

Management control in Moroccan universities: an exploratory study Le contrôle de gestion dans les universités marocaines : une étude exploratoire.

Auteur 1 : LAHJOUJI Kaoutar

LAHJOUJI Kaoutar, PhD

Université Sidi Mohamed Ben Abdellah / Faculté Polydisciplinaire de Taza

Déclaration de divulgation : L'auteur n'a pas connaissance de quelconque financement qui pourrait affecter l'objectivité de cette étude.

Conflit d'intérêts : L'auteur ne signale aucun conflit d'intérêts.

Pour citer cet article : LAHJOUJI .K (2023). « Le contrôle de gestion dans les universités marocaines : une étude exploratoire », African Scientific Journal « Volume 03, Numéro 18 » pp: 718 –734.

Date de soumission : Mai 2023

Date de publication : Juin 2023



DOI : 10.5281/zenodo.8189245

Copyright © 2023 – ASJ



Abstract

After having been the prerogative of industrial and commercial companies in the 1980s, management control has spread to other fields in order to pursue the same objective: supporting organizations in the management of their performance. However, research that has studied management control in new domains has demonstrated the difficulty of establishing itself in these domains. Among these domains, we mention the public sector and more particularly universities or higher education institutions. The factors that can block the implementation of management control are many and depend on the context in which universities are operating. Some factors may be exogenous and therefore linked to the external environment, while others may be endogenous, linked to management systems, the human factor, strategy or culture. This article examines these factors (whether endogenous or exogenous) in the Moroccan context, in Moroccan universities. This is a qualitative study whose objective is to study how management control is practiced in Moroccan universities and what are the elements that can make its implementation difficult.

Keywords : Management control, Performance, University.

Introduction

Founded by R. N. Anthony, management control emerged in industrial companies at the beginning of the 20th century to offer a solution for improving performance. Indeed, management control appeared to meet the needs of organizations, especially those that find themselves in the awkward position of forecasting, planning and deciding to ensure a certain sustainability in a hostile and constantly changing environment. Thus, management control constitutes an essential steering tool to respond to the daily concerns of managers.

After having been the prerogative of commercial and industrial companies, management control has been of interest to other organizations, particularly universities, since the 1980s. Management control is truly essential in order to contribute to the management of the performance of these organizations, which are confined to a sector with many specificities and particularities, "...this observation can be generalized to all types of complex contemporary organizations in which the implementation of management tools, and in particular management control, is desirable and even indispensable, but the success of these implementations depends on conceptual and methodological questions..." (Pariente, 1998).

The question of management control in universities presents practical challenges, since universities often have difficulty implementing this type of system (Marchesnay, 1993; Plane, 1999; Parsons, 2004). Studies on the implementation of control tools, such as those by Kaplan and Norton (1996) or Löning et al. (1998), and on management methods in universities, such as those by Marchesnay (1993), Plane (1999), Parsons (2004) and Davila and Foster (2007), insist on certain variables that are necessary for the success of its implementation, such as the size of the university, the technology used, etc.

This article looks at management control in Moroccan universities through an exploratory qualitative study, with the aim of examining the factors that can contribute to the development of management control in Moroccan universities.

1. General context :

Performance measurement and management systems in public organizations, such as management control systems, are key elements in improving performance within these structures (Abramson et al., 2006). The effectiveness of these systems is also confirmed by other actors, such as: Hatry (1999); Newcomer (1997) and Wholey (1999). However, their use in many public organizations is still underdeveloped and the reasons are not well understood. This observation is also valid for universities.

From a theoretical point of view, if performance measurement systems are easily applicable to industrial and commercial companies, they are not when it comes to universities, even though they are dealing with new strategic constraints that require them to better control their management to be performant and meet the increased needs of society. Indeed, they are exposed to the problem of implementing a management control system adapted to their specificities, activities and missions (Cappelletti, 2012).

However, management control, as defined in the LOLF, is part of a cybernetic model¹. The application of this model depends essentially on the nature and character of the system (Hofstede, 1978). Indeed, the cybernetic model of management control is designed in a non-stochastic context², which is not the case for universities. The theory suggests that management control systems focus on the implementation of strategies and the achievement of organizational goals. They aim to ensure that the organization designs effective programs and implements them in an efficient way.

