Management control in Moroccan universities: between practices and implementation difficulties

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Abstract: Among the recommendations that have been made for the Moroccan universities, as a public structure, is that of measuring university performance, which is becoming an indispensable condition, even vital for the success of reforms undertaken in this sector. Performance measurement presume the introduction of criteria of objectives and results by forcing universities to break with the traditional methods of management based on means to move towards those focused on results, and therefore to implement a management control system as a means of measuring performance.

This paper aims to develop a state of the art of management control in Moroccan universities. We will try to build an empirical knowledge of the situation of Moroccan universities in relation to their management control practices and in relation to some elements of the global environment.

Keywords: Management control, performance, university.

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1. Introduction

It is recognized that performance measurement is important for efficiency, not only in the private sector but also in the public sector. Measuring performance in universities is also a crucial but problematic issue. The main activity of a university is to transmit a higher education, it is a prerequisite for the creation knowledge, as well as for the international recognition of the country's intellectual potential. Increasing competition among universities, as well as the multi-faceted nature of their operations, is forcing university leaders to revisit existing methods of performance measurement and to explore new methods of performance measurement by looking to private sector practices.

Moroccan universities have also adopted this new approach to performance measurement, particularly with the emergence of the New Public Management and under the impetus of the new organic law (adopted in 2015) where the establishment of a system and a steering tool are essential to measure performance, in this case: a management control system.

The aim of this article is to develop an empirical knowledge of the reality of management control in Moroccan universities. The aim is to explore Moroccan universities in relation to their management control practices in order to determine whether they have succeeded in implementing a management control system that enables them to manage their performance.

2. The particularities of performance measurement in the public sector:

The differences in performance management in the public and private sectors, which are determined not only by the different nature of these sectors but also by different established traditions, should also be mentioned. Performance measurement in private sector organizations aims to maximize profits, ensure satisfaction of owners, while the main objective of public sector organizations is to provide public services, therefore, performance measurement in public organizations must be oriented towards these objectives.

Different objectives of performance management are determined by the exact nature of the organizations themselves, such as their vision, mission, and strategy. As the basis for a timely solution, performance management creates accurate and real value and shows "where the organization is, how successful it is and where it is going" (Marr et al. 2004). Using of an appropriate and adequate performance measurement system provides multiple benefits to an organization.



The main objectives distinguished for private sector, public sector, and university organizations are distinguished in Figure 1.

Figure 1 : Objectives of organizations.

Source: Balabonienė, I., & Večerskienė, G. (2014), p. 156

Radnor and McGuire (2004) identify the improvement of public service, the evaluation of the organization's resources and cost control, as the objective of performance measurement in the public sector. According to Moxham (2014), the objective of performance management in the public sector is to maintain the satisfaction of citizens, users of the public service, of the services offered. However, for Gajda-Lupke (2009), the objectives of performance management in the public sector are to identify budget execution, improve planning and management, and increase transparency.

One of the particularities of performance management in public sector organizations is the choice of an appropriate evaluation system. The effectiveness of these systems is also confirmed by other actors, such as: Hatry (1999); Newcomer (1997) and Wholey (1999).

Performance measurement systems, which combine the financial and non-financial data of the organization, which in turn allow the organization to analyze different perspectives, are increasingly being used. The choice of a measurement system is influenced by the objectives of public organizations, their functions, and the desire to increase effectiveness and efficiency, as well as the different needs of stakeholders.

Management control systems represent a system for evaluating and steering performance (Gervais, 2009). It is through tools such as budgets, general/analytical accounting or balanced scorecard that it is developing, also in the public sector, in general and in universities in particular.

3. Problem of implementing a management control system in universities:

When implementing a performance measurement system, the objectives must be identified, separate parts of the system must be created and customized, a measurement method must be chosen, and measurement indicators must be determined.

However, the characteristics of universities can block the role of a management control system in performance management and lead to harmful, effects (Rasolofo-Distler, 2009). These characteristics include a rigid bureaucracy, a lack of innovation, a tunnel vision.... In addition, there is the specificity and diversity of their missions (initial and continuing education, orientation and professional insertion, scientific and technological research, transmission and valorization of its results, international cooperation...) knowing that management control, proposed to universities, is part of a cybernetic model (Hofstede, 1978). The cybernetic model of management control is conceived in a non-stochastic context, which is not the case in professional anarchies, namely universities.

4. Moroccan context

In Morocco, the implementation of a control system within Moroccan universities was present and is still relevant. Public universities have similarly had to change their management practices by focusing on results. These developments refer to two elements. Firstly, the obligation, under the impact of the LOLF (Organic Law of the Finance Law) n°130-13 promulgated by the Dahir n° 1-15-62 of 14 chaabane 1436 (June 2, 2015) to adopt a management based on results and to renovate the management practices for a better performance of the public action. Secondly, it is the desire to receive performance measurement tools and design management control systems to deal the constraints of the current context of Moroccan universities.

