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Corporate governance in Colombian universities

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Abstract

In a context of greater demands in terms of accountability and transparency in management, we analyse the extent to which Corporate Governance (CG) mechanisms have been adopted and we define the model of governance in universities in Colombia. In the field of higher education, there are usually no compulsory requirements related to CG. Nevertheless, governance mechanisms are nowadays crucial in determining the objectives, strategies and direction of universities. Based on a survey of 81 rectors of higher education institutions in Colombia, we analyse the models of CG adopted (managerial and stakeholder models). The results contribute to a better understanding of key CG concepts at universities.

Points for practitioners

There is an increasing awareness of the importance of improving the mechanisms of governance that may help to achieve greater effectiveness and efficiency in the management of resources and awareness of society. The analysis of the predominant CG models, the stakeholder model and the managerial model, and the way in which Colombian universities are introducing these models could be used to promote the establishment of a common legal framework. This model should be flexible and include different opinions and preferences. The results may be useful and could be transferred to other countries that have the same characteristics.

Keywords

Colombia, corporate governance, management education, rectors, universities

Governance structure in universities

During the 1980s, many organizational changes took place at universities on a worldwide scale. We are witnessing profound university reforms that can produce change in the governance model of universities (Jemielniak and Greenwood, 2015; Levy, 1986). There is an increasing awareness of the importance of improving the mechanisms of governance (Huisman, 2009) that can play a decisive role in establishing the balance that currently exists between university organizational autonomy and government control of universities (Huisman et al., 2015; Kehm and Lanzendorf, 2007).

In the Western world, the state has gradually given more autonomy to universities at the same time as promoting the implementation of new management systems and exerting steering from a distance (Huisman, 2009; Kehm, 2012). The management of these institutions has gradually been oriented towards the market (Giroto et al., 2013) and, at the same time, improved awareness of society (Huisman et al., 2015).

In the literature, we find several models of university management (Trakman, 2008): (a) the collegiate model in which university governance is carried out by academic staff; (b) the managerial model which is structured through CG mechanisms mainly focused on control – accountability and efficiency – in university management; (c) the trust model whereby governance is supervised by a trust council which is not necessarily composed of academics or stakeholders; (d) the stakeholder model wherein representatives of different interest groups participate in the governance of the university; and, finally, (e) the mixed model which combines elements of the previous models (governance by academics, stakeholders and a trust council, pluralism and control). Management can be identified with different governance modes: quasi-market, network steering, interactive governance, multi-level and multi-actor governance (Huisman et al., 2015).

The two models that predominantly coexist in university governance are the stakeholder model and the managerial model. The difference between them lies in the role of boards – the coordinating and control roles, respectively (Hung, 1998). The most important theories in CG in higher education are agency theory (Jensen and Meckling, 1976; Shleifer and Vishny, 1997) and, from a social perspective, stakeholder theory (Freeman, 1984). Agency theory emphasizes the control role (the managerial model can be included in this theory) while stakeholder theory places the emphasis on pluralism through involving stakeholders (the stakeholder model fits into this theory). Stakeholder theory extends the agency problem to a multilateral relation among all stakeholders. In the context of higher education, the most common agency problem is accountability to the state in the case of public universities or to owners in that of private universities (Faccio et al., 2001). The stakeholder model has been mainly implemented in Europe, where management is generally carried out by academics and in which stakeholders participate. The philosophy of pluralism and self-governing in terms of procedures and contents is predominant (Kehm, 2012). The managerial model, implemented in Anglo-American countries, is characterized by a more professional and hierarchical management of universities and is focused on achieving greater control, effectiveness and efficiency and a more competitive approach towards attracting students. In this model, the management organs are mainly composed of nonacademic staff, and greater importance is given to the disclosure of information and accountability (Hung, 1998; Mora, 2001).

