

Asian Journal of Economics, Business and Accounting

11(1): 1-10, 2019; Article no.AJEBA.46588

ISSN: 2456-639X

Evaluation of the Impact of the External Audit in the Functioning of Health Public Institutions "Cases of the General Hospitals of Reference of Kabondo and Makiso/Kisangani of 2011 and 2014"

Assani Ramazani Raymond^{1*} and Isetcha Tawiti Désiré¹

¹Higher School of the Medical Technical, Kisangani, Democratic Republic of the Congo.

Authors' contributions

This work was carried out in collaboration among both authors. Both authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJEBA/2019/v11i130116

Editor(s)

(1) Dr. Vasilii Erokhin, School of Economics and Management, Harbin Engineering University, China.
(2) Dr. Ivan Markovic, Faculty of Economics, University of Nis, Serbia.

(3) Dr. María-Dolores Guillamón, Department of Financial Economics and Accounting, University of Murcia, Spain.

Reviewers:

(1) Somnath Das, Rabindra Mahavidyalaya, Champadanga, Hooghly, India.(2) Romer C. Castillo, Batangas State University, Philippines.

(3) R. Shenbagavalli, India.

Complete Peer review History: http://www.sdiarticle3.com/review-history/46588

Original Research Article

Received 09 November 2018 Accepted 29 January 2019 Published 29 March 2019

ABSTRACT

Objectives: This study aims at evaluating the effects of the external audit on the countable and financial management of the General Hospitals of Reference of Makiso/Kisangani and Kabondo. **Methods:** We worked with a sample with reasoned choice. It is about a descriptive study of the retrospective type which we associate the analytical method. The data collected in this study after the examination, were transformed into frequency, and then, expressed as a percentage.

Results: For the HGR of Makiso/Kisangani, the receipts carried out for the audited period account for 55.56% against 45.44% for the not-audited period, that is to say a variation of 10.12%. While for the HGR of Kabondo, the receipts carried out for the audited period account for 63.81% against 36.19% for the not-audited period, that is to say a variation of 27.62%.

Conclusion: We noticed that for the audited period the medical structures under study presented a performance by profitability, the permanent follow-up of its accountancy which reduces the risks of

the frauds and errors as well as the financial hemorrhages, the reliability of financial information due to the self-checking and the credibility of the institution near the external contractors, since it presents a good image.

Keywords: Evaluation; impact; external audit; public institution of health.

1. INTRODUCTION

An institution dedicated to the development and the continuity of its activities must organize well its financial service and its accountancy so as to enable him to draw up a report/ratio on the good management of its resources and the realization of its activities during one well defined period.

As a mechanism of governance, the external audit has for main goal to guarantee the reliability of the diffused countable data. It consequently contributes to attenuate the asymmetry of information underlying the relation between the contracting managers and shareholders or thirds. By guaranteeing the faithful image of communicated financial information, the audit seems to constitute a key factor making it possible to the various partners to make their own decisions. Being given its importance for the decision-making, the various users of the financial statements need to be protected as for the quality of this audit [1].

The concept of fraud is the subject today of many international debates. Franck Harding, president of *International Federation of Accountants* (IFAC) in 1999, stressed already the need for fighting against this international phenomenon good before the current explosion of largely mediatized businesses [2].

Several studies, carried out in the Anglo-Saxon countries, however show that only 5% of the cases of fraud are discovered by the external listeners, in spite of the presence of inaccuracies in the financial statements in 65% of these cases. This incapacity of the listeners to detect the many cases of fraud, and this in spite of the evolutions engaged in the field of the professional standards, thus calls in question a model of legal audit centered about the objective more total of faithful image and about an approach by the risks.

The concept of fraud is considered in a more or less significant way according to the stages of development of the legal audit. The objectives and the professional standards thus varied,

giving different responsibilities to the listeners, in time, by comparing the origin and the topicality of the audit, but also in space, by distinguishing the models from international and American audit [3].

The audit is a service not like the others. Indeed, it is about a commercial activity producing a collective good: confidence. The organization of the production and the distribution of such a service cannot obey the usual rules of a market [4].

Vis-à-vis this evolution, two opposite readings can be advanced. For one, the reinforcement of external control is legitimate, it results in improving the structures of governance of the company, the transparency of its operation, improves its economic effectiveness like its efficiency for the benefit of a greater number of fascinating parts. For the other, this pressure finally primarily centered on the economic performance in the short run prevents the leaders of the companies from deploying industrial strategies of long term, supports opportunist behaviors and leads finally to an increased wasting of resources, even with economic, environmental or social disasters.

