

*Original Research*

# The Relationship Between Budgetary Evaluation, Organizational Decentralization and Firm's Performance

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## Abstract

Certainly, the use of the achievement of budgetary objectives as a criterion for evaluating individual performance of managers (budgetary evaluation) is considered a controversial subject. It has been the subject of some research studies to understand its diversity and its impact on firm's performance. In this context, the aim of this paper is twofold. First, it tests the impact of organizational decentralization on budgetary evaluation practices. Second, it investigates the contribution of budgetary evaluation in firms' global performance improvement according to organizational decentralization. Data were collected from 62 Moroccan firms, operating in different industries, via a questionnaire survey. Based on descriptive statistics and some statistical tests (linear regressions), the study results show that organizational decentralization has a positive significant impact on budgetary evaluation, implying that "strict" budgetary evaluation especially based on the achievement of budgetary targets in individual performance evaluation is adopted more by decentralized firms. In addition, the firms' global performance is significantly and positively impacted by the budgetary evaluation in decentralized companies. This relationship is not significant in centralized firms. Among the implications of this study, we can highlight that its results are very useful for companies' managers. The use of a "strict" budgetary evaluation is more suitable for decentralized firms. While centralized companies are indifferent between adopting "strict" and "flexible" budgetary valuation.

**Keywords:** Budgetary evaluation, Firm's performance, Organizational decentralization, Moroccan firms.

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## Introduction

Since its first use in the early 20th century in US manufacturing firms, management control is always considered as a set of tools allowing companies' managers to make good decisions and thus improve global firm's performance. Among these tools, budgets remain crucial for planning and performance evaluation (Ekholm and Wallin, 2000; Marginson and Ogden, 2005, Anthony and Govindarajan, 2007; Libby and Lindsay, 2010; Merchant and Van der Stede, 2012; etc.). According to Drury (2006), budget can be defined as a "plan expressed in quantitative, usually monetary term covering a specific period of time usually one year. In other words, a budget is a systematic plan for utilization of manpower and material resources".

The budget as a component of the Management control system, especially the budget practices have been the subject of several research studies in the world. Among these practices, we find the budgetary evaluation or RAPM (reliance on accounting performance measures). Harrison (1993, p. 319) considers RAPM to be ".....the extent to which superiors rely on, and emphasize those performance criteria which are quantified in accounting and financial terms, and which are pre-specified as budget targets". Unfortunately, these researches were conducted only in developed countries like Australia (Brownell and Dunk, 1991; Brownell and Hirst, 1986; Ross, 1994, 1995), the USA (Hopwood, 1972; Govindarajan, 1984), Canada (Kaplan and Mackey, 1992; Williams et al, 1990), the UK (Otley, 1978; Dunk, 1992), etc.

Regarding to the use of budgetary and accounting data in the evaluation of individual manager's performance, Hopwood (1972) identified three main styles.

- First, the Budget Constrained (BC);
- Second, the Profit Conscious (PC);
- and third, the Non- Accounting (NA) style.

To better understand this diversity, several contingency factors are studied like firm size (Merchant, 1984; Sponem, 2006; Elhamma, 2015; etc.), business strategy (Govindarajan, 1988; Gupta, 1987, Van der Stede, 2001; Elhamma, 2013; etc.), environmental uncertainty (Hirst, 1983; Merchant, 1984; Govindarajan, 1984; Simons, 1987; Ezzamel, 1990; etc.). In this context, we note that the organizational decentralization is rarely used by researchers in this field. In front of this situation, the aim of this paper is twofold. First, it tests the impact of organizational decentralization on budgetary evaluation practices. Second, it investigates the contribution of budgetary evaluation in firms' performance improvement according to organizational decentralization. In order to achieve these two objectives, linear regression technique was adopted based on sample of 62 Moroccan firms. The study results show that organizational decentralization has a positive and significant impact on budgetary evaluation, implying that "strict" budgetary evaluation based especially on the achievement of budgetary targets in individual performance evaluation is adopted more by decentralized firms. In addition, the firms' performance is significantly and positively

impacted by the budgetary evaluation in decentralized companies. This relationship is not significant in centralized firms.

Compared to previous work researches, this present study has two main characteristics. The first, this paper presents the results of one of the rare studies on budgetary evaluation conducted in African and Arab countries. The second, in this research, we will use both positive and normative contingency theory. To the author's knowledge, the latter is rarely used by researchers. This research work is very useful to firms' managers in North African countries. The use of "strict" budgetary evaluation is more beneficial for decentralized firms.

The remainder of the paper is structured as follows. In the second section, we provide literature review and hypotheses development. In the third section, we present our methodological choices. In the fourth section, we report the empirical results. Finally, in the fifth section, we report summary and conclusion.

## **Theoretical framework and formulation of hypotheses**

### *Theoretical framework*

Our objective in this research is to investigate the possible impact of organizational decentralization on budgetary evaluation and its relationship with improving global firm's performance. To achieve these two objectives, we have chosen to use the contingency theory. According to Fisher (1995, p. 32), "...the contingent control literature is based on the premise that a correct match between contingent factors and a firm's control package will result in desired outcomes (i.e. higher performance)". According to Wolinksi (2010), the contingency theory states "that a leader's effectiveness is contingent on how well the leader's style matches a specific setting or situation". The contingency theory is defined by Donaldson (2001) as "organizational results result from fitting organization characteristics to contingencies that reflect the organization's situations".

### *Impact of organizational decentralization on budgetary evaluation*

Since the seventies of the 20th century, the state of the RAPM's literature is paradoxical. According to Brownell and Dunk (1991, p.703), it constitutes one of the research avenues in management control with a "critical mass of empirical work". Hopwood (1972) defined evaluative styles as "the extent and manner in which budgetary data are used in performance evaluation". He developed three styles of evaluation performance which make distinctly different use of the accounting data (table 1).