Over recent years, the Anglo-American higher education model, which uses a management model similar to that of companies, has become the main reference for OECD countries. At the same time as university autonomy has increased, demands have also increased in terms of accountability (Giroto et al., 2013). This managerial model has been implemented in the USA through the Education Consolidation and Improvement Act (1981), in the UK through the Dearing Report (1997) (Tight, 2006) and in other Anglo-American culture countries such as Australia, where a management protocol has been established (Harman and Treadgold, 2007; Lokuwaduge and Armstrong, 2014). These procedures have been adopted as the reference point for universities in other countries such as Canada (Chan and Richardson, 2012), South Africa (Adams, 2006), Asia (Chan and Lo, 2007; Hanada, 2013), Europe (De Boer et al., 2010) and South America (Contreras et al., 2013), stimulating a wide debate about the effects of and changes brought about by adopting a managerial model.

The managerial model of CG at universities allows the incorporation of parameters of control, effectiveness and efficiency in university management (De Boer et al., 2010; Dixon and Coy, 2007). Moreover, accountability mechanisms are improved, performance indicators can be incorporated and good governance codes can be established (Lambert, 2003). The predominant position of American universities in international rankings may explain their strong influence over other countries and the spread of their model of management (Leydesdorff and Shin, 2011).

The European model, which follows the stakeholder model using collegiate management, is characterized by the autonomy that is granted to universities, the participation of different stakeholders in the decision-making process through their inclusion in GC organs and by a management model aimed at catering for the demands of different stakeholders who may sometimes have conflicting interests. The objectives of an institution can only be achieved by balancing the different interests of stakeholders. The European model leads to greater cooperation between social agents (Huisman, 2009; Kehm, 2011) and to giving further consideration and attention to their legitimate demands. By incorporating stakeholders into their governing bodies, organizations are thus more likely to respond to the interests of society as a whole (Hung, 1998). In universities, the application of the stakeholder model requires knowledge of the socioeconomic context of the country and identification of different stakeholders and the relation between them, and also their relation with the university (Oliva, 2009). Whether we consider the corporate social responsibility objectives is a priority for universities, the coordinating role of governing boards is crucial.

Development of the stakeholder model at universities requires a search for a social balance between the different agents involved. They establish the objectives and strategies of the university (Brunner, 2011).

The choice between one model or another is not easy, since it is necessary to consider the administrative culture and traditions. Thus, although the influence of highest ranked universities is a factor that must be taken into account, it is also true that university systems are linked to the culture, tradition and the history of the country (Kehm, 2012). An administrative culture refers to the existence of certain similar cultural values among countries, which causes different styles of public administration (Torres, 2005). In Latin American countries, the administrative culture mixes a heritage which is mainly from Continental Europe and, specifically, from Spain and Portugal (Torres, 2004) and the

influence of the English-speaking world, since a significant proportion of the political and administrative elite in Latin America have studied at English-speaking universities (Matas, 2001). Higher education in the Latin American model has been characterized by strong politicization, bureaucracy and low budgets and, lately, the large presence of private universities (Levy, 1986). Other characteristics are democratic governance, orientation towards resolving the social, economic, and political problems of the country, democratization of access, autonomy from state intervention and academic freedom (Bernasconi, 2008). The crisis in public universities provoked by the massification, unruly growth, deterioration of quality and decreased influence over the elites and, on the other hand, the worldwide rise of the American idea of a research university have promoted changes in the university model (Bernasconi, 2008) and perhaps have caused the loss of some relevant objectives (Readings, 1996). This is the context in which we must place the Colombian universities that are the subject of this study.

In the case of Latin American countries such as Colombia, there has been very little research into CG in the university context. There have been some descriptive studies about improvements in management systems (Restrepo et al., 2012). In practice, some measures are now being put in place to improve university management. Specifically, these universities are currently in the midst of an accreditation process to ensure that they meet predetermined quality requirements (National Accreditation Council, 2013). In addition to this, there is a growing demand from different stakeholders for greater transparency and an improvement in terms of accountability (Larran et al., 2012).