To arrive at a rigorous management, the institution must set up the check procedures internal and external which will guarantee the countable management of much undertaken personal or member, deprived or public [5].

Rigorous management currently interests the financiers, the partners, the managers who intend to undertake the partnership with the public organizations. The rational management of much undertaken private and public A like consequence the maximization and the optimization of the resources placed at its disposal for its development and wellbeing of the population. The financiers and the managers must focus more their attentions on the installation of the mechanisms of control. Without an effective control, the life of the organization is dedicated to the failure if not with disappearance [6].

However, any organization, as of its creation, lays down objectives to be reached, through its financial resources, material and human. It must optimize its performance and its development by the installation of the mechanisms of effective and regular control; this is why, the general hospitals of reference being institutions in social matter enjoying the autonomy of management in Democratic Republic of the Congo, were seen in the obligation to function like institutions with lucrative goal to carry out the benefit; for this reason the general hospitals of reference, for a certain time, decided to raise the percentage of benefit on the cost of purchase of the drugs, of the reagents of laboratory. They carry on other ordinary activities of self-financing such as the hiring of the rooms of the meetings, the hiring of the outboard motor boats and the fast guns, the hiring of the overhead projectors [7].

In their study on the internal audit in the public administration, specified that the Ministries for the Social Affairs, the Public Health and the Environment do not comprise service of audit. However, an adviser attached to the secretariatgeneral and also affected with other tasks punctually carries out missions which are connected with the internal audit. But there is not charter, its missions remain very limited in a number, and the responsible adviser does not have training in audit [8].

In its study, Okongo Shekinah, specified that countable financial management poses many problems with the managers who do not manage to satisfy the financiers, the partners, the State and the thirds, by their manners of managing; because information relating to the funds placed at their disposal seems absurd. To perennialize these activities and to thus ensure good the governance and the credibility of the general hospitals of reference, the managers of these hospitals must adhere to a system effective and advantageous management of the funds, subsidies that the financiers so much external that intern place at their disposal and call upon a regular practice of audit on all the documents of accountancy held by the hospitals, namely the newspaper, the book of analytical case, the books of receipts by service by combining the efforts to plan, organize, analyze, decide, act and evaluate together the effects of control in the hospitals [9].

Vis-a-vis this situation, the result of the public organizations of the State of Tunisia has a

credibility as well at the national level as international [10].

As for our medical system in democratic Republic of Congo, its integration would improve the output of the service.

Many deficits is noted in financial management general hospitals reference Kisangani. We can, as an indication, quote pharmacies of pocket, the sequestration of the patients by the obligation and the imposition of right of injection, the fraudulent contribution of the samples to be tested at the laboratory, etc. However, since good of time, two of these General Hospitals of Reference under examination already were the subject of the external audits, in particular that organized by Makiso/Kisangani and Kabondo in 2011 by the Belgian Technical Co-operation. The financial audit in question consists in evaluating the effects of this work of external control on the behavior of the book, on the financial health of these public medical structures.

Have regard with what precedes, our concern beats about the bush hereafter:

Which is the impact of the external audit on the accountancy and the financial management of the general hospitals of reference of Makiso/Kisangani and Kabondo?

In a specific way, this study aims at evaluating the effects of the external audit on the countable and financial management of the General Hospitals of Reference of Makiso/Kisangani and Kabondo.

In comparison with the fundamental question raised in the problems, we supposed that the external audit would have a positive impact on the accountancy and/or the financial management of the General Hospitals of Reference of Makiso/Kisangani and Kabondo.

2. METHODOLOGY

2.1 Population of Study

Compared to our study, the population consists of five General Hospitals of Reference which account the town of Kisangani.

2.2 Sample

It is advantageous for a researcher to work with the whole of the population concerned with the study. Taking into account the time constraints assigned, of a financial nature (budget), as well as the availability of the subjects (reports/ratios), we extracted the sample in the population mother made up of all the General Hospitals of Reference of Kisangani.

Concerning this study, they act of a sample with reasoned choice insofar as we drew in a considered way according to the objectives of our research, it is here two General Hospitals of Reference which is the General Hospital of Reference of Kabondo and the General Hospital of Reference of Makiso/Kisangani.