The question of management control in universities presents practical challenges, since universities often have difficulty implementing this type of system (Marchesnay, 1993). 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), or Davila and Foster

(2007), insist on certain inevitable variables for the success of its implementation, such as the size of the university, the technology used....

In the case of Moroccan universities, we ask this question with vivacity: have Moroccan universities succeeded in setting up a management control system that will allowing management and evaluation of their performance? If the answer is yes, what role will be given to management control in such a particular context?

The higher education system has not deviated from the reforms in the public sector since the 1980s, the most notable of which was the 2009-2012 emergency program. Thanks to this program, Moroccan universities have moved from a logic of means to a logic of results with clear missions and objectives, the achievement of which depends on obtaining financial and human resources. This emergency program has contributed to the implementation of contracting, which has been accompanied by the emergence of management control practices through the adoption of a monitoring system and dashboards whose objective is to ensure efficiency and provide satisfactory service. This program was abandoned with the advent of the new ministerial team and since then, the universities no longer work with this logic of contracting and contracts-Objectives-Means.

5. Methodology:

In order to constitute a state of the art of management control in Moroccan universities and to build an empirical knowledge, we adopted an exploratory approach, we focused essentially on a situation analysis in a descriptive perspective, through the multiple case method. This method allows both to confirm existing theories on management control in universities and at the same time to shed empirical light on the subject.

The multiple case method allows us to investigate different cases, with very varied visions, which brings a richness to the empirical investigation, while considering the specificities of each case. The contribution of this research is to explore several university cases in order to understand their situation in terms of performance management and management control.

We inform that in order to develop an inventory of management control in Moroccan universities, we have structured our interview guide in three sections: a first section relating to the identification and existence or not of a management control function within the presidency of the university; a second section concerns to the case of the existence of management control as an entity or function; and a third section relates to the case where the university does not have this entity.

The entire sample is presented in the following tables, with interviews listed in chronological order:

	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 intervie	15				

	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

Table 2: Interviews within Universities

6. Results & Discussion:

In this section, we analyze the situation of management control within universities and the Ministry of Education.

6.1. At the Ministry of Education:

Our exploration study allowed us to discover that the management control, as an entity or cell is still at the stage of reflection knowing that in the official organization chart (published on the website of the ministry) there is a cell dedicated to management control. Also, the interviews conducted within the ministry reveal that the management of Moroccan universities is problematic despite the famous reform launched by the late Hassan II aimed a charter to give the broad guidelines for this sector. This charter was supported by the law 01-00 as a tool to institutionalize this reform process "the law 01-00 was revolutionary but after 18 years ... it is still poorly defined ... " said a division head of in the Strategies and Information Systems direction.

6.1.1. Regulatory environment:

The only control present in the ministry and the universities is the financial control in reference to the law 69-00 relating to the financial control of the State on Public Institutions. In accordance with to the provisions of Article number 3 of this law, the procedures for preparing, adopting and approving budgets and multi-annual forecast statements, must be carried out by the state controller as well as the registers and other supports must be kept by the paying treasurer.

For the budgets referred to in Article 7, these are the acts by which operating, financing, cash flow and investment operations are planned, costed, and authorized for the following financial year. They include in particular an operating budget, an investment budget, and a financing plan. They are detailed according to the university's chart of accounts.

Moroccan universities, as public institutions, receive subsidies from the State and are subject to a priori financial control, according to the provisions of Article 7 of Law 69-00. This control outlines the modalities of prior control and emphasizes that the decisions taken by the board of directors, or the deliberative body are final only after their approval by the Ministry of Finance

Based on interviews conducted, this type of control has its shortcomings and above all constrains the university system to be performant. however, in order for universities to be autonomous and subject to posterior control, they must satisfy certain conditions which, according to those interviewed, is a very difficult prospect to realize1.

In view of the preceding, it should be noted that the reform of the state's financial control on public institutions, which is part of the budget reform, is a key tool for good governance (Chtouki, 2006) because it tends towards the elimination of a priori control by giving public organizations modern management tools and promoting a corporate culture based on results, not on objectives.

6.1.2. Organizational environment:

Along with the cumbersomeness of this State control, the interviews conducted revealed the presence of coordination, collaboration, and communication problems. These concepts remind us of one of the modalities of use of management control, which is interactive control (Simons, 1994), where the objective of management control is to produce information that serves as a basis for discussions and interactions between the company's collaborators, particularly for the purpose of defining or reorienting the organization's strategy. This problem of interaction exists in particular between the universities and the supervisory authorities and between the universities and their components.