However, characteristics of public sector organizations, including universities, can hinder this role for management control and lead to a harmful, even ruinous effect (Distler, 2009). These characteristics include rigid bureaucracy, lack of innovation, tunnel vision, etc. In addition, universities have specific and diverse missions (initial and continuing education, professional orientation and integration, scientific and technological research, transmission and valorization of its results, international cooperation, etc.).

Universities, like all organizations and public services, have progressively changed their operations from an administrative approach to a managerial approach. Traditionally

¹ Founded by the mathematician Norbert Wiener in 1948, cybernetics is the science of self-governed mechanisms and system control.

² According to this model, management control consists in comparing the forecasts with the achievements and possibly taking corrective measures, it is a question of adjusting the action with the objective. Called pilot action, this process determines an initial trajectory that can be redefined depending on the situation.

administered on the basis of an a priori budget allocation and framed by regulations that protect their operations, the transformation of universities took place in the early 1990s in the context of an emerging trend towards the new public management.

For Hofstede (1978), the university is a clear example of an organization whose mode of operation and objectives make it unsuitable for cybernetic modes of control. According to him (Hofstede, on 1981), the university cannot be the object of a non-cybernetic control of the political type, or an alternative model of the "organized anarchy" type (Cohen, March and Olsen, 1972). Indeed, it is an extreme case of organization in which power is widely distributed among different groups having very divergent objectives, which makes it difficult to achieve its activities in quantitative terms allowing to measure performance.

2. Moroccan context :

Nowadays, the issue of the performance of higher education in Morocco has become a topical and omnipresent subject in the Moroccan landscape, both among the general public and among specialized instances. In spite of numerous reforms and serious regularization efforts, the results have not been up to the expectations and objectives initially set. This has been noted in official reports.

Ambitious to improve their performance, Moroccan universities have shown interest in adopting a new management approach, particularly with the emergence of the New Public Management and under the impetus of the Organic Law of the Laws of Finance that was voted in 2015.

The main objective of the organic law on the finance law was to establish a true performance culture within the administration and to make public management more efficient. It has led to a sharp increase in the need for management tools and trained personnel in all public services of the State. In this sense, management control, as a performance measurement system, has become an indispensable tool in Moroccan universities.

3. Methodology:

Studying how management control is practiced in Moroccan universities and detecting the key factors for its successful implementation required the adoption of a qualitative approach based on semi-directive interviews with actors in order to collect data through their experiences in management within universities.

Therefore, we realized our qualitative study on the basis of multiple cases by carrying out semi-directive interviews with actors present in the presidencies of universities and involved in the

monitoring of universities. These qualitative data were processed using the content analysis method, which was carried out with the help of QSR NVivo software.

The totality of the sample is presented in the following tables³:

Table 1: Interviews within the Ministry

	Entity	Period	Number of interviewees
1	Budget and General Affairs	Nov. 201- Jan. 2020	7
2	Public Higher Education	Nov. 2019- Jan. 2020	1
3	Strategies and Information Systems	Nov. 2019- Jan. 2020	7
Total of interviews			15

Source: Author's elaboration.

Table 2 : interviews within the universities

	University	Head Office	Period	Number of interviewees
1	Moulay Ismail	Meknès	Feb. 18	3
2	Mohamed V de Rabat	Rabat	Mar. 18	1
3	Mohammed Premier	Oujda	July 18	2
4	Ibn Zohr	Agadir	Feb. 19	2
5	Ibn Tofail	Kenitra	Feb. 19	2
6	S.M. Soulaymane	Béni Mellal	Mar. 19	2
7	Chouaib Doukkali	El Jadida	Mar. 19	1
8	Abdelmalek Saadi	Tétouan	May 19	3
9	Hassan First	Settat	June 19	1
10	Cadi Ayyad	Marrakech	July 19	1
11	Hassan II	Casablanca	July 19	1
Total of interviews				19

Source: Author's elaboration.

³ In chronological order of interviews.

4. Results

Our exploratory study of Moroccan universities revealed the absence of an official management control department or unit. Consequently, our analysis was oriented towards the factors hindering the implementation of a management control system in Moroccan universities by drawing on the main postulates (inspired by the work of Chandler, 1962; Woodward, 1958; Burns and Stalker, 1966; Lawrence and Lorsch, 1967) of the contingency theory, namely: environment, technology, size, strategy and culture.