These general hospitals of reference were reasonably selected by the fact that they were audited in 2011 and nonaudited in 2014.

2.3 Data-Gathering Technical

This study is descriptive of the retrospective type which we associate the analytical method. Concerning this study, we used the documentary technique. It enabled us to impregnate ourselves realities of the data drawn from the various documents provided by the General Hospitals of Reference concerned with our study.

2.4 Processing Data Technical

The data collected in this study after the examination, were transformed into frequency, and then, expressed as a percentage.

3. RESULTS

3.1 Comparison of Finances of the General Hospitals of Reference of Kisangani

Taking into consideration this table, it arises that the receipts carried out by the General Hospital of Reference of Makiso/Kisangani in 2011, year during which the external audit was carried out, are relatively higher than those carried out in 2014, nonaudited period.

But it should be noted that July 2011 is that which knew a high performance in terms of receipts compared to the other months; with a monthly receipt of 25,611,035 FC against 20,634,520 FC in 2014.

Ultimately, from this comparison a difference of 41,227,810 FC emerges. This difference shows that the external audit has a positive impact on accountancy and the financial management in the institutions of health.

However, the general total revenues are higher in 2011, the audited year with an amount of

Table 1. Report/Ratio of Treasury of the Audited Year (2011) and the Not-Audited Year (2014) in Congolese Francs of the Hgr Makiso/Kisangani

Institution	HGR Makiso/Kisangani Audited Year (2011)	HGR Makiso/Kisangani nonaudited Year (2014)
Periods (in month)	Amount (in FC)	Amount (in FC)
January	18,504,510	20,157,660
February	25,228,780	17,022,030
March	22,632,260	15,719,110
April	23,423,170	24,077,250
May	22,181,690	16,188,860
June	20,893,100	17,670,885
July	25,611,035	20,634,520
August	12,707,450	24,866,200
September	14,419,450	14,227,000
October	13,875,500	0,00
November	24,867,000	17,643,160
December	22,542,840	17,452,300
Total	246,886,785	205,658,975

246,886,785 FC contrary to the nonaudited year 2014 whose amount was estimated at 205,658,975 FC. We illustrated in the graph below this difference of the two years receipts audited and nonaudited at the General Hospital of Reference of Makiso/Kisangani:

In the Fig. 1, the curves of expenditure in the two years evolve/move in tooth of saw. But we note however a characteristic in October 2014 when the curve tends towards zero, i.e. during this month, the general hospital of reference of Makiso/Kisangani did not maximize the receipts.

After comparison of the data of these two periods, we noted that March 2011 produced

more receipts, that is to say rising of 39,337,295 FC contrary with those of March of the year 2014; follow-up of those of June of the year 2011 when one still recorded more receipts against June of the year 2014; and that December of the year 2011 compared with same December in 2014.

In May 2011, the receipts evolved/moved with the rise against May in 2014. In November 2011, the same variation was noted against November 2014. In the same way the produced receipts, in October 2011, the shift was observed against October 2014. In February 2011, there was more of the receipts than in February 2014, September 2011 shows to us higher profitability against the

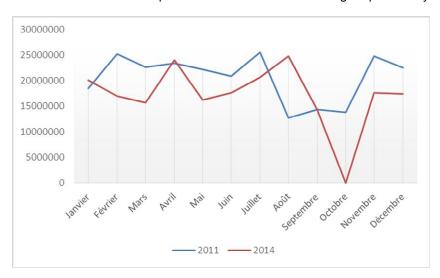


Fig. 1. Receipts of the HGR Makiso/Kisangani, audited year and nonaudited year

Table 2. Report/ratio of treasury in Francs Congolais of the audited year (2011) and the non-audited year (2014) in HGR/Kabondo

	Institution	HGR/Kabondo audited Year (2011)	HGR/Kabondo non-audited Year (2014) Amount (in FC)
Period (in month)		Amount (in FC)	, , , , , ,
January		19,220,609	11,842,760
February		24,766,948	15,927,626
March		39,337,295	15,169,072
April		22,425,304	16,385,475
May		27,874,199	13,488,739
June		37,039,305	15,044,350
July		21,446,649	14,427,062
August		22,878,917	14,893,029
September		23,087,658	14,419,678
October		27,286,861	13,564,915
November		27,681,814	24,253,870
December		29,739,937	13,613,749
Total		322,785,496	183,030,325

same month of the year 2014. It is the same for August 2011 opponent the achievements lower produced than the same month for the year 2014; as for April 2011, too many receipts compared to April 2014, it is also declared in June 2011 opponent that of 2014; and finally in January 2011 compared with June 2014.

