboard to investigate new aspects, and it also enriches the current academic conversation.

To sum up, our study does double duty: it improves theoretical frameworks and fills a gap in the literature, making it an excellent resource for researchers looking to validate and expand upon the existing ideas. The study is an important contribution to the academic debate, as our results are contextually relevant for SMEs in a developing country such as Iraq.

# Method

# How statistics are gathered

The study is based on an extensive review of both Arabic and English literature, including books, journals, articles, scientific research, theses and websites, to gather primary and secondary sources that cover a broad spectrum of information pertinent to the research question. This rigorous literature review laid the foundation for the study.

# **Development of questionnaires**

The study's foundation was the survey, which was fashioned after careful consideration of the issue at hand and the aims of the investigation. The study's questionnaire questions were constructed using secondary data sources, such as results from prior research and articles from reputable international scientific journals (Al-Lahibi 2018; Anwar 2018; Libby & Lindsay 2007; Lee, Kim & Seo 2015; Mahariq 2016; Neely et al. 2003; Porter 1985; Qi 2010).

# Participants and sampling methods

Small- and medium-sized enterprises are used as a proxy for the area of research SME in Iraq operates exclusively in the private manufacturing sector. A random sample of accountants from those companies was chosen using the method (Steven Thompson), while the research community is represented by those working in these enterprises (as the number of SMEs in Iraq reached 22974 according to the record of the Federation of Iraqi Industries).

A total of 378 individuals were included in the sample, as this was the minimum number required by the methodology and to ensure adequate representation of the full sample. A total

of 500 forms were disseminated; 359 were returned; and 6 were discarded because they were incomplete; as a result, the final sample consists of 353 forms (a recovery rate of 70.6%).

# **Data collection process**

The questionnaire was collected through cooperation with the Statistics Department for all governorates in Iraq because of the challenges in obtaining information and data related to SME in the country. Small- and medium-sized enterprises often lack sufficient disclosure. This collaboration facilitated the distribution and collection of questionnaires from SMEs, ensuring a comprehensive and systematic approach to data collection. Consequently, this cooperation significantly bolstered the reliability and validity of the data obtained.

# Questionnaire design

The data in this research were analysed using the statistical software SPSS 26 and AMOS 26 by using a variety of different statistical procedures, all of which were chosen based on the specific requirements of deriving conclusions from the questionnaire responses.

A questionnaire made just for this study was used to get answers and collect the data needed for analysis and drawing conclusions.

#### Validity and reliability

Firstly, we test the validity and reliability of the study tool; the reliability of the scale was determined by calculating the square root of Cronbach's alpha stability coefficient, which showed an acceptable range of variation across the questionnaire's questions (0.777–0.826). Cronbach's alpha was clearly within a respectable range (0.603–0.683), reflecting the reliability and confidence of the research variables and confirming their validity for further examination. Moreover, the researcher relied on calculating the skewness coefficient value for all study variables in order to verify the presumption of a normal distribution of the data. The skewness coefficients of the study variables and their dimensions are all within the permissible range, indicating that the data have a normal distribution; consequently, parametric statistical analysis tools and techniques can be applied.

In this investigation, maximum likelihood estimation (MLE) was used because the skewness coefficients were within the acceptable range, which provides support for the assumption of a normal distribution. Additionally, to complement the insights gained from descriptive analysis, MLE guarantees reliable parameter estimate and is suited for normally distributed data, give its capability to concurrently examine causal linkages (Kline 2023).

#### Multicollinearity test

The variance inflation factor (VIF) test was performed to determine whether or not the data suffer from multicollinearity. This was performed so that the multiple linear regression

equations could be tested using data that met the standards of statistical integrity. If the VIF is greater than 10, this indicates that the multicollinearity test is high, and the permissible variance (tolerance) should not be less than 0.1. This is because if the permissible variance is less than 0.1, it indicates that the multiple correlations with other variables are high, which increases the probability that check multilinear syncs will be performed. The following is shown in Table 1.

The findings that are shown in Table 1 show that the VIF values are much lower than the value that is considered acceptable (10). This indicates that there are no issues with multicollinearity in this particular investigation.

#### **Demographic variables**

The study comprised nine demographic variables, including gender, age, qualification, firm age, decision-making input, staff count, job title, years of experience and the degree of budgetary control.