To better explain this diversity of budgetary evaluation styles, we will use the contingency theory. Donaldson (2001, p. 1) defined it as follows: "organizational effectiveness results from fitting characteristics of the organization, such as its structure, to contingencies that reflect the situation of the organization". Several factors are usually used in the contingency literature in management control (Chenhall, 2003). According to Donaldson (2001), "a contingency is any variable that moderates the effect of an organizational characteristic on organizational performance". Several contingency factors are used to explain the diversity of the budgetary evaluation: environmental uncertainty

(Hirst, 1983; Govindarajan, 1984; etc.), budget participation (Brownell, 1982; Brownell and Hirst, 1986; etc.), business unit strategy (Govindarajan and Gupta, 1985), national culture (Harisson 1983; etc.), etc. In this research, we will use the organizational decentralization. Chenhall (2003) considered, in the contingency theory, the organizational structure as a one of the determining factors in the design of management control, specifically, the degree of its decentralization (Chapman, 1997).

Table 1. Hopwood's (1972) taxonomy of budget evaluation styles

| Style                         | Main characteristics   |
|-------------------------------|--|
| Budget constrained style (BC) | The evaluation of manager's performance is done by using of accounting data and the achievement of budgetary targets |
| Profit conscious style (PC)   | The budgetary and accounting data are used flexibly in the individual and collective performance evaluation          |
| Non accounting style (NA)     | The budgetary information has not a great role in the evaluation of manager's performance.                           |

Source: Hopwood (1972)

The contractual logic was the main source of the introduction of the budget in US firms. According to this logic, the budget is considered as a contract through which the managers of the centres are obliged to achieve the budgeted targets. Thus, the use of the results obtained was associated with the measurement of the individual performance of these managers of the centres. This passage from a Taylorist (autocratic) conception of power to a negotiated delegation favours that the results of each individual's actions are measured not by a subjective evaluation (direct supervision), but by an objective evaluation (evaluation by the results). Results-based monitoring is more adapted with the processes of decentralization and delegation of decision-making.

Pugh et al. (1969) have shown that organizations characterized by increased decentralization of decision-making generally put in place management control based on standardized and formalized performance evaluation systems. This result has been confirmed empirically by Merchant (1981). When there is more independence given to the lower echelons in decision-making, the budget is more used as a post-evaluation tool.

**H<sub>1</sub>:** There is a significant and positive effect of the organizational decentralization on the budgetary evaluation.

### *Performance of budgetary evaluation*

The relationship between budgetary evaluation and firm's performance remains among the most controversial subjects in management control research. Theoretical and empirical researches have reported inconsistent findings. Two opposite groups can be highlighted. The first group of researchers found a negative relationship between budgetary evaluation and performance. Hopwood (1972, 1973) found greater JRT (job-related tension) and dysfunctional behaviours amongst managers who were supervised by BC. This result is confirmed recently by Merchant and Van der Stede (2007) and

Marginson et al. (2009). These authors have shown that the use of the financial measures such as profit and return on capital employed encourage dysfunctional behavior. In this context, Kaplan and Norton (1992) who proposed the Balanced Scorecard condemn the exclusive use of accounting measures for evaluating a manager's performance. In the same sense, Lau and Moser (2008) argued that the use of financial measures may be problematic. For the second group of authors, especially Stedry (1960), Otley (1978) and Simons (1988), the firm's performance is greatest when budgetary evaluation system based on the achievement of the budget targets. Recently, Dahlan et al. (2007) found a positive relationship between tight budgetary control and organizational performance.

These conflicting results and according to several researchers, especially Otley and Pollanen (2000, p. 483), we must introduce the contingency variable used in this study which is the organizational decentralization. Therefore, we can formulate these hypotheses:

**H<sub>2</sub>:** There is a significant and positive effect of strict budgetary evaluation on the organizational performance in decentralized firms.

**H<sub>3</sub>:** There is a non-significant effect of strict budgetary evaluation on the organizational performance in centralized firms.

## **Methodology of research**

### *Study context and sample*

This study was conducted in Morocco that is located in Northern Africa and has a population of 33 million. In this country, the management control is largely drawn on the French model (Elhamma and Moalla, 2015). However, recently, Moroccan firms have to adopt managerial innovations like Activity Based Costing (ABC) method (Elhamma and Zhang, 2013); the balanced scorecard (Elhamma, 2014; Achibane and Elhamma, 2016); International Financial Reporting Standards (IFRS) (Elhamma, 2023); etc.

Questionnaires were sent directly or by post to 412 companies located in different regions of Morocco. The total number of responses retained and analyzed was 62, making a response rate of 15%. In front of the non-availability of an exhaustive list of Moroccan companies that adopt "budgetary management", we opted for the random sampling method.

The questionnaires were completed by 18 chief financial officers (29%), 23 management controllers (37%), 17 accountants (27%) and 4 other managers (6%). The sample consists of 48 industrial firms (77%), 6 building and public works (10%), 6 services (10%) and 2 commercial firms (3%). 48% of the sample consists of SMEs (small and medium firms) (less than 200 employees) and 52% of large firms (more than 200 employees).

## *Measurement of variables*

### Budgetary evaluation

To operationalize the budgetary evaluation in this research, we selected four items. A scale with five points (ranging for “1: not agree at all” to “5: totally agree”) allows a respondent to indicate their agreement with each of these situations:

- “the evaluation of the manager is based on its ability to realize the budget targets”;
- “you grant bonuses for responsible coming to realize the budget targets”;
- “you decide promotions for responsible coming to realize the budget targets”
- and “you punish responsible not coming to realize the budget targets”.