Have regard to all what precedes, we noted that the total revenues are those of the year 2011, audited year with an amount of 322,785,496 FC against 183,030,325 FC of the nonaudited year. From this comparison a variation from 139,755,171 FC emerges.

The data presented in Fig. 2 show that the receipts recorded by the general hospital of reference of Kabondo into 2011 evolve/move in tooth of saw. But in 2014, the curve is presented in the form of a slope with one shown spectacular at November.

With regard to HGR/Kabondo, on a total of 505,815,821 FC for the two years, for the audited period, this structure carried out 322,785,496 FC either 63.81% of the receipts against

183,030,325 FC or 36.19% for the nonaudited period.

By raising the proportion for the two periods with the HGR of Makiso/Kisangani, on a total of 452,545,760 FC for the two years, for the audited period, this structure carried out 246,886,785 FC either 55.56% of the receipts against 205,658,975 FC or 45.44% for the nonaudited period.

An analysis on the data presented in this table shows that HGR/Kabondo carried out during two years of comparison a total receipt of 505,815,821 FC; 322,785,496 FC in 2011 either 63.81% and 183,030,325 FC in 2014, or 36.19%

Within sight of the results of the first two tables of the above mentioned structures, the tendencies of the receipts produced for the two different periods, i.e. 2011 audited year and year 2014 inform us not-audited year, that achievements of the audited period were largely higher than the receipts of the nonaudited period. This situation would be explained by the personnel, motivation the of following

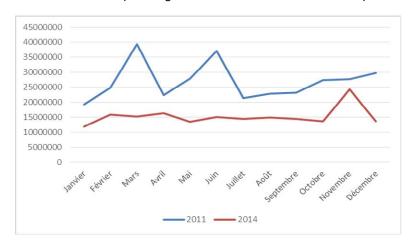


Fig. 2. Receipts of HGR/Kabondo, audited year and non-audited year

Table 3. Synthesis of the reports/ratios of treasury of the HGR of Kabondo and Makiso/Kisangani in congolese franc

Institut	tions HGR/Kabondo		HGR Makiso/Kisangani	
Audited	Amount	%	Amount	%
year and				
nonaudited year				
Audited year (2011)	322,785,496	63.81	246,886,785	55.56
Non-audited year (2014)	183,030,325	36.19	205,658,975	45.44
Total	505,815,821	100	452,545,760	100

the financial support and technique of the Belgian Technical Co-operation, a good tariffing which answers the purchasing power of the patients with like impact the hyper frequentation, a financial accessibility and finally by the realization of a control of performance and one financial audit within the hospital.

4. DISCUSSION AND COMMENTS

The aim of the financial audit is to express an independent opinion on the financial statements established according to professional rules and generally allowed accounting policies and standards' into force. Indeed, this report/ratio is prepared by an independent and qualified professional thus assuming all its responsibility on the disclosure for this opinion. Admittedly, survival in a turbulent economy characterized by the asymmetry of information and the scarcity of credible and relevant information require the search for a source presenting information necessary.

Other shares, the modern company is characterized by the fact that only the leaders have a real direct access to the activity of the company. This confers to them a liberty of action and a significant informational advantage. Such a situation supports the existence of the conflicts of interests between the leaders and the other speakers of the company, which requires the installation of the means intended to direct their behaviors.

It was noted that after the nonaudited period, the medical establishments being the subject of our study did not sustain the system of control of management. It is thus arisen the following situations: the not-behaviour of a regular accountancy of engagement according to standards' of the countable system OHADA, bus. we noted that it is the accountancy case which is held in these two medical establishments, the insufficiency of financial information and the supporting documents, the absence of the banking bringings together, the absence of book of Bank, the absence of the policy of the loans to the members of the personnel and other thirds, the manual behaviour of accountancy. All this led to the fraud, the diversion of the funds and other risks of falsifications of financial information.

The external audit evokes control by thirds of the financial performances of the company and conformity of its practices compared to the regulation or to the usually allowed rules. The

identification and the evaluation of these factors of performance require to have frames of reference... One generally obtains them by exploiting systematic and organized comparisons corresponding performances and explanatory factors within a sample of companies chosen to offer a sufficient spectrum of exploitable situations [11].