The researchers continue analysis distribution of the study sample items in accordance with demographic characteristics. The survey results indicate that there is a majority of male participants, comprising 70% of the sample, while females represent only 30%. In addition, the study found that a significant proportion of respondents (55.1%) were younger than 30 years of age, suggesting that young people are overrepresented in the role of accountant in Iraq's SMEs. However, younger workers in accountant positions (less than 20 years) may have pursued specialised education or training in accounting while still in school (commercial school) or have started working in the field at a young age because of interest or employer recruitment. Most participants in the sample have some form of formal education, with the highest proportion of college graduates (41.6%) being respondents with at least a bachelor's degree. Moreover, the majority of companies in the study sample were less than 35 years (58.9%), indicating that the vast majority of businesses in the sample have a long history of operation. Notably, over onethird of the sample (35.4%) reported not being involved in decision-making processes. In terms of business size, medium-sized businesses with 10 or more employees made up 50.1% of the sample, while small businesses with fewer than 10 employees comprised 49.9%, making the sample

**TABLE 1:** Multicollinearity test for study Variables in financial and nonfinancial performance.

Variable	Financial performance		Nonfinancial performance		
	Tolerance	VIF	Tolerance	VIF	
The independent variable					
Beyond Budgeting	0.378	2.643	0.378	2.643	
Mediator variable					
Competitive advantage:					
<ul> <li>Differentiation</li> </ul>	0.944	1.059	0.944	1.059	
<ul> <li>Cost leadership</li> </ul>	0.446	2.241	0.446	2.241	
Control variable					
• Size	0.982	1.019	0.982	1.019	
• Age	0.977	1.024	0.977	1.024	

VIF, variance inflation factor.

representative of both small- and medium-sized businesses. Furthermore, department heads at the company represented the most significant portion of job titles (38%), followed by accountants, accountants' assistants and senior management. The experience levels of the participants were well distributed, with 90.1% of responses coming from those with 5–10 years of experience. Finally, the survey found that 54.4% of businesses prepare budgets in whole or in part, while 45.6% do not, indicating that some enterprises in the research sample may have issues with accounting organisation and planning.

#### Statistical method

To give a summary of the dataset and highlight important trends and patterns, we used descriptive analysis in the data analysis. Furthermore, we used multiple regression analysis for H1, H2 and H3 to look at the links between BB and performance, with competitive advantage acting as a mediator. In particular, we looked at how BB practices impact competitive advantage, which impacts performance. During the Structural Equation Modeling analysis, this study uses the maximum likelihood for H4 procedure to assess the factor loadings, validity and reliability of the scales and constructs employed in the research. We were able to evaluate the mediating role of competitive advantage in the link between BB practices and performance measures using these analytical tools, which gave us important new insights into the underlying mechanics of this relationship.

#### Measurement of variables

The Beyond Budgeting variable was composed of 12 phrases that highlight the significance of the BB approach (Al-Lahibi 2018; Mahariq 2016). The second variable, dependent variable 'Organisation Performance', was measured based on financial and nonfinancial performance, as the FP dimension was measured through two statements using growth in sales revenue and profit, while the nonfinancial performance dimension was measured through budget performance and other performance areas, within four phrases (budgetary performance and other performance such as satisfaction with job, job involvement in organisation), so that the total of performance phrases is 6 (Qi 2010). The third variable, the mediator variable, is represented by the competitive advantage strategy in two dimensions. The first dimension is the advantage of differentiation and it was measured in five terms. The second dimension is cost leadership and it was measured in three terms (Anwar 2018; Lee et al. 2015; Porter 1985). Finally, control variables were also included in the study, with firm's age and size identified as potentially impacting the results. According to Mason et al. (2015), variables that are restricting, such as an organisation's age or size, could actually boost performance. To ensure consistency, the Iraq Statistical Yearbook's criteria were used to define small businesses as having less than 10 employees and mediumsized businesses as having between 10 and 29 workers. Both firm age and company size were found to have a significant

impact on the model's predictions, which is consistent with previous research on the topic (Semrau, Ambos & Kraus 2016).

# **Descriptive analysis**

Table 2 provides descriptive analysis results for the study variables using SPSS Ver.26. The table highlights the mean, standard deviation, as well as the minimum and maximum values, offering insights into the characteristics of these variables based on respondents' perceptions.

Regarding the independent variable, BB, respondents displayed a strong awareness of the approach's significance. There was a widespread consensus on the value of Beyond Budgeting in facilitating firm planning and mitigating the challenges associated with traditional budgeting methods.