Management control, as it was conceived in the 1960s, is essentially associated with the organizational philosophy of decentralization.

Based on this principle of decentralization, the interviewees call for the need to have a contact person with the presidencies of Moroccan universities to facilitate collaboration and the accomplishment of their missions, particularly for the Directorate of Strategies and Information Systems for all statistics, "there is an international calendar for the dissemination of statistics (generally, twice a year), this calendar is not always respected by our universities. Otherwise, "we sometimes find ourselves obliged to contact the component as if the presidency did not exist, especially since the data we must use are of great importance, they are requested by the CSE, HCP, OECD, UNESCO, ..." said a manager within the same Directorate. Hence the importance of these variables (coordination, collaboration, and communication) to provide reliable data and release information that will be the basis for strategic decisions. It is a statistical chain where several sources are mobilized, which causes a very high margin of error "The process becomes heavy and slow because of the communication that is not simplified and unfortunately, the universities tend to inflate the data in order to have more subsidies, that is when they communicate, they report data that are not reliable.

This interactive management control modality is also associated with a behavioral dimension linked to the competence of the actor or collaborator. However, the Moroccan university suffers from the inadequacy of the profile and the job because of the lack of specific skills according to most of the people interviewed.

6.1.3. Information system: necessity and constraint

¹ Among these conditions, we can list: a functional organization chart; a chart of accounts and a manual of procedures and organization; a regular and sincere accounting with certified accounts; an annual activity report; an internal audit and management control department,

According to the interviews conducted, the absence of an information system is one of the most important handicaps in the university system. Yet, in theory, management control and information system are strongly linked because if the information system is a support for control, it is also the object of management control (Legrenzi and Nau, 2012). One of the fundamental roles of management control with an information system is to provide coherence within the organization and achieve effectiveness and efficiency (Bouquin, 2011).

Moreover, for some authors, the effectiveness of management control is based essentially on the capacity of information systems and management tools, which are highly sophisticated, to make it possible to control new management methods and new changes in the environment (Bouquin, 2011). Indeed, the integration of procedures and the different dimensions of management opens up a new domain for decision-making techniques. Decision-makers have a transversal, global but also very precise view of information flows, allowing them to refine and accelerate their decision-making (Meysonnier and Pourtier, 2006).

We note that the Moroccan university system had as a project the establishment of an efficient and uniform information system between universities. This was the SAGE integrated management software package, which was managed by Abdelmalek Saadi University. The actors interviewed confirm that this project did not succeed despite the significant investment that was undertaken for this project and that they have developed local applications to facilitate management.

6.1.4. Performance indicators vs. output indicators:

A first performance project was drawn up by the ministry for the 2017 financial year following the recommendation of the organic law on finance laws... This project includes the strategy broken down into programs as well as quantified performance indicators for a period of 4 years.

Some indicators are not understandable by the actors, which creates a reticence on the part of the actors to no longer follow these indicators. Moreover, it is impossible to calculate or quantify certain indicators, such as the cumulative rate of deployment of IS projects, which already requires the implementation of an information systems.

Moreover, this performance project reminds us of the neo-institutional theory, which states that organizations adopt management tools while the latter hardly provide the optimal solution to their problem, but rather seek submission and adherence to public authorities and the environment (Meyer and Rouan, 1977 and Powel and Di Maggio, 1983). This theory is confirmed for Moroccan universities, which want to comply with the rules and laws governing public service. The Organic Law of Finance Laws is a good example.

As for performance indicators, an official at the Ministry's DSSI reveals that "the Moroccan university system is based on output indicators and not on performance indicators"). Among these indicators, we find enrollment rate, supervision rate, enrollment rate, success rate, "Even if these are performance indicators only, often these rates or indicators are not reliable because they are required by the World Bank. This means that some figures can be inflated in order to benefit from the debt

In addition, contracting plays an important role in performance indicators. Indeed, it is a new mode of governance between the universities and the State, it comes to respond to the problem of performance evaluation. In practice, the Ministry has a service in charge of monitoring contracts with institutions, but this service is not operational in the absence of a contracting between the supervisory authority and the universities, according to the confirmation of DSSI officials. According to the same officials, we need another law, other than 01-00, which regulates and institutionalizes contracting in order for it to be implemented. The people interviewed say that the delay in implementing these projects is the result of constraints related to information, the lack of necessary skills, but also the political dimension that is very present in the university environment.

6.2. Situation analysis within universities

The interviews conducted within the presidencies reveal the many problems that are disrupting the Moroccan university and that the management of Moroccan universities is very complex.

The issue of management control in Moroccan universities is limited to locally developed practices.

For some universities, management control practices are limited to the adoption of budget allocation keys for the university's components in order to allow the presidential team to make objective and impartial decisions regarding the allocation of resources. These keys are accompanied by objectives to be achieved in each component.