A high total score means a strict budgetary evaluation (budgetary evaluation system based especially on the achievement of the budget targets) and vice versa. Cronbach's Alpha is 0.867, suggesting that the items have high internal consistency.

### Organizational decentralization

Decentralization was studied with both horizontal and vertical dimensions (Kalika, 1987). Vertical decentralization can locate the level at which decisions are made. Horizontal decentralization refers to the participation of different business managers in decision making.

To measure vertical and horizontal decentralization, we used an instrument developed by Kalika (1987) and used by Germain (2004). For vertical decentralization, we asked respondents to specify the hierarchical level at which decisions are made. The five following types of decisions were given, "recruitment/dismissal", "launch a new product," "choice of suppliers/customers", "pricing sale" and "operational reorganization operations". A score is assigned to each hierarchical level: "1: general manager and more", "2: functional managers" and "3: operational managers". A low score indicates a low vertical decentralization and a high score indicates a high vertical decentralization. Cronbach's Alpha is 0.822, suggesting that the items have high internal consistency.

Horizontal decentralization concerns the participation of a different responsible party in decision making. A five-point Likert scale is used to indicate the extent to which respondents agree with the following statements: "you are involved in making all the decisions, including minor decisions because you think that everything must be controlled", "you can take important decisions only after consulting your collaborators", "your collaborators always consult you before the implementation of their decisions" and "you let your employees take decisions alone within their area of responsibility". A high score indicates that the degree of horizontal decentralization of decision-making is high and vice versa. For the first and third affirmation, the score was reversed. Cronbach's Alpha is 0.726, implying that the items have relatively high internal consistency.



## Global performance

In front of the impossibility to isolate the performance generated by the management accounting methods, we had chosen a perceptual approach. This approach involves an assessment of the respondent on a five-point scale (ranging from “very low” to “very high”), the average contribution of the management accounting method adopted in the improvement of three dimensions of performance: "profitability", "competitiveness" and "productivity". Also, to measure profitability, we have not used data from the financial statements because it is considered confidential by the surveyed companies.

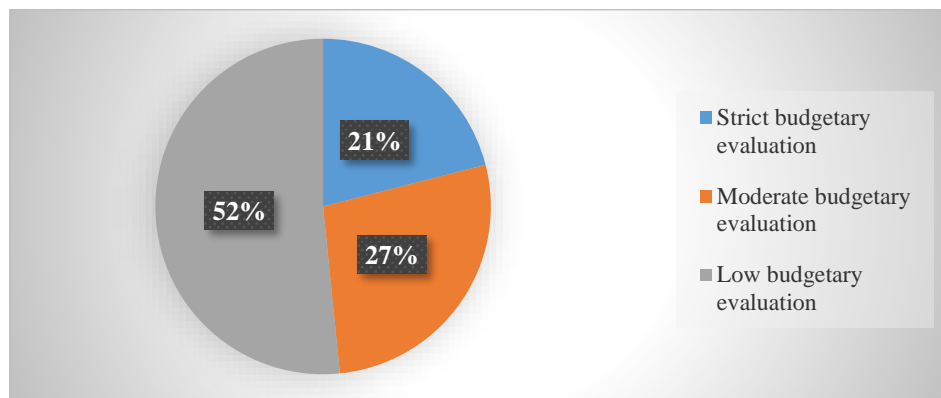
## Results and discussion

### *Impact of organizational decentralization on budgetary evaluation*

The study results show that the budgetary evaluation practices are diversified in surveyed firms. According to the results of hierarchical classification by «Ward algorithm», we have identified three main categories of budgetary evaluation practices (table 2).

Table 2. Main styles of budgetary evaluation in studied firms

| Group   |                               | %     |
|---------|-------------------------------|-------|
| GROUP 1 | Strict budgetary evaluation   | 21%   |
| GROUP 2 | Moderate budgetary evaluation | 27.4% |
| GROUP 3 | Low budgetary evaluation      | 51.6% |
| Total   |                               | 100%  |



Graph 1. Main styles of budgetary evaluation in studied firms

The study results show that 79% of the surveyed companies do not focus exclusively on accounting and budget data to evaluate individual performance of managers (low and moderate budgetary evaluation). On the other hand, 21% of the sample declared that they use exclusively this type of accounting and budgetary data to evaluate the individual performance of managers (strict budgetary evaluation). This result is in line with those of Libby and Lindsay (2010). These two researchers found in their study on 558 North-American companies that the strict budgetary evaluation and the use of accounting

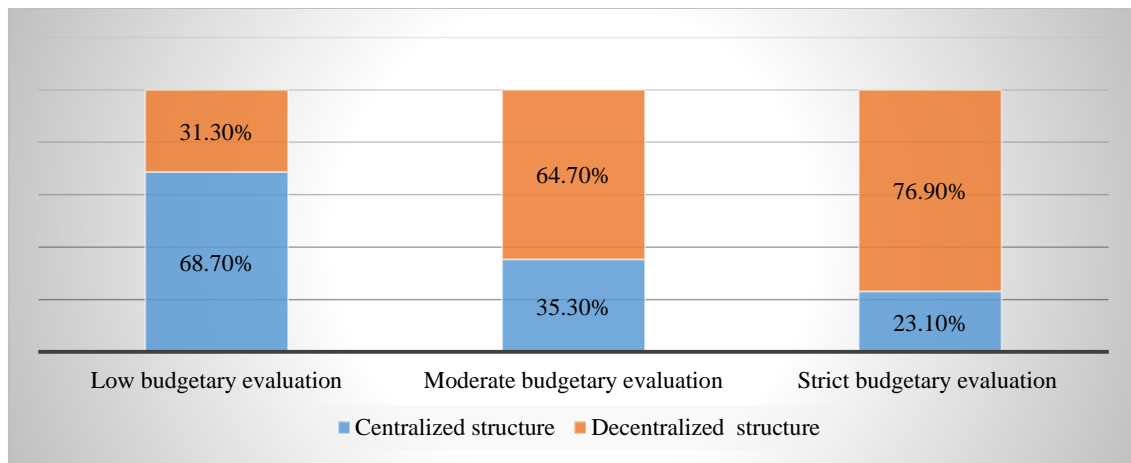
information for ex-post performance evaluation is much less adopted, and subjective factors are used frequently.