In a globalized world, it is relevant to analyse how dominant trends and one's own culture influence the structure of university governance that is to be adopted. The implementation of CG mechanisms at universities seems to be an unquestionable fact, although the rhythm and the scope of adoption of CG practices will vary depending on the country (Taylor, 2012). It is relevant whether this implementation takes place in a context in which there is no previous legal framework. Therefore, we are going to study the case of Colombian universities.

Our aim is to analyse the current situation in terms of the adoption of CG mechanisms in Colombia. There is currently no obligation to adopt CG mechanisms, although due to the influence of surrounding countries, the training process of university managers and the practices of the best-ranked universities on a worldwide scale, many Colombian universities are beginning to introduce these mechanisms. The results may be useful and be transferred to other countries that have the same characteristics.

We will define the models that are currently adopted in Colombian universities as well as their main characteristics, the CG mechanisms enforced within higher education institutions, to assess the priorities set by university management and, finally, to gauge to what extent the position adopted is related to the administrative culture of the country. We also want to determine whether or not CG standards are the same in public and private institutions.

Therefore, taking into account the limited quantity of previous literature on this topic, the importance of CG, and the lack of a regulatory framework, our study provides further knowledge of the various key concepts that make up CG at universities of different geographical and cultural contexts.

In order to define these models, it is necessary to analyse the different aspects of CG that universities are adopting. The relative importance attached to different aspects of CG will allow us to determine the model that will be crucial in terms of establishing roles and priorities in the management of higher education institutions. In this sense, we will focus on the different CG mechanisms that define the managerial model and the stakeholder model. Specifically, we will refer to the priorities that they establish in terms of performance, the contents of their good practice codes, the role of their councils and the allocation of their budget. It will also be necessary to analyse the structure and composition of governance organs and, finally, assess the importance attached to quality.

Regarding the performance of the managerial model, it focuses mainly on its mission; according to the Dearing Report (Trow, 1998), the academic and research mission of a university should be aimed at excellence and academic quality and it is often measured by the institution's position in the international ranking tables (Ferrer and Morris, 2013). On the other hand, the stakeholder model broadens the performance objectives and accepts a greater commitment to social responsibility which is reflected not only through its mission, but also through its vision and the creation of a strategic plan (Chicharro and Carrillo, 2009).

Our study is structured as follows: in the next section, a summary is given of the chronological evolution of universities in Colombia. In the third section, we present our methodology. We then analyse the results obtained and, finally, we present our main conclusions.

Universities in Colombia: structure and regulatory questions

The first universities in Colombia appeared at the end of the fifteenth century. University education in Colombia has evolved considerably over the course of the last century, strengthening their autonomy and their capacity for selfmanagement (Munera, 2011; Soto, 2005). The structure and organization of Colombian universities are legally established (MEN, 1992). In line with the legislation currently in force, Colombian universities are institutions with a democratic governance system in which different stakeholders must participate in the collegiate governance organs of universities, similar to the European model (Castro and Tomas, 2010). Nevertheless, some Colombian institutions may apply other broader management models which need to be analysed. In the case of public universities, management corresponds to the Supreme University Council (CSU), which is responsible for taking decisions of an academic and administrative nature. The rector is the legal representative whose main function is to carry out and subsequently manage the decisions made by the CSU. Many private universities are nonprofit-making institutions (corporations, foundations or institutions of a charitable nature). University governance lies with management councils who are mainly representatives of the founders or the owners. The president or the rector is the legal representative of the university (MEN, 1992).

In 2011, an attempt was made to reform the current law in order to incorporate in the university aspects related to CG such as transparency, efficiency and good governance (MEN, 2011). However, this proposal was not finally approved, and the 1992 regulations remained in force. In this context, it is interesting to analyse the governance models that universities adopt.