The participants in the study demonstrated a strong consensus regarding the overall organisations' performance (OP) of the companies. Interestingly, the Mean Agreement for the NONFP Dimension exceeded that of the FP dimension, implying a greater emphasis on nonfinancial variables when evaluating organisational performance. The NONFP dimension scored above the midpoint of three, reflecting a positive view of this aspect of performance. In contrast, the mean score for the FP dimension was below the five-point mark, indicating a relatively lower consensus on performance in this specific area.

In the case of the mediator variable, there was a strong perception of competitive advantage (CA) within companies. A slight preference for differentiation advantage (CA-D) over cost leadership advantage (CA-LC) is worth considering, with CA-D being associated with uniqueness in specifications, while CA-LC emphasises offering the lowest prices.

Regarding the control variable, the average firm age was approximately 37 years, and there was consistency in terms of firm ages, as evident from the low difference coefficient. Firms in the study typically had more than nine employees, indicating a certain threshold in company size.

# **Discussion and results**

The research describes a study conducted in Iraq to test the impact of the Beyond Budgeting methodology on the performance of SMEs in the country. We use a multiple linear regression equation to examine the effect of Beyond Budgeting approach on the organisation performance (financial, nonfinancial), as well as its effect on competitive advantage with its dimensions (differentiation, cost leadership) in addition to the presence of the controlling variables represented by size and age, as shown in the equation regression for the following:

 $FP = B1 BB + B2 SIZE + B3 AGE + \epsilon$ 

NONFP = £31BB + £2SIZE + £3AGE + £

 $CA-D = £1 BB + £2 SIZE + £3 AGE + \epsilon$ 

CA-CL = £1 BB + £2 SIZE + £3 AGE + £

 $FP = \text{\&}1 \text{ CA-D} + \text{\&}2 \text{ CA-CL} + \text{\&}3 \text{ SIZE} + \text{\&}4 \text{ AGE} + \epsilon$ 

NONFP = &3 CA-D + &3 SIZE + &4 AGE +&6

where:

BB: Beyond Budgeting as the independent variable

FP: financial performance as the dependent variable

NONFP: nonfinancial performance as the dependent variable

CA-D: competitive advantage (differentiation)

CA-CL: competitive advantage (cost leadership)

SIZE: size as the control variable

AGE: age as the control variable

The regression equation model in Table 3 tests the hypothesis H1<sub>1</sub>. The model is valid and significant at 5% level, with

**TABLE 2:** Descriptive statistics (N = 353).

	()-				
Variable	Measurements	Minimum	Maximum	Mean	Std. Deviation
The independent variable	Mahariq (2016), Al-Lahibi (2018)	-	-	-	-
Beyond Budgeting	A total of 12 phrases that highlight the significance of the BB	3.750	5.000	4.654	0.293
Dependent variable					
Organisations Performance:	Qi (2010)	3.750	6.500	4.802	0.640
• FP	Growth in sales revenue and profit	3.500	8.000	5.017	1.067
• NONFP	<b>Budgetary Performance and Other Performance</b>	4.000	5.000	4.587	0.429
Mediator variable					
Competitive advantage:	Porter (1985), Lee et al. (2015), Anwar (2018)	4.000	5.000	4.692	0.265
• CA-D	Five phrases	4.000	5.000	4.692	0.265
• CA-CL	Three phrases	3.800	5.000	4.683	0.343
Control variable	Semrau et al. (2016)	-	-	-	-
• Size	Number of employees	1.000	2.000	1.501	0.501
• Age	Natural logarithm of the number of years the company has been in operation	16.000	70.000	37.241	9.122

BB, Beyond Budgeting as the independent variable; OP, organisations' performance; FP, financial performance as the dependent variable; NONFP, nonfinancial performance as the dependent variable; CA-D, competitive advantage (differentiation) as mediator variable; CA-CL, competitive advantage (cost leadership) as mediator variable; SIZE, size as the control variable; AGE, age as the control variable; CA-D, competitive advantage (cost leadership) as mediator variable; SIZE, size as the control variable; AGE, age as the control variable.

F=16.687. It uses the Beyond Budgeting approach (BBA) to estimate the firm's FP. It also includes size and age as control variables. The findings indicate that BB has a positive and significant impact on FP ( $\emptyset=1.29$ , t= significant). The BBA accounts for 12% of the variation in FP, as shown by Adj. $\mathbb{R}^2$ . Thus, SMEs can improve their budgeting processes, resource allocation and overall financial management, leading to better FP indicators such as increased profitability, liquidity and stability (Hope & Fraser 2003). These findings suggest that Iraqi SMEs should consider incorporating BB into their organisational practices to improve their FP.