The main results relating to the budgetary evaluation practices according to the organizational decentralization can be as follows:

Table 3. Budgetary evaluation according to the organizational decentralization

|                          | Low budgetary evaluation |       | Moderate budgetary evaluation |       | Strict budgetary evaluation |       |
|--------------------------|--------------------------|-------|-------------------------------|-------|-----------------------------|-------|
|                          | N.                       | %     | N.                            | %     | N.                          | %     |
| Centralized structure*   | 22                       | 68.7% | 6                             | 35.3% | 3                           | 23.1% |
| Decentralized structure* | 10                       | 31.3% | 11                            | 64.7% | 10                          | 76.9% |
| Total                    | 32                       | 100%  | 17                            | 100%  | 13                          | 100%  |

\* Distinction between “centralized” and “decentralized” structure was done by using the median value.



Graph 2. Budgetary evaluation practices according to organizational decentralization

The first results of our study on the relationship between budgetary evaluation and organizational decentralization seem to confirm the hypothesis H1. On the one hand, about 77% of companies adopting a "strict budgetary evaluation" are decentralized firms. On the other hand, about 69% of the companies adopting a "low budgetary evaluation" are centralized firms. To test statistically the relationship between the two variables, we use the linear regression (table 4).

The results of the linear regression show that organizational decentralization has a positive and significant impact on budgetary evaluation ( $\beta = 0.337$ ,  $p < 1\%$ ). The first variable explains about 11.4% of the variance known by the second variable. This result confirms the validation of the first research hypothesis H1 according to which there is a significant and positive effect of the organizational decentralization on the budgetary evaluation. Our study results are in line with some research showing that mechanism controls must be tightened to reduce the risks associated with greater decentralization of



decision. In their study, Davila et al. (2018) found that "decentralization has a positive effect on the tightness of control".

Table 4. Linear regression of the budgetary evaluation according to the organizational decentralization.

| Independent Variable<br>(organizational decentralization) | Dependent Variable<br>(budgetary evaluation) |
|---|--|
| $\beta$   | 0.337  |
| t-statistic   | 2.776*                                       |
| $R^2$   | 0.114  |
| F-value   | 7.707*                                       |

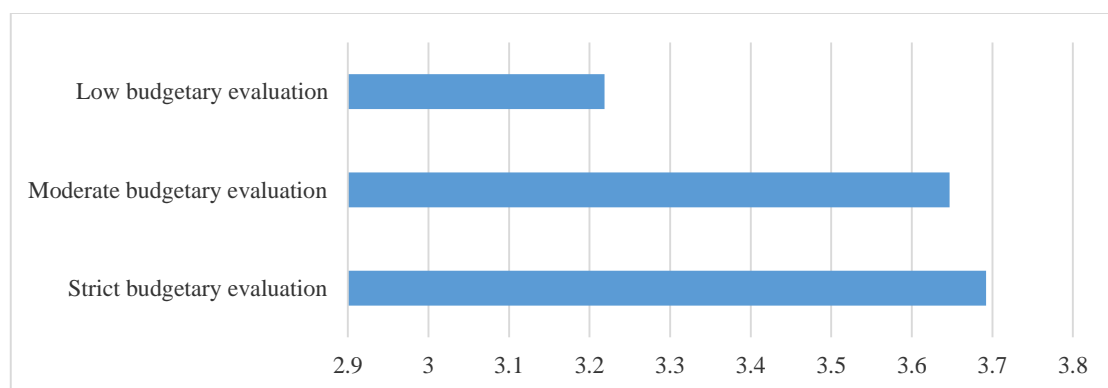
\* Significant at 1% level

### *Impact of budgetary evaluation on global firm's performance*

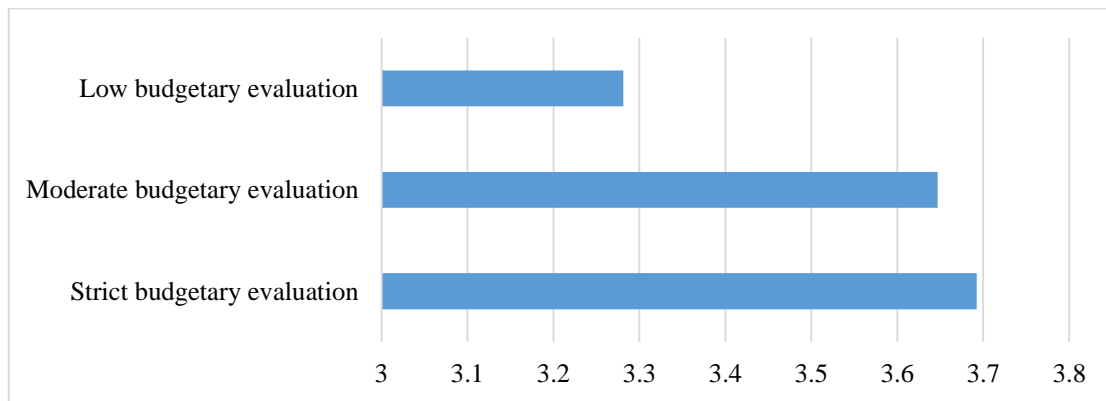
The main results of the performance of different budgetary evaluation practices are shown in table 5.