The node hierarchy system distinguishes between two categories of nodes: "parent nodes" that group together several nodes called "child nodes". We will present the definition of these different nodes in the following tables (Tables 3):

Table 3: Meaning of parent nodes

Set	Parent node	Child node
characteristics	Date of creation	-
	Number of institutions	-
	Number of students	-
Internal brakes	Strategy	Strategic vision
		Role of the President
		Role of the University Council
	Organization	Size
		Technology
		Management processes
		Skill
	Human Factor and Competence	Social and behavioral aspect
External brakes	External environment	The legal framework
		Autonomy, decentralization and contractualization
		Political context

Source: Author's elaboration.

In addition to the hierarchical nodes, we used a free node for the concept of "culture". This choice is explained by the fact that the notion of culture refers to several general or specific elements that explain the basis of an organization's functioning.

Table 4 : Constraints to Management Control in Moroccan Universities

Brakes	
Culture (DC01)	
(DC011)	Absence of a performance culture
External environment (DEE01)	
DEE011	Autonomy, Decentralization and Contractualization
DEE012	Regulatory framework
DEE013	Political context
Human factor (DFH01)	
DFH011	Social and behavioral aspect
DFH012	Competence
Strategy (DS01)	
DS011	Role of the University Council
DS012	Role of the President
DS013	Strategic vision
Organization (DO01)	
DO011	Management process
DO012	Size
DO013	Technology

Source: Author's elaboration.

The analysis of the data from our interviewees' perceptions of the key factors of management control in Moroccan universities has been summarized in the following table (Table 6). This table presents in columns the interviews conducted (coded from E01 to E34) and in lines the obstacles to the development of management control. The intersection of the two axes presents the reference frequency of encoding relative to the obstacles and determinants of management control.

Table 5 : Hierarchy of management control barriers :

		E01	E02	E03	E04	E05	E06	E07	E08	E09	E10	E11	E12	E13	E14	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E25
Culture (DC01)		2	1	4	4	6	4	3	4	2	2	2	3	4	6	2	2	1	2	3	3	2	3	3	2	2
DC011	Absence of a performance culture	2	1	4	4	6	4	3	4	2	2	2	3	4	6	2	2	1	2	3	3	2	3	3	2	2
External environment (DEE01)		6	2	8	8	7	1	1	2	7	2	1	3	4	4	1	1	2	1	1	0	1	1	3	2	0
DEE011	Autonomy, Decentralization and Contractualization	0	1	3	4	3	0	1	1	3	0	0	1	2	2	1	1	1	0	0	0	1	1	1	1	0
DEE012	Regulatory framework	5	1	4	2	2	0	0	1	4	1	1	2	1	0	0	0	0	0	0	0	0	0	1	0	0
DEE013	Political context	1	0	1	2	2	1	0	0	0	1	0	0	1	2	0	0	1	1	1	0	0	0	1	1	0
human factor (DFH01)		10	5	12	5	6	7	5	2	6	14	2	5	6	5	1	6	2	4	5	7	5	3	2	1	2
DFH011	Social and behavioral aspect	6	4	9	4	5	5	3	2	4	9	1	4	3	3	1	2	1	3	4	5	3	3	2	0	0
DFH012	Competence	4	1	3	1	1	2	2	0	2	5	1	1	3	2	0	4	1	1	1	2	2	0	0	1	2

Strategy (DS01)		2	1	4	1	2	3	3	0	0	0	1	1	1	1	2	7	3	8	0	4	5	8	4	3	2
DS011	Role of the university Council	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	3	2	2	1	1	0
DS012	Role of the president	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	2	0	1	1	1	1	2	2
DS013	Strategic vision	2	1	4	1	2	3	3	0	0	0	1	1	1	1	2	3	0	3	0	0	2	5	2	0	0
Organisation (DO01)		3	4	5	1	3	1	1	0	0	4	1	1	1	0	1	3	0	1	1	0	0	4	4	0	4
DO011	Management process	3	3	4	1	2	1	1	0	0	2	1	1	0	0	1	2	0	1	1	0	0	4	1	0	2
DO012	Size	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	2
DO013	Technology	0	1	1	0	1	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0

Source : Nvivo 10 output

5. Discussion

Our exploratory study has allowed us to highlight certain factors as being the most important according to the actors interviewed to explain the difficulty of developing a management control system in Moroccan universities, especially since they have already initiated such a process with the emergency program.