This situation indicates clearly that the absence of a service of audit within these two medical establishments is a bad omen for a better operation, harmonious and effective. It would be understood that this service would have only existed for the period when these two medical establishments profited validly from the financing of the Belgian Technical Co-operation for thus drawing the attention of the backer and to make him believe the strict observance of the rules of financial management in order to be given other financings.

It would be thus desirable, for these two hospitals, to regularly make recourse to a cabinet of audit approved of international fame in order to sustain the performance considered to be essential in the correct operation of the organization. We noticed that these two hospitals made recourse neither to a cabinet of external audit of the national level, nor with a cabinet of the international level.

The results of the study undertaken in Tunisia by Abdelwahed Omri, Faten Hakim Ghorbel and Fatma Triki Baklouti [10] show that the membership of the listeners to an international network is positively and significantly related to the quality of the accruals and with the relevance of the accounting income. This shows that the "BIG" improve quality of the accounting income of the Tunisian companies with dimensions. This positive relation can be justified by the fact that the "BIG" provide services of better quality because they have better infrastructures and more and better trained teams.

Gramling et al. [12] envisage the recourse to the service of a specialized listener whom can provide an insurance as for the quality of voluntary information. The authors note that the companies which are audited by a specialized listener communicate estimated information on the future cash-flows more credible than those which are audited by a listener not specialized.

This manner of designing the things is not coherent. Is not it about a delaying tactics on

behalf of the leaders of these two hospitals? This question often came to us to mind for better including/understanding the real reasons which hide behind this attitude. Whereas, we think, it would be desirable to remain in the logic of the things, i.e. the maintenance of the performance, to attract more other investors.

We also noticed that to reach the performance, the hospital must obligatorily show the faithful image in the regular behaviour of the financial statements. We stated the fact that these two hospitals do not hold up to date the financial statements. We thus noted the absence of the assessments, the principal financial statement which describes the patrimonial situation of the hospital, the table of financing of the resources and employment (TAFIRE)... the other additional documents.

The financial audit is a positive practice for the particular investors, insofar as it in particular makes it possible to make sure that the financial data communicated by a company with dimensions with its shareholders are exact. The external audit is an activity of control and council undertaken by a person external with an organization.

The external audit can relate to the organization of work, the allocation of the functions and the responsibilities, the respect of the procedures within an entity (organizational audit) and the validity of the financial statements emitted by an organization (financial audit). The external audit can be impose by a financial partner or the law who imposes on certain organizations hearing and the periodic validation their accounts [13].

In addition, the absence of the banking books in these two hospitals does not make it possible to make profit from the credit near a bank in order to carry out the paramount objectives which are assigned to them. With our opinion, the banking of the financial transactions is a good thing to put forward a better management of the funds intended for the operation of a hospital. A hospital which functions without a banking account in this XXIth century cannot claim to be prevailed the attraction of the investors, especially in the sector of health and thus to be classified among the powerful organizations.

According to the IAASB, the risk of non-detection of a significant anomaly coming from frauds is higher than that of non-detection of a significant anomaly resulting from an error, because the fraud can result from collusions, falsifications of documents, omissions intentional, erroneous declarations or skirtings of the internal audit. When the audit is finished, the external listeners have the whole responsibility for the opinion that they express on the financial statements.

The type of the external audit most widespread relates to that of the financial statements. These financial statements are made up: assessment and fluctuations of its economic state. The general objectives of a practice of external audit consist in checking that the results obtained correspond to the results envisaged. It is in particular a question of checking that the countable procedures were observed, to detect possible dysfunctions, their causes and to highlight the improvements necessary, include/understand, analyze an incident, a variation, and a specific dysfunction. Within the framework of one financial audit external, it will more precisely act to measure the countable organization of the entity in order to detect the insufficiencies of them, to improve them, and to prevent the frauds and the diversions.

In this same order of idea, the recourse of the company to the external financing to reinforce its place on the market requires the presentation of the audited financial statements to the banker to help it to make the exact decision [14].

In addition, it is difficult to treat reinforcement of external control on management without tackling a question having deeply upset the strategic landscape of many companies during these last years: rise to power of the funds of investment in their capital [15].

Behaviour of the files consisting in particular with the seizure of the invoices, the writings of pay, the bank, the lettering of the accounts of third and the photocopies. Work preliminary to the establishment of the assessment: Audit of the whole of the cycles. Establishment of the assessment thanks to the software allowing to carry out a colored assessment, data-processing treatment of information and other financial transactions, i.e. the recourse to countable software, are as much factors which can lead to the performance.