Moreover, the model's stability was measured by the regression equation of H1, with an F = 22.784; this is statistically significant at the 5% level. This confirms the validity of the regression equation model and indicates the possibility of estimating the firm's NONFP in terms of the BBA as well as the existence of the controlling variables represented by size and age. Beyond Budgeting concepts have a positive ( $\beta = 0.563$ , t = significant) value on the firm's NONFP, suggesting it has a beneficial effect on the bottom line (Adj.R<sup>2</sup>). But the Beyond Budgeting approach may account for 16% of the variation in the company's NONFP. Thus, implementing effective management processes based on the Beyond Budgeting approach, such as decentralised decision-making and dynamic resource allocation, can enhance NONFP outcomes for Iraqi SMEs. This study's findings are in line with those of previous studies (Ferreira, Coelho & Moutinho 2020; Valdiansyah & Augustine 2021). Based on the aforesaid, the first main hypothesis is accepted.

On the way to test the  $H2_1$  using a regression equation model, it appears that the model is significant at 5% level, with F=4.459. It estimates the competitive advantage differentiation (CA-D) based on BB. It also controls for size and age. The results show that BB has a positive and significant effect on CA-D ( $\beta=0.062$ , t= significant). The BBA explains 2.9% of the variation in differentiation, as indicated by Adj. $R^2$ . Representing the notion that SMEs in Iraq can leverage strong leadership practices, the results suggest that they can differentiate themselves from competitors.

**TABLE 3:** Regression analysis for the effect of Beyond Budgeting on the firm's performance and competitive advantage (N = 353).

Dimensions			Budgeting mance					etitive	
,	FP		NONFP		CA	CA-D		CA-CL	
•	t	Sig.	t	Sig.	t	Sig.	t	Sig.	
ВВ	7.065	0.000	7.827	0.000	3.482	0.001	18.582	0.000	
SIZE	-0.493	0.622	1.574	0.116	0.943	0.346	-0.847	0.398	
AGE	0.938	0.349	-1.039	0.300	0.256	0.798	-0.034	0.973	
F (Sig.)	16.687	0.000	22.784	0.000	4.459	0.004	115.976	0.000	
$R^2$	0.130	-	0.160	-	0.037	-	0.499	-	
Adj.R <sup>2</sup>	0.120	-	0.160	-	0.029	-	0.50	-	

Note: Correlation is significant at the \*, 0.05 level (two-tailed); \*\*, 0.01 level (two-tailed). BB, Beyond Budgeting as the independent variable; FP, financial performance as the dependent variable; NONFP, nonfinancial performance as the dependent variable; CA-D, competitive advantage (differentiation); CA-CL, competitive advantage (cost leadership); SIZE, size as the control variable; AGE, age as the control variable.

The regression equation model in Table 3 tests the hypothesis  $\mathrm{H2}_2$ . It shows that the model is valid and significant at 5% level, with F=115.976. The BB estimates the competitive advantage (cost leadership); it also includes size and age as control variables. The findings indicate that BB has a positive and significant impact on cost leadership ( $\beta=707$ ,  $t=\mathrm{significant}$ ). The BBA accounts for 50% of the variation in cost leadership, as shown by  $\mathrm{Adj.}R^2$ . According to Lestari et al. (2020), a successful business strategy utilises the distinctive resources of a company, remains flexible in the face of obstacles, and presents challenges for competitors to replicate. This result is consistent with Pontjoharyo's findings, which shows that Beyond Budgeting has a beneficial effect on competitive advantage (Pontjoharyo 2017). Therefore, the second main hypothesis is accepted.