Methodology

Selection of the sample

As stated previously, the objective of our study is to analyse the different models of governance and management structures in higher education through the leaders' perception of Colombian universities. The sample of universities is made up of both public and private institutions registered at the National Ministry of Education of the Republic of Colombia. (<http://www.mineducacion.gov.co>). Our study is focused on the whole population of Colombian universities (81 universities), of which 40 percent are public and 60 percent are private.

The data were gathered through a survey with closed questions aimed at rectors which used a Likert 5 point scale to indicate importance (1 = 'unimportant', 5 = 'very important') and satisfaction (1 = 'totally unsatisfactory', 5 = 'totally satisfactory') (Solomon et al., 2003). The survey was carried out through the platform of the Computer Network Centre at the University of Granada between October 2012 and May 2013. We received 69 replies (85.16 percent of those surveyed). The response rate from public universities was 96.8 percent (31 universities), whereas from private universities it was 77.5 percent (38 universities) (Table 1). The percentage of non-respondents is low because we telephoned rectors to gain their interest in the study and we committed ourselves to send them the results.

The questionnaire was made up of items related to CG which were included in the Global Reporting Initiative (GRI 4) and in other studies on the characteristics and content of CG in the sphere of business (Ho, 2005). Furthermore, we have taken into account a set of CG principles and rules used in the sphere of universities, which has allowed us to create our own questionnaire which includes measures such as: production of an annual report (Dixon and Coy, 2007); the performance of strategic planning (Rytmeister, 2009); implementation of good practice codes (Nolan, 1995); the composition and structure of university governance (Florez-Parra et al., 2014); identification of the sources of funding and the allocation of this funding (Carpentier, 2006); standards of quality (Taylor and Braddock, 2007).

The survey contained 22 items and was divided for analysis into five blocks (Table 2). The first of these focused on measuring the degree of importance and satisfaction with the fulfilment of general aspects of CG (five items). In this way, we obtained a subjective measurement of the degree of fulfilment through the product of the variables 'importance' and 'satisfaction' for each of the items included in the questionnaire (Covin and Slevin, 1989).

The second block referred to good practice codes in terms of governance (four items) (items 6 to 9), specifically to the main commitments – quality, transparency, social responsibility, control of corruption – established in these codes. The third block is designed to gather information about CG structure – size and composition – criteria for the election of members and the functions that they perform – the setting of strategies, or the work of advice, control and supervision (eight items) – items 10 to 17. The fourth block is composed of three items and aims to measure the priorities that are established in the allocation of economic resources – items 18 to 20. Finally, the last block, which is made up of two items, refers to the importance for university leaders of improving their

position in the national ranking and standards of academic quality such as institutional accreditation – items 21 and 22.