We have noted, through the hierarchy obtained, that the issue of management control in Moroccan universities is due to problems related mainly to the culture and the human factor:

5.1. A performance culture almost absent....

According to our interlocutors, the impact of culture is very clear on the performance of Moroccan universities and, above all, the absence of a performance culture makes the implementation of a management control system very complicated. Moreover, the influence of culture is recognized, definitively, as a factor influencing the modes of operation of organizations in general and those of management control in particular (Ouchi, 1979; Moores and Chenhall, 1991; Chaipelleo, 1996; Bouquin and Presqueux, 1999; Segal, 1991; Naro, 1998; Morsing and Oswald, 2008; Tabet Aoul and Zerrouki , 2014;...). The case of Moroccan universities joins all these empirical works that have validated the direct relationship between the existence of management control and its characteristics and the culture that prevails in the organization.

At the level of Moroccan universities, culture remains a complex constraint because it is linked to the human factor: "the absence of a management control system I don't think it's a question of competence... it's a problem of culture that we have in Moroccan universities..." says a department head in a presidency. Contingent variables in management control, such as the cultural orientations of the company, play a major role in the design and operation of control systems in the organization. That said, most stakeholders in Moroccan universities tend to be indifferent, due to their value systems and beliefs, which makes it difficult to involve them in the achievement of the university's strategic objectives, given that the university organization is characterized by the multiplicity of its stakeholders.

Moreover, this cultural barrier leads us to a second barrier that is more important than the first, the one related to the human factor, i.e. the attitudes and behaviors of the actors. In fact, during our interviews, we noted that the majority of actors believe that the key element for the implementation of a management control system in our Moroccan universities is linked to the human factor. This key element refers to the second definition of management control proposed

by Anthnony (1988): "the process by which managers influence other members of the organization to implement the organization's strategy" (p. 95).

5.2. The attitudes and behaviors of the actors are very critical

The management control process involves a multitude of actors. Their attitudes and behaviors can also be decisive for the performance of an organization (Godener et al. 2003). In Moroccan universities, our interlocutors affirmed this fact by claiming that the main obstacle to the implementation of a management control system is due to the attitudes and behaviors of individuals.

In Moroccan universities, non-collaboration, non-coordination, and the absence of communication are the results of individual behavior. However, management control needs actors who coordinate, collaborate, and communicate as Bouquin (2013) says "the key to control is information. The one who controls is the one who knows". Therefore, the existence of relevant information that is equally available to all stakeholders is a condition for management control.

It must therefore be recognized that this social and behavioral aspect is very important for management control in Moroccan universities. The stakes are therefore higher for Moroccan universities whose main activity is based on its human capital: teachers, administrators and students.

5.3. Competence is also necessary

According to our interlocutors, the lack of skills is a real constraint in relation to the challenges of management control. In our research, the word "competence" does not only mean competence in management control, but competence in each operating position. Indeed, several interviewees repeatedly lament "...for our universities, and for the higher education system, Unfortunately.... The profile does not fit the position...". Also, we take the approach that was indicated by Le Boterf, (2008) so that we understand here by "competence" the knowledge (theoretical or practical), the know-how (experience) and the savoir-être (behavioral dimension).

Several authors have confirmed this observation through their research, where they have demonstrated the strong link between a management control system and competence (Bescos, 2002; Chiapello, 1990; Fornerino and Godener, 2006; Deglaine et al. 2003; Arquero et al. 2004; Azan, 2007; Bollecker, 2007) and that management control needs human as well as technical skills (Ducroq et al. 2012). Even if these results speak of the skills that management controllers

must have only, our Moroccan universities lack skills on several levels, including: management, strategy, ... according to our interlocutors.

Competence is lacking in the universities from the top to the operational and administrative levels. "We have a need for personnel ... but competent personnel ... I don't think so, especially in the context and for the use of information and communication technologies..." claims a manager within the ministry "we have tried to set up training for the benefit of the personnel of our division It was beneficial but it remains modest and insufficient for the expectations of the various stakeholders and for a good working and piloting of the activities of the universities". Also, a head of department in a presidency claims this lack of skills that affects the managerial aspect: "In Moroccan universities we work in a managerial anarchy we have a clear need in management We don't know how to manage.... ".

"In Morocco, as in other sectors, the higher education sector deplores the lack of skills (lack of experience and technical skills, interpersonal skills, quality of expression)," says a manager in a Moroccan university.