"These keys, commonly accepted by all actors of the institutions under the university, allow us to distribute the state allocation in a healthy climate and without difficulty as before," according to the Responsible for Budget and Management Control. In other words, these keys represent the performance criteria of the university to support the performing institutions, particularly in terms of budget execution.

According to an officer at Mohammed V University in Rabat, these practices developed in Rabat constitute a means of protection, monopolization, and optimization of resources. We can also say that the role of management control within the Mohammed V University is like an ammunition machine (Burchell and Hopwood, 1980) contrary to the roles of effectiveness, efficiency, and coordination, learning identified in the literature.

This limited role of management control in universities can be explained by the political dimension that is embodied in the status and behavior of those in charge of the institutions, since they are elected officials and representatives. With the ambition to renew their mandate, they seek to reap a great deal of satisfaction (Fabre, 2013) by developing an individual strategy that would consist, for example, of seeking resources, increasing the size of the university and the number of administrative and faculty members in order to have a reasonably acceptable pedagogical and administrative staffing rate.

According to the interviewees, the universities had the opportunity to learn about management control as an evaluation and monitoring tool thanks to the emergency program, which was the occasion for the emergence of a management control culture following the introduction of contracting between the supervisory authorities and the universities. The emergency program, which was a major issue for the reform of the education sector, was an opportunity to put in place mechanisms for monitoring and evaluating the performance of universities, in particular through the introduction of a State-university contracting: "These contracts are part of the national movement to improve the performance of public action management and are aimed at reinforcing the effectiveness and efficiency of the higher education and scientific research system" (Internal document of the DSSI).

However, this program was abandoned following the advent of a new government in 2012 and therefore all of these practices were abandoned as well. This program is considered unsuccessful. This failure is due, according to the interviewees, to the poor preparation of the universities and especially to the fact that there is not enough support.

contracting would give the possibility to "penalize" the university that does not achieve its objectives through the reduction of the investment subvention. In addition, contracting would create a certain competitiveness between universities when achievements are published. At this level, the problem of the reliability of results arises (universities tend to overestimate their results).

Currently, Moroccan universities are content to issue statistics considered by some to be performance indicators, including the number of students enrolled, the number of graduates, the number of courses offered,

6.2.1. Management control practices but in an informally

The absence of a formal or institutional management control system in Moroccan universities does not eliminate the reality that Moroccan universities adopt management control practices and use tools in the monitoring of their activities.

These practices provide the necessary information. This is mainly budget monitoring "This is my argument to prove our weak means when it comes to organizing an event ..." according to a manager at Mohammed V University in Rabat. The development of a budgetary control tool makes it possible to monitor the rate of budget execution. In addition, special attention is given to the rationalization of expenditures and the search for new revenues.

This monitoring of the execution of university budgets, imposed by the Minister of Finance, is a necessary procedure for feeding their accounts in case of need or lack of liquidity. Indeed, the regulations in force require that certain accounting and account indicators be communicated periodically to all financial control bodies, in particular the cash and account situations and the semi-annual transfer.

6.2.2. Budgets

In theory, the budget system is the cornerstone and link between the three pillars of performance: effectiveness, efficiency, and relevance (Gervais, 2009). So, an organization that does not have objectives cannot pretend to develop a budgetary procedure and consequently cannot pretend to refer to management control.

In practice, the problem of the budgetary calendar is very present, and the higher education system suffers from it. The Ministry wishes to apply an optimal budgetary management especially with the Ministry of Finance concerning the payment of budgets.

Following the end of contracting, universities are moving from the logic of results to the logic of means, a step backwards after the emergency program in terms of budget management. As a result, in the absence of budgets based on the achievement of objectives, the universities found themselves working with the old procedure of managing budgets in operating and investment headings.

7. Conclusion

The literature on management control in universities has revealed that the specific case of universities and the particularity of their activities make it possible to understand why management control is difficult to apply there, even with a contingency approach that is taken in consideration. In this research, we tried to elaborate a state of the art in perspective to develop an empirical knowledge of the situation of Moroccan universities in relation to management control.

The originality of this research lies in the fact that it covers a subject that has been little studied in Morocco in a contingency approach integrating all the dimensions that can explain the complexity of implementing and developing a management control system. In addition, our qualitative approach, marked by the inventory of all Moroccan universities, differs from other approaches used to respond to this type of problem.

Our exploratory study reveals that Moroccan universities do not have a management control system in its official form and that with the abandonment of the emergency program, universities no Longer work within the logic of contracting and contracts-Objectives-Means.

Management control in Moroccan universities has a limited role, restricted to a few practices that have been used informally. Similarly, many indicators are produced but are essentially aimed at providing administrative statistics to respond to reporting obligations imposed by the university's supervisory authorities.

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