Table 5. Performance average compared between the different budgetary evaluations systems

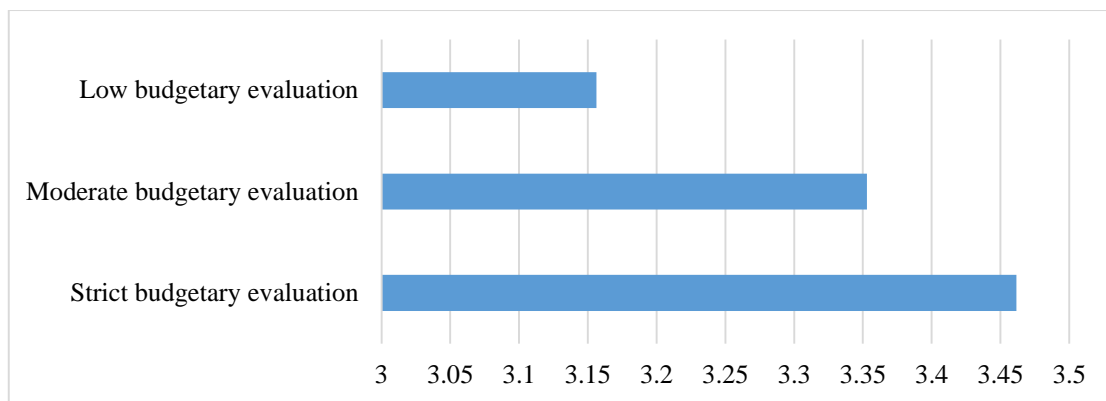
| Variable           | Strict budgetary evaluation | Moderate budgetary evaluation | Low budgetary evaluation |
|--------------------|-----------------------------|-------------------------------|--------------------------|
| Competitiveness    | 3.6923                      | 3.6471                        | 3.2188                   |
| Profitability      | 3.6923                      | 3.6471                        | 3.2813                   |
| Productivity       | 3.4615                      | 3.3529                        | 3.1563                   |
| <b>Performance</b> | <b>10.8462</b>              | <b>10.1774</b>                | <b>9.6563</b>            |



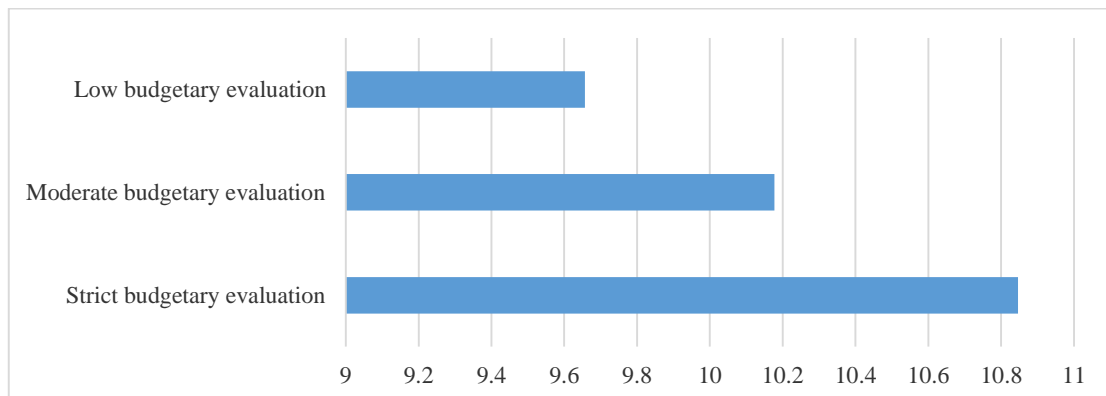
Graph 3. Impact of budgetary evaluation on competitiveness



Graph 4. Impact of budgetary evaluation on profitability



Graph 5. Impact of budgetary evaluation on Productivity



Graph 6. Impact of budgetary evaluation on global performance

The “strict budgetary evaluation” contributes more than the two other budgetary evaluation styles in the firm’s performance improvement. To confirm statistically this finding, we use the linear regression (table 6).

Table 6. Linear regression between budgetary evaluation and performance

| Independent variable<br>(budgetary evaluation) | Dependent variables |               |                     |             |
|--|---------------------|---------------|---------------------|-------------|
|  | Competitiveness     | Profitability | Productivity        | Performance |
| $\beta$  | 0.330               | 0.318         | 0.188               | 0.333       |
| t-statistic                                    | 2.711*              | 2.594**       | 1.486 <sup>ns</sup> | 2.731*      |
| R <sup>2</sup>                                 | 0.109               | 0.101         | 0.035               | 0.111       |
| F-value  | 7.384*              | 6.727**       | 2.208 <sup>ns</sup> | 7.460*      |

\* Significant at 1% level \*\* Significant at 5% level <sup>ns</sup> Not Significant

The study results show that competitiveness ( $\beta=0.33$ ;  $p<1\%$ ), profitability ( $\beta=0.318$ ;  $p<5\%$ ) and global performance ( $\beta=0.333$ ;  $p<1\%$ ) are impacted positively and significantly by the strict budgetary evaluation. 11.1% of the variability of the firm's performance can be explained by the variability of the budgetary evaluation. The model identified is statistically significant at 1% level ( $F=7.460$ ;  $p<1\%$ ). This implying that individual performance evaluation systems based especially on the achievement of budgetary targets are crucial to improve the global performance of the studied firms. The present study results are not consistent with those obtained in some previous researches. Historically, research works studying reliance on accounting performance measures (RAPM) showed generally dysfunctional consequences, such as "deterioration of human relationships in organizations, budgetary gaming, short-termism, data manipulation and inhibition of new-idea generation, arise (Argyris, 1952; Hartmann, 2000; Hofstede, 1967; Hopwood, 1972; Merchant, 1990)" (Masuya and Yoshida, 2021).