Table 1. Colombian universities in the sample

COLOMBIAN UNIVERSITIES					
Nº	Higher Education Institutions Univeritaria-Public	Department	Nº	Higher Education Institutions Univeritaria-Private	Department
1.	UNIVERSITY-COLLEGE OF CUNDINAMARCA-	BOGOTA D.C	1.	FREE UNIVERSITY	BOGOTA D.C
2.	NUEVA GRANADA MILITARY UNIVERSITY	BOGOTA D.C	2.	UNIVERSITY INCCA DE COLOMBIA	BOGOTA D.C
3.	DISTRICT UNIVERSITY -FRANCISCO JOSE DE CALDAS-	BOGOTA D.C	3.	GRAN COLOMBIA UNIVERSITY	BOGOTA D.C
4.	NATIONAL UNIVERSITY OF COLOMBIA	BOGOTA D.C	4.	UNIVERSITY OF APPLIED SCIENCES AND ENVIRONMENTAL UDCA.	BOGOTA D.C
5.	NATIONAL OPEN UNIVERSITY AND DISTANCE	BOGOTA D.C	5.	AUTONOMOUS UNIVERSITY OF COLOMBIA -FUAC-	BOGOTA D.C
6.	PEDAGOGIC NATIONAL UNIVERSITY	BOGOTA D.C	6.	UNIVERSITY OF ANDES	BOGOTA D.C
7.	UNIVERSITY OF PAMPLONA	NORTE DE SANTANDER	7.	COOPERATIVE UNIVERSITY OF COLOMBIA	BOGOTA D.C
8.	UNIVERSITY FRANCISCO OF PAULA SANTANDER	NORTE DE SANTANDER	8.	ANTONIO NARIÑO UNIVERSITY	BOGOTA D.C
9.	PACIFIC UNIVERSITY	VALLE DEL CAUCA	9.	UNIVERSITY EL BOSQUE	BOGOTA D.C
10.	UNIVERSITY OF VALLE	VALLE DEL CAUCA	10.	UNIVERSITY MANUELA BELTRAN-UMB-	BOGOTA D.C
11.	UNIVERSITY OF CARTAGENA	BOLIVAR	11.	CENTRAL UNIVERSITY	BOGOTA D.C
12.	NAVAL SCHOOL OF CADETS ALMIRANTE PADILLA	BOLIVAR	12.	UNIVERSITY DE BOGOTA -JORGE TADEO LOZANO-	BOGOTA D.C
13.	UNIVERSITY OF ANTIOQUIA	ANTIOQUIA	13.	PONTIFICAL UNIVERSITY JAVERIANA	BOGOTA D.C
14.	ATLANTIC UNIVERSITY	ATLANTICO	14.	PILOT UNIVERSITY OF COLOMBIA	BOGOTA D.C
15.	PEDAGOGICAL AND TECHN. UNIVERSITY OF COLOMBIA - UPTC	BOYACA	15.	UNIVERSITY SANTO TOMAS	BOGOTA D.C
16.	UNIVERSITY OF CALDAS	CALDAS	16.	CATHOLIC UNIVERSITY OF COLOMBIA	BOGOTA D.C
17.	UNIVERSITY OF THE AMAZONIA	CAQUETA	17.	LATIN AMERICAN AUTONOMOUS UNIVERSITY-UNAULA-	ANTIOQUIA
18.	UNIVERSITY OF CAUCA	CAUCA	18.	EAFIT UNIVERSITY	ANTIOQUIA
19.	POPULAR UNIVERSITY OF CESAR	CESAR	19.	CES UNIVERSITY	ANTIOQUIA
20.	TECHNOLOGICAL UNIVERSITY OF CHOCO-DIEGO LUIS CORDOBA	CHOCO	20.	CATHOLIC UNIVERSITY OF THE ORIENT	ANTIOQUIA
21.	UNIVERSITY OF CORDOBA	CORDOBA	21.	BOLIVARIAN PONTIFICAL UNIVERSITY	ANTIOQUIA
22.	UNIVERSITY OF LA GUAJIRA	GUAJIRA	22.	UNIVERSITY OF MEDELLIN	ANTIOQUIA
23.	SURCOLOMBIANA UNIVERSITY	HUILA	23.	UNIVERSITY CORPORATION OF THE COAST -CUC-	ATLANTICO
24.	UNIVERSITY OF MAGDALENA	MAGDALENA	24.	UNIVERSITY SIMON BOLIVAR	ATLANTICO
25.	UNIVERSITY OF LLANOS	META	25.	UNIVERSITY OF SANTIAGO DE CALI	VALLE DEL CAUCA
26.	UNIVERSITY OF NARIÑO	NARIÑO	26.	AUTONOMOUS UNIVERSITY OF THE WEST	VALLE DEL CAUCA
27.	UNIVERSITY OF QUINDIO	QUINDIO	27.	CATHOLIC UNIVERSITY OF MANIZALES	CALDAS
28.	TECHNOLOGICAL UNIVERSITY OF PEREIRA -UTP-	RISARALDA	28.	UNIVERSITY OF MANIZALES	CALDAS
29.	INDUSTRIAL UNIVERSITY OF SANTANDER	SANTANDER	29.	AUTONOMOUS UNIVERSITY OF MANIZALES	CALDAS
30.	UNIVERSITY OF SUCRE	SUCRE	30.	UNIVERSITY OF SANTANDER	SANTANDER
31.	UNIVERSITY OF TOLIMA	TOLIMA	31.	AUTONOMOUS UNIVERSITY OF BUCARAMANGA-UNAB-	SANTANDER
			32.	UNIVERSITY OF SINÚ	CORDOBA
			33.	UNIVERSITY OF La SABANA	CUNDINAMARCA
			34.	UNIVERSITY MARIANA	NARIÑO
			35.	CATHOLIC UNIVERSITY OF PEREIRA	RISARALDA
			36.	UNIVERSITY OF IBAGUE	TOLIMA
			37.	TECHNOLOGICAL UNIVERSITY OF BOLIVAR	BOLIVAR
			38.	UNIVERSITY OF BOYACA UNIBOYACA	BOYACA
Total Colombian Public Universities:		31= (96,88%)	Total Colombian Private Universities:		38= (77,55%)
Total Colombian Universities: 69= (85,16%)					