In this way, we can say that the question of competence is very important and that human resources are one of the central issues. The emergency program clearly identified this dimension by specifying in the program's summary report that "because of their weight and significant impact, human resources are now one of the main levers for reforming the education and training system. So, any improvement measure must imperatively involve human resources capable of assimilating and implementing it".

5.4. But there are also other considerable obstacles:

Other dimensions have also emerged as obstacles to the success of management control in Moroccan universities, namely the strategic dimension. According to those interviewed, having a strategic vision with clear objectives is a condition for the successful implementation of management control.

For Moroccan universities, the strategic vision is often linked to the President. His development project is considered by stakeholders to be the university's strategic vision, a roadmap with which to set clear and precise objectives. Therefore, the role of the President appears to be important for the implementation of an ad-hoc strategic vision.

In addition to the role of the President, there is the role of the University Council, which can be seen as a brake on management control. Indeed, some interviewees consider that the role of the

University Council must be strengthened and that the decisions made must adhere to this results-based management approach.

However, the dimension relating to the external environment has also emerged in the hierarchy obtained. The need to implement a system of Contracts-Objectives-Means through contractualization by granting universities a certain autonomy is a variable of management control in Moroccan universities. we can say that contractualization is a condition for the implementation of management control in Moroccan universities.

In summary, the obstacles highlighted in this research allow us to confirm the complexity of the issue of management control in Moroccan universities and to understand the difficulty that results from it. Despite their diversity, with different degrees of emergence during the interviews, these obstacles seem intrinsically linked and all perspectives are likely to contribute in parallel to the implementation of a management control system within Moroccan universities.

Conclusion

The exploratory study conducted as part of this research has allowed us to develop a status report on management control in Moroccan universities, taking into account all the reforms that have occurred in the public sector in general and in universities in particular. In the absence of an officially structured management control system, we have tried to understand and explain this absence.

The contingency of management control is very clear in Moroccan universities. It depends essentially on the human and cultural dimension. So, the attitudes and behaviors of the human factor, together with the absence of a performance culture, really hinder the development of management control in Moroccan public universities.

Other dimensions have also emerged as obstacles to development. The strategic and organizational perspectives are considered prerequisites for management control in Moroccan universities, without forgetting the external environment, through the establishment of a contractualization. This contractualization should come from a regulatory framework, on the one hand to protect it from political hazards, and on the other hand to encourage the support and involvement of the President and all the stakeholders.

Bibliography

- Anthony R. N. (1988). The management control function. Harvard Business School Press. (Traduction française : La fonction contrôle de gestion. Paris, Publi-union, 1993).
- Anthony R.N., Planning and Control Systemes. A Framework for Analysis, Boston, Harvard University, 1965.
- Arquero, J., Manuel Jimenez Cardoso, S., Joyce, J., 2004. Skills development, motivation and learning in financial statement analysis: An evaluation of alternative types of case studies, vol. 13. 2004.
- Azan, W. (2007). Développement chez F. Perroux et performance par le changement organisationnel. *Revue française de gestion*, (2), 15-30
- Bescos, P.-L. (2002), « Les enjeux actuels et les compétences futures des membres de la fonction gestion-finace », *Finance Contrôle Stratégie*, Vol. 5, No. 4, p. 5-28.
- Bollecker, M. (2007). La recherche sur les contrôleurs de gestion: état de l'art et perspectives. *Comptabilité-Contrôle-Audit*, 13(1), 87-106.
- Bouquin, H. et Kuszla, C. (2013), " Le Contrôle de Gestion, Paris PUF, 10ème édition.
- Bouquin, H., & Pesqueux, Y. (1999). Vingt ans de contrôle de gestion ou le passage d'une technique à une discipline. *Comptabilité contrôle audit*.
- Burns, T., & Stalker, G. M. (1966). *The Management of Innovation*, London: Tavistock 2nd cd.
- Cappelletti, L. (2012) *Le contrôle de gestion de l'immatériel : Une nouvelle approche du capital humain*. Dunod.
- Chandler, A. D. (1962), "Strategy and structure: History of the industrial enterprise. MIT.
- Chiapello, E. (1990). Contrôleurs de gestion, comment concevez-vous votre fonction ? *Echanges*, 92(4), 7-36.
- Chiapello, E. (1996). Les typologies des modes de contrôle et leurs facteurs de contingence: un essai d'organisation de la littérature. *Comptabilité Contrôle Audit*, 2(2).
- Cohen, M. D., March, J. G., & Olsen, J. P. (1972). A garbage can model of organizational choice. *Administrative science quarterly*, 17(1), 1-25.
- Davila, A., & Foster, G. (2007). Management control systems in early-stage startup companies. *The accounting review*, 82(4), 907-937.
- Deglaine, J., Godener, A., & Fornerino, M. (2003). Les compétences clés des contrôleurs de gestion: résultats d'une étude empirique. *Actes du 14e congrès AGRH*, Grenoble.