#### *Impact of budgetary evaluation on firms' performance according to organizational decentralization*

To test statistically the hypotheses H2 and H3, we use the linear regression between the firm's performance and budgetary evaluation in both centralized and decentralized firms (table 7 and 8).

Table 7. Linear regression between budgetary evaluation and performance in centralized firms

| Dependent variable | Centralized firms   |                      |                     |                     |
|--------------------|---------------------|----------------------|---------------------|---------------------|
|                    | Competitiveness     | Profitability        | Productivity        | Performance         |
| $\beta$            | 0.039               | -0.062               | 0.072               | 0.023               |
| t-statistic        | 0.210 <sup>ns</sup> | -0.334 <sup>ns</sup> | 0.387 <sup>ns</sup> | 0.126 <sup>ns</sup> |
| R <sup>2</sup>     | 0.002               | 0.004                | 0.005               | 0.001               |
| F-value            | 0.044 <sup>ns</sup> | 0.112 <sup>ns</sup>  | 0.150 <sup>ns</sup> | 0.016 <sup>ns</sup> |

<sup>ns</sup> Not Significant

In decentralized firms, the budgetary evaluation is highly and positively correlated with competitiveness ( $r = 0.416$ ,  $p < 5\%$ ), profitability ( $r = 0.504$ ,  $p < 1\%$ ), productivity ( $r = 0.362$ ,  $p < 5\%$ ) and global performance in general ( $r = 0.505$ ,  $p < 1\%$ ). But, all these relationships are not significant in the centralized firms. These results allow us to confirm the hypotheses H2 and H3 according to which there is a significant and positive effect of strict budgetary evaluation on the organizational performance in decentralized firms and

there is a non-significant effect of strict budgetary evaluation on the organizational performance in centralized firms. These results can be explained by the fact that firms' superiors frequently use, especially in decentralized enterprises characterized by more delegation of decisions, a budget-emphasis style of individual evaluation because of its objectivity (Merchant, 1998; Emsley, 2001; etc.). According to this budgetary evaluation style, achievement of budgetary targets results in bonuses, pay raises and promotions, etc. therefore this budgetary evaluation style can be considered as an important source of motivation of managers in decentralized companies. In addition, the use of the achievement of budgetary targets in the individual performance evaluation produces generally budget pressure (Davis et al., 2006). This pressure "is sometimes a positive thing. Positive pressure may keep managers focused on a task, improve performance or bring a real sense of achievement as the result of overcoming a new challenge" (Huang and Chen, 2010).

Table 8. Linear regression between budgetary evaluation and performance in decentralized firms

| Dependent variable | Decentralized firms |               |              |             |
|--------------------|---------------------|---------------|--------------|-------------|
|                    | Competitiveness     | Profitability | Productivity | Performance |
| $\beta$            | 0.416               | 0.504         | 0.362        | 0.505       |
| t-statistic        | 2.465**             | 3.144*        | 2.093**      | 3.147*      |
| $R^2$              | 0.173               | 0.254         | 0.131        | 0.255       |
| F-value            | 6.077**             | 9.883*        | 4.380**      | 9.904*      |

\* Significant at 1% level \*\* Significant at 5% level

## Conclusion

This investigation was conducted to provide some empirical evidence of the effect of the organizational decentralization on the budgetary evaluation and its performance according to organizational decentralization. By using a data from 62 Moroccan firms, we found the main following results:

- The organizational decentralization has a significant and positive impact on the budgetary evaluation. A "strict" budgetary evaluation focused especially on the achievement of the budget targets is adopted especially by the decentralized firms.
- The budgetary evaluation has a significant positive impact on the firm's performance in decentralized enterprises. This impact is not significant in centralized firms. To improve its performance, the first category of firms has an interest to adopt a "strict" budgetary evaluation based on the achievement of the budget targets, but the second group of enterprises is indifferent between adoption and not adoption of this budgetary evaluation system.

This study makes important contributions to the literature. This study contributes to understand the relationship between budgetary evaluation styles and organizational decentralization. Unlike the majority of previous research studies that have focused especially on the effects of organizational decentralization on budgetary evaluation by using positive contingency approach, this study is among the firsts in developing

countries that use the normative contingency approach and examining the effects of organizational decentralization on budgetary evaluation by using a third variable which is the global firm's performance. In addition, our results have important managerial implications for companies' managers in developing countries. In decentralized organizations, the use of strict budgetary evaluation is more suitable.

Finally, we present the study limitations alongside the directions for further research. Indeed, two main limitations should be discussed in the present investigation. First, the modest size of the sample. Second the use of a perceptual approach to collect data. We used in this research organizational decentralization to explain the diversity of the budgetary evaluation and its performance in Moroccan firms. In this context, many avenues of research are considered. First, it is necessary to use other organizational variables like strategy, environment uncertainty, firm size, etc. Second, it is important to use non organizational determinants (behavioral) like leadership styles, the culture of leadership, legal ownership (independent or subsidiary of a Moroccan or foreign companies), etc.