The regression equation model for H3, is not stable, as shown by the insignificant value of F = 1.331 in Table 4. This means that the firm's FP cannot be estimated by the CA (CA-D, CA-CL) and the control variables (size and age). The CA also has no significant effect on the FP, as shown by the insignificant value of T at 4% significance level and the low value of  $Adj.R^2$  (0.3%). Therefore, the FP is excluded from the indirect impact tests because the CA is not a valid mediator. However, the regression equation model for H3, is stable, as shown by the significant value of F = 88.457 at 5% significance level. This means that the firm's NONFP can be estimated by the CA (CA-D, CA-CL) and the control variables (size and age). The CA (CA-D) has a significant and positive effect on the NONFP, as shown by ( $\beta = 0.703$ , t = significant). The value of Adj. $R^2$ (49.8%) indicates that the CA (CA-D) explains almost half of the variation in the NONFP. Nonfinancial measures are more actionable and future-oriented, and their use can improve an organisation's capabilities in future planning and strategy implementation (Spencer, Joiner & Salmon 2009). The results are in line with the common belief that differentiates put a premium on nonfinancial variables (Hoque 2004; Porter 1980), but they also show that this is not always the case. Based on this, the third main hypothesis is accepted.

Using the statistical programme (AMOS: Ver. 26), structural equation modelling (SEM) and the maximum likelihood method are used for mediation analysis. By taking

**TABLE 4:** Regression analysis for the effect of competitive advantage on the firm's performance (N = 353).

Dimensions	Com	Competitive advantage: Performance					
	F	P	NONFP				
	t	Sig.	t	Sig.			
CA-D	1.863	0.063	18.328	0.000			
CA-CL	0.988	0.324	-0.623	0.534			
SIZE	-0.250	0.803	1.452	0.147			
AGE	0.384	0.701	-2.213	0.028			
F (Sig.)	1.331	0.258	88.457	0.000			
$R^2$	0.015	-	0.504	-			
Adj.R <sup>2</sup>	0.004	-	0.498	-			

Note: Correlation is significant at the \*, 0.05 level (two-tailed); \*\*, 0.01 level (two-tailed). CA-D, competitive advantage (differentiation); CA-CL, competitive advantage (cost leadership), as the independent variable; FP, financial performance as the dependent variable; NONFP, nonfinancial performance as the dependent variable; SIZE, size as the control variable; AGE, age as the control variable.

measurement errors into account and handling many causal linkages, SEM outperforms first-generation approaches and reduces bias. Compared to conventional regression, SEM is more effective in identifying mediation outcomes, according to the available empirical data. The SEM approach used incorporates latent variables for each construct, following SEM of mediation by Little et al. (2007). With this choice, we are in agreement with Cheung and Lau (2008), who claim that in mediational studies, SEM is more effective than standard regression. We measured the direct and indirect effects of BB on the NONFP of the company, mediated by CA in terms of CA-D and CA-CL. Table 5 shows the results of these effects of BB.

The direct path coefficient between BB and NONFP is 0.266, indicating a positive relationship through CA-D, whereas the indirect path coefficient measures the influence of CA-D as a mediator variable between BB and NONFP, resulting in a coefficient of 0.121, affirming subhypothesis H4<sub>1</sub>. However, the overall path coefficient demonstrates that BB significantly and positively affects NONFP through CA-D, with a coefficient of 0.386. These are consistent with the researchers' argument that strategy that is tailored to a firm's internal and external environment is very likely to provide greater performance, according to the theory underlying the body of research on the relationship between strategy and performance (Parnell, Acikdilli & Doyle 2019; Salisu & Goni 2019). Nonfinancial performance measures, including customer loyalty, market share and brand equity all benefit from these developments. Moreover, Alsheikh (2020) and Tavitiyaman, Qu and Zhang (2011) both agree that the relationship between organisational performance and competitive strategy is complex and far from settled.

Furthermore, the direct path coefficient, which assesses the direct impact of BB on NONFP, is 0.636, signifying a significant and positive influence. Conversely, the indirect path coefficient (BB to NONFP through CA-CL) is -0.250, indicating a significant negative impact because the influence of cost leadership (CA-CL), corroborating H4,.

The overall path coefficient, accounting for both direct and indirect impacts, is 0.386, affirming the positive and significant effects of BB on NONFP.

Nevertheless, these are in line with the previous researches (Banker, Mashruwala & Tripathy 2014); they found that cost leadership strategies were not linked to long-term FP. However, Beyond Budgeting practices have a mixed effect

**TABLE 5:** Results of analysing direct, indirect and macro Beyond Budgeting effects on business (nonfinancial) performance through differentiation and cost leadership as a competitive advantage.