In 2003, according to an article of David Carassus and Denis Cormier [3], only 5% of the frauds are discovered whereas 65% of the financial statements have inaccuracies. A study carried out in 2005 by Price Waterhouse

Coopers (PWC) reveals that only 4% of the frauds discovered are it by an external listener against 29% by the means of rumor.

Lastly, we noted within these hospitals under study, the shouting absence of the reference frames of management, whereas the use of these reference frames proves to be essential in the operation of a company or a hospital which profits from the foreign financings.

The process of control external led to evaluate the conformity of practices to a reference frame, this last which can be various natures: explicit and with universal like the countable standards or the standards of quality, or more implicit and/or built initially territorial vocation then for within the framework of a specific relation, as in the activities of notation: financial notation or, more recently, social notation. The recourse to these reference frames is obligatory within the companies or organizations [13].

5. CONCLUSION

This study related to the evaluation of the impact of the external audit in the work of the health public institutions. Cases of the General Hospitals of Reference of Kabondo and Makiso/Kisangani of 2011 and 2014.

At the end of our study, we ended to the following results:

- For the HGR of Makiso/Kisangani, the receipts carried out for the audited period account for 55.56% against 45.44% for the non-audited period, that is to say a variation of 10.12%.
- For the HGR of Kabondo, the receipts carried out for the audited period account for 63.81% against 36.19% for the non-audited period, that is to say a variation of 27.62%.

This situation would be explained by the fact why for the audited period the medical structures under study presented a performance due:

- by its profitability;
- with the permanent follow-up of its accountancy which reduces the risks of the frauds and errors as well as the financial haemorrhages:
- by the reliability of financial information due to the self-checking;

- by the organization of the financial audit initiated by the backers, being also a management tool;
- by the credibility of the institution near the external contractors, since it presents a good image;
- by a guarantee with the internal and external collaborators, owing to the fact that there is performance;
- by an accountancy held well, clear, precise and continuous.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

- Sullivan ON, Diacon SR. Internal and external governance mechanisms: evidence from the U.K. insurance industry, Corporate Governance: International year Review, flight. 1999;7(4):363-373.
- Izs Echoes. The countable experts attack corruption, June 24; 1999.
- Carrasus D, Cormier D. Standards and practical of the legal external audit prevention detection of fraud, Accounts Department - Control - To that, 2003;9:171-188. CCA 091.0171,
- 4. Hassan M. The quality of external audit and concept of significativity: exploratory study. Elsevier, Masson, Paris; 2010.
- Collins L, Coll. Internal audit, Ed. Dunod, Paris: 2006.
- Jacques L, Tytgat. Technique of countable control, missions of the auditor and the reviser of company, Ed of the presses of S.A. Printing works L Vannelle, Brussels; 2001.
- 7. Ngobebe S. Control management. Ed. Pearson Education, Paris; 2004.
- 8. Christian de Visscher. The internal audit in the public administration, Belgium, Brussels; 2002.
- Okongo Shekinah. Impact of the external audit in the public medical institutions, case of the General hospital of Reference of Makiso/Kisangani, new Memory in Management of the Health Institutions, Higher Institute of the Medical Technical of Kisangani. Kisangani; 2015.
- Abdelwahed Omri, Faten Hakim Ghorbel, Fatma Triki Baklouti. Impact of the external audit on the quality of the accounting

- income: Case of the Tunisian companies with dimensions. Governance Review. 2009;6(2).
- Xavier Mesnard, Jean-Claude Tarondeau.
 To use the audit by benchmarking to improve the performances. French Reexamined Lavoisier "of management". 2003;147:247-258.
- 12. Gramling AA, Johnson VE, Khurana IK. The association between to that the firm industry experiment and financial reporting quality, working paper, Wake Forest
- University, University of Illinois, and University of Missouri; 1999.
- 13. Youssef Yahyaouin. Utility of the report/ratio of the external listener. University of Sousse Control in Countable Sciences. Tunis; 2005.
- 14. Collins L, Vallin G. To that and internal Audit, 4th Ed Dunod, Paris; 2003.
- Davis GF, Thompson TT. A social movement perspective one corporate control. Administrative Quarterly Science. 1994;39:141-173.

© 2019 Raymond and Désiré; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
http://www.sdiarticle3.com/review-history/46588