## References

- Achibane, M. and Elhamma, A. (2016), Balanced Scorecard Et Incertitude Environnementale: Cas Des Entreprises Au Maroc, *European Scientific Journal*, Vol.12, No.7, pp. 459-469. DOI: <https://www.doi.org/10.19044/esj.2016.v12n7p459>
- Anthony, R. & Govindarajan, V. (2007). *Management Control Systems*. 12ed., McGraw-Hill, NY.
- Bento, A.M., and White, L.F. (2001). Organizational Form, Performance and Information Cost in Small Business. *Journal of Applied Business Research*, 17(4), 41-61.
- Blau, P. M. (1970), A Formal Theory of Differentiation in Organizations, *American Sociological Review*, 35: 201-18.
- Brownell, P. and Hirst, M., 1986, 'Reliance on Accounting Information, Budgetary Participation, and Task Uncertainty: Tests of a Three-Way Interaction', *Journal of Accounting Research*, Vol. 12, No. 2, pp. 241-249.
- Brownell, P., & Dunk, A. S. (1991). Task uncertainty and its interaction with budgetary participation and budget emphasis: Some methodological issues and empirical investigation. *Accounting, Organizations and Society*, 1Q, p.693-703.
- Brownell, P., 1982, 'The Role of Accounting Data in Performance Evaluation, Budgetary Participation and Organizational Effectiveness', *Journal of Accounting Research*, Vol. 20, pp. 12-27.
- Bruns, W. J. and Waterhouse, J. H. (1975). Budgetary control and organizational structure. *Journal of Accounting Research*, 33, 101-129.

- Burrow, J., Kleindl, B. and Everard, K. (2008), *Business Principles and Management*, South-westren:Thomson.
- Chapman, C.S. 1997. Reflections on a Contingent View of Accounting, Accounting, Organizations and Society. 22 (2), 189-205.
- Charaf, K. and Bescos, P. L. (2013), The role of organizational and cultural factors in the adoption of Activity-Based Costing: The case of Moroccan firms, *Accounting and Management Information Systems*, Vol. 12, n° 1, pp.4–21.
- Chenhall, R.H. (2003). Management Control Systems Design within its Organizational Context; Findings from Contingency-based Research and Directions for the Future. *Accounting, Organizations and Society*, 28 (2/3), 127–168.
- Covaleski, M. A., Evans, J. H., Luft, J. L. & Shields, M. D. (2003). Budgeting research: three theoretical perspectives and criteria for selective integration. *Journal of Management Accounting Research*, 15, 3-49.
- Dahlan, M., Auzair, S. and Wan Madznah, Wan I. (2007). Tight budgetary control, business strategy, external environment and firm performance. *Malaysian Accounting Review*, 6 (2), 80-97.
- Davila, A., Gupta, M. and Palmer, R.J. (2018), "Internal Controls, Decentralization, and Performance", Epstein, M.J., Verbeeten, F.H.M. and Widener, S.K. (Ed.) *Performance Measurement and Management Control: The Relevance of Performance Measurement and Management Control Research (Studies in Managerial and Financial Accounting, Vol. 33)*, Emerald Publishing Limited, Bingley, pp. 39-64. <https://doi.org/10.1108/S1479-351220180000033003>
- Davis, S., DeZoort, F.T. and Kopp, L.S. (2006), "The effect of obedience pressure and perceived responsibility on management accountants' creation of budgetary slack", *Behavioral Research in Accounting*, Vol. 18, pp. 19-35.
- Dent, J. F. (1990). Strategy, organization and control: Some possibilities for accounting research. *Accounting, Organizations and Society*, 15 (1-2), 3-25.
- Donaldson, L. (1996). The normal science of structural contingency theory, in *Handook of organizational theory*, ed. Clegg S.R., Hardy C. & Nord W.R: 57-76.
- Elhamma, A. (2012), The relationship between Firm Size, Activity Based Costing and Performance: An application on Moroccan enterprises, *Journal of Accounting Business & Management*, 19 (1), p. 90-102.
- Elhamma, A. (2013), The Impact of Business Strategy on Budgetary Evaluation in Moroccan Firms: An Empirical Study, *International Journal of Accounting Research*, 2 (1), pp. 1-7.
- Elhamma, A. (2014), Performance du Balanced Scorecard : Perception des responsables d'entreprises, *Revue Internationale de Management et de Stratégie*, 5 (2).





- Elhamma, A. (2015), The relationship between budgetary evaluation, firm size and performance, *Journal of Management Development*. Vol. 34 No. 8. pp. 973-986.
- Elhamma, A., Zhang, Y.F. (2013), The relationship between activity-based costing, business strategy and performance in Moroccan enterprises, *Journal of Accounting and Management Information Systems*, Vol. 12, n°1, pp. 22-38.
- Elhamma, A. (2023), Impact of mandatory IFRS adoption on foreign direct investment: the moderating role of conflict of interest regulation, *Journal of Financial Reporting and Accounting*, Vol. ahead-of-print No. ahead-of-print.  
<https://doi.org/10.1108/JFRA-04-2022-0145>
- Elhamma, A., and Moalla, H. (2015), Impact of uncertainty and decentralization on activity-based costing use, *International Journal of Accounting and Economics Studies*, 3 (2), pp. 148-155.
- Emsley, D. (2001), Budget-emphasis in performance evaluation and managers' job-related tension: the moderating effect of information completeness, *British Accounting Review*, Vol. 33, pp. 399-419.
- Fisher, J. (1995). Contingency-Based Research on Management Control Systems: Categorization by Levels of Complexity, *Journal of Accounting Literature*, 14, 24-53.
- Fisher, J. (1998). Contingency theory, management control systems and firm outcomes: Past results and future directions. *Behavioral Research In Accounting*, (10 Supplement), 47-64.
- Galbraith, J. (1973), *Designing Complex Organizations*. Reading, MA: Addison-Wesley.
- Govindarajan, V. (1988), A contingency approach to strategy implementation at the business-unit level: Integrating administrative mechanisms with strategy, *Academy of Management Journal* 31, p. 828-853.
- Govindarajan, V. and Gupta, A.K., (1985). Linking Control Systems to Business Unit Strategy: Impact on Performance. *Accounting, Organizations and Society*. 10 (1), 51-66.
- Govindarajan, V., (1984), Appropriateness of Accounting Data in Performance Evaluation: An Empirical Examination of Environmental Uncertainty as an Intervening Variable. *Accounting, Organizations and Society*, 9 (2), 125-135.
- Govindarajan, V., 1986, 'Impact of Participation in the Budgetary Process on Managerial Attitudes and Performance: Universalistic and Contingency Perspectives', *Decision Sciences*, Vol. 17, pp. 496-516.