Independent	Variables		Direct path	Indirect path	
	Mediator	Dependent	coefficient value	coefficient value	coefficient value
ВВ	CA-D	NONFP	0.266	0.121	0.386
ВВ	CA-CL	NONFP	0.636	-0.250	0.386

BB, Beyond Budgeting as the independent variable; CA-D, competitive advantage (differentiation); CA-CL, competitive advantage (cost leadership), as the mediator variable; PP, financial performance as the dependent variable; NONFP, nonfinancial performance as the dependent variable; SIZE, size as the control variable; AGE, age as the control variable.

on NONFP. Thus, they can help organisations lower their costs and become more competitive, but they can also reduce other aspects of NONFP. Based on these results, the fourth main hypothesis is accepted.

Iraqi SMEs should find a middle ground between strict cost management and strong competitive differentiation because competitive advantage contributes significantly to the performance of the organisation by combining the firm's unique resources with market opportunities (Falih et al. 2020). This result is consistent with Valdiansyah and Augustine's (2021) research, which found that implementing Beyond Budgeting is one of the company's methods in response to market competitiveness to acquire a competitive advantage, and this has a good impact on the organisation's performance as a whole.

As per the regression analysis provided, the relationships among the variables, namely Beyond Budgeting, competitive advantage and performance, remain statistically unaffected by the inclusion of the control variables SIZE and AGE. These findings suggest that, within the scope of the available data, the size and age of an organisation exert minimal to negligible influence on the associations between these variables. Table 6 illustrates the main finding of the study.

# Conclusion

The primary objective of this study was to enhance our comprehension of the relationship between BB and OP within the context of SMEs. This research aimed to bridge the gap in the existing literature by exploring BB's multifaceted impacts on organisational performance, going beyond the traditional focus on FP.

Our study introduced a novel model that considers distinct dimensions: FP, NONFP, and introduces a mediator, competitive advantage. The pivotal role of competitive advantage highlighted the importance of strategically integrating BB principles into both strategic and operational management. By doing so, SMEs can leverage BB to enhance their competitiveness and performance (Bogsnes 2016).

Our findings shed new light on how businesses in Iraq are using management control systems. This emphasis on the fundamentals of a management control system is particularly valuable in the context of smaller companies. Specifically, we found that adopting BB practices led to a relaxation of spending limits and provided managers with greater leeway when allocating funds.

TABLE 6: A summary of the findings.

Hypothesis	Paths	Result	
H1	BB→OP	Supported	
H2	BB→CA	Supported	
Н3	CA→OP	Supported	
H4	BB→CA→NONFP	Supported	

BB, Beyond Budgeting as the independent variable; CA-D, competitive advantage (differentiation); CA-CL, competitive advantage (cost leadership), as the mediator variable; OP, organisation performance as the dependent variable; NONFP, nonfinancial performance as the dependent variable.

This study carries substantial managerial implications. We uncovered a pathway in which the effects of BB on firm performance are mediated by improvements in an organisation's growth in sales revenue, profit, budget performance, job satisfaction, and job involvement. At the core of these indicators of NONFP lies the concept of competitive advantage. As such, BB assumes strategic significance in the sustenance and growth of SMEs.

Furthermore, when it comes to introducing novel items or methods to the market, small businesses play an important role in a nation's competitiveness (Robu 2013). As a result of their size, SMEs have an advantage in the globalised economy because they can respond quickly to market shifts (Erdin & Ozkaya 2020; Robu 2013).

While our study offers valuable insights into the Iraqi SME context, future research should consider a larger sample size and investigate other variables. However, our findings underscore the importance of integrating Beyond Budgeting principles as a strategic approach to bolster SMEs' competitiveness and organisational performance. It is clear that Beyond Budgeting plays a substantial role in enhancing SME business performance, making it a viable alternative to traditional budgeting methods for businesses in similar contexts.

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#### **Competing interests**

The authors declare that they have no financial or personal relationship(s) that may have inappropriately influenced them in writing this article.

#### Authors' contributions

This study was a student and supervisor collaboration. N.S.A. is the main author/contributor to the study. S.D. is the main supervisor (providing supervising guidance to the study).

#### **Ethical considerations**

Ethical clearance to conduct this study was obtained from the University of Kirkuk, Faculty of Administration and Economics (No. 33).

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# Data availability

The data used in this research is publicly available from the Central Organization for Standardization and Quality Control in Iraq (https://cosit.gov.iq/ar/). Accession codes

and unique identifiers for the datasets used are available on the website. Figures in this study that are based on raw data from the website are listed below, along with the corresponding links to the raw data. Please note that while the data is publicly available, there may be restrictions on its use or distribution, as outlined on the website.

#### Disclaimer

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of any affiliated agency of the authors.

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