- Distler, R. (2009). Conception et mise en oeuvre d'un système de pilotage intégrant la responsabilité sociale de l'entreprise: une méthode combinatoire (Doctoral dissertation, Université Paul Verlaine-Metz).
- Fornerino, M., & Godener, A. (2006). Être contrôleur de gestion en France aujourd'hui: conseiller, adapter les outils... et surveiller. *Finance Contrôle Stratégie*, 9(1), 187-208.
- Godener, A., Fornerino, M., & Deglaine, J. (2003, May). Influence des pratiques de communication orale des contrôleurs de gestion sur les attitudes et comportements des managers. In *Identification et maîtrise des risques: enjeux pour l'audit, la comptabilité et le contrôle de gestion* (pp. CD-Rom).
- Hatry, H. (1999). Mini-symposium on intergovernmental comparative performance data. *Public Administration Review*, 59(2), 101-102.
- Hofstede, G. (1978). The poverty of management control philosophy. *Academy of management Review*, 3(3), 450-461.
- Kaplan, R. S., & Norton, D. P. (1996). Linking the balanced scorecard to strategy. *California management review*, 39(1), 53-79.
- Lawrence, P. R., & Lorsch, J. W. (1967). Differentiation and integration in complex organizations. *Administrative science quarterly*, 1-47.
- Le Boterf, G. (2008). Travailler efficacement en réseau: une compétence collective. Editions Eyrolles.
- Löning, H., Pesqueux, Y., Chiapello, E., Malleret, V., Méric, J., Michel, D., & Solé, A. (1998). *Le contrôle de gestion* (Vol. 20). Paris: Dunod.
- Marchesnay, M. (1993). *Management stratégique* (pp. 5-6). Paris: Eyrolles.
- Moore, K. J., & Chenhall, R. H. (1991). Organizational contexts and management accounting systems: an evaluation of contingency frameworks. Bond University, School of Business.
- Morsing, M., & Oswald, D. (2008). Sustainable leadership: management control systems and organizational culture in Novo Nordisk A/S. *Corporate Governance: The international journal of business in society*, 9(1), 83-99.
- Naro, G. (1998). La dimension humaine du contrôle de gestion: la recherche anglo-saxonne sur les aspects comportementaux de la gestion budgétaire. *Comptabilité contrôle audit*, 4(2).
- Newcomer, K. E. (1997). Using performance measurement to improve programs. *New directions for evaluation*, 1997(75), 5-14.
- Ouchi, W. G. (1979). A conceptual framework for the design of organizational control mechanisms. *Management science*, 25(9), 833-848.

- Pariente, P. (1998). Intérêt des approches contingentes en contrôle de gestion: le cas des collectivités locales. *Politiques et management public*, 16(4), 1-18.
- Parsons, M. (2004). Effective knowledge management for law firms. New York : Oxford University Press.
- Plane, J. M. (1999). Considérations sur l'approche ethnométhodologique des organisations. *Revue française de gestion*, (123), 44-53.
- Segal, J. P. (1991, May). Peut-on vaincre les résistances au contrôle de gestion en France ? In Les cadres conceptuels (pp. cd-rom).
- Tabet Aoul, W., & Zerrouki, M. A. (2014). Culture et Performance de l'Entreprise Algérienne: Cas de l'Entreprise NAFTAL. *Majallat al-'Ulūm al-Iqtisādīyah wa-al-Tasyīr wa-al-'Ulūm al-Tijārīyah*, 346(2779), 1-16.
- Wholey, J. S. (1999). Performance-based management: Responding to the challenges. *Public Productivity & Management Review*, 288-307.
- Woodward, J. (1958). Management and technology (No. 3). HM Stationery Off.