- Harrison, G.L. (1993). Reliance on accounting performance measures in superior evaluative style- the influence of national culture and personality. *Accounting, Organizations and Society*, 18, 319-339.
- Hartmann, F. G. H. (2000). The appropriateness of RAPM: toward the further development of theory. *Accounting, Organizations and Society*, 25 (4-5), 451-482.
- Hirst, M.K. 1983, Reliance on Accounting Performance Measures, Task Uncertainty, and Dysfunctional Behaviour: Some Extensions, *Journal of Accounting Research*, Vol. 21, No. 3, pp. 596-605.
- Hopwood, A.G. (1972). An Empirical Study of the Role of Accounting Data in Performance Evaluation. *Journal of Accounting Research*, supplement 10, 156-182.
- Horngren, C. T., Datar, S. M. and Rajan, M. V. (2012), *Cost Accounting: A managerial Emphasis*, (14th ed.). New Jersey: Pearson Prentice Hall.
- Huang, C. and Chen, M. (2010), "Playing devious games, budget-emphasis in performance evaluation, and attitudes towards the budgetary process", *Management Decision*, Vol. 48 No. 6, pp. 940-951.  
<https://doi.org/10.1108/00251741011053479>
- Kaplan, R. S. and Atkinson, A. A. (1998) *Advanced management accounting*. New York: Prentice Hall.
- Kaplan, R.S. and Norton, D.P., 1992, 'The Balanced Scorecard – Measures that Drive Performance', *Harvard Business Review*, January/February, pp. 71-79.
- Kenis, I. (1979). Effects of Budgetary Goal Characteristics on Managerial Attitudes and Performance. *The Accounting Review*, October, 707-721.
- Lal, M. (1991). Organizational size, structuring of activities, and control information system sophistication levels: an empirical study. *Management International Review* 31 (2), 101-113.
- Lau, C. M. and Moser, A. (2008) Behavioural effects of nonfinancial performance measures: the role of procedural fairness. *Behavioral Research in Accounting*, 20 (2), 55 - 71.
- Lawrence P. and Lorsch J. (1967), Differentiation and Integration in Complex Organizations, *Administrative Science Quarterly* 12, p. 1-30.
- Libby, T. and Lindsay, R.M. (2010), "Beyond Budgeting or budgeting reconsidered? A survey of North-American budgeting practice", *Management Accounting Research*, Vol. 21, pp. 56-75.

- Libby, T. and Lindsay, R.M. (2010), Beyond budgeting or budgeting reconsidered? A survey of North-American budgeting practice, *Management Accounting Research*, Vol. 21 No. 1, pp. 56-75.
- Marginson D., McAulay L., Roush M. and Van Zijl T. (2009), Performance Measures and Short-Termism: An Exploratory Study, *WORKING PAPER SERIES* Working Paper No. 66 February.
- Masuya, K. and Yoshida, E. (2021), Multidimensional performance evaluation styles: budget rigidity and discretionary adjustments, *Pacific Accounting Review*, 33 (1), pp. 64-80. <https://doi.org/10.1108/PAR-07-2019-0089>
- Merchant, K. (1981). The design of the corporate budgeting system: influences on managerial behavior and performance. *The Accounting Review*, 4, 813-829.
- Merchant, K.A and Van der Stede, W.A (2007) *Management control systems: performance measurement, evaluation and incentives* 2nd, Prentice Hall.
- Merchant, K.A. (1998), *Modern Management Control Systems*, Prentice-Hall, Upper Saddle River, NJ.
- Merchant, K.A. and Van der Stede, W. A. (2012). *Management Control Systems*. (3rd ed.). Essex, UK : Prentice Hall.
- Mintzberg H. (1980), *Structure et dynamique des organisations*, Paris, Éditions d'Organisation.
- Moore K. and Chenhall R.C. (1994). Framework and MAS evidence. In K. Moore and P. Booth P. (Eds.), *Strategic Management Accounting: Australian Cases*. John Wiley and Sons, Brisbane 12-26.
- Otley, D., Pollanen, R.M., (2000). Budgetary Criteria in Performance Evaluation: A Critical Appraisal Using New Evidence. *Accounting, Organizations and Society*, 25, 483-496.
- Otley, D.T. (1978). Budget Use and Managerial Performance. *Journal of Accounting Research*, 16, 142-149.
- Scott, W. (1992). *Organizations: Rational, Natural, and Open Systems*. Englewood Cliffs, N.J.: Prentice-Hall.
- Scott, W. (2003). *Organizations: rational, natural and open systems*, Englewood Cliffs, NJ: Prentice Hall.
- Shields, M. D. (1995), An empirical analysis of firms' implementation experience with activity based costing. *Journal of Management Accounting Research*, 7, 148-166.
- Simons, R. (1988). Analysis of the Organizational Characteristics Related to Tight Budget Goals. *Contemporary Accounting Research*, 5(1), 267-283.

- Sponem, S. 2006. Budgetary control: technical efficiency or adaptation to institutionalized expectations? 8th interdisciplinary perspectives on accounting conference, Cardiff business School, July.
- Stedry A. C. (1960). Budget Control and Cost Behavior, Prentice Hall Inc.
- Van der Stede, W. (2001). Measuring tight budgetary control. *Management Accounting Research*, 12 (1), 119-137.

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