Source: Own elaboration

Research methodology

A cluster analysis was applied to the data obtained with the aim of establishing the characteristics of the possible models for university management. First, a hierarchical method was used – the Ward method – (Ketchen and Shook, 1996) in order to ascertain the number of groups that had homogeneous characteristics. From the application of this technique, as can be observed in the dendrogram (Figure 1), for a distance of 12.5 points four groups were formed.

A non-hierarchical analysis was then carried out – the analysis of K-measurements – in order to ascertain the components of the different groups in the application of the hierarchical method. The first group was made up of 22 universities, cluster two had five, conglomerate three had 14 and group four had 28 institutions (Figure 2). The statistical package used was SPSS 21.0. The first conglomerate is composed of 22 universities, where there is a predominant presence of public institutions (54.55 percent) over private

ones (45.45 percent). In the second cluster, there are only five universities (three public ones and two private). This group is composed of small universities located in peripheral zones of Colombia. The third cluster included a greater number of private institutions (78.57 percent) and, finally, the fourth cluster was made up of 28 universities, 53.57 percent from the private sphere and 46.43 percent from the public sphere. In summary, we may conclude that in the private sphere there are three CG models with a similar level of importance (11, 10 and 15 universities, respectively), whereas in the public sphere we can mainly define two models represented by 12 and 13 universities, respectively. Furthermore, it can be observed that there is no clear separation between public and private universities since in each of the clusters there are examples of both types, which demonstrates that there are several models according to the priorities that are established which are valid for these institutions (Levy, 1986). In Table 2, we see the scores obtained for the different items in each of the groups that have been established. Based on this data, we will attempt to establish the characteristics of each of the clusters obtained in order to identify the models of university management.

Table 2. Descriptive clusters

N	Variables	Cluster 1		Cluster 2		Cluster 3		Cluster 4	
		N	Mean	N	Mean	N	Mean	N	Mean
1.	Fulfilment of the mission statement of the university	14	23.57	5	13.60	22	19.55	28	24.11
2.	Fulfilment of the vision of the university	14	22.50	5	13.60	22	18.77	28	23.57
3.	Fulfilment of the strategic plan of the university.	14	19.57	5	13.20	22	19.00	28	23.04
4.	Fulfilment of the organizational system and the functions of the university.	14	15.71	5	11.80	22	14.00	28	21.39
5.	Fulfilment of the annual management report of the university.	14	16.14	5	12.80	22	20.09	28	23.21
6.	Content code (commitment to quality).	14	4.79	5	4.20	22	4.18	28	4.29
7.	Content code (commitment to transparency).	14	3.50	5	3.20	22	3.36	28	3.79
8.	Content code (commitment to social responsibility).	14	3.21	5	2.40	22	3.41	28	3.18
9.	Content code (eradication of corrupt practices).	14	2.07	5	2.00	22	1.86	28	1.89
10.	Composition of the supreme council or management council.	14	4.00	5	4.20	22	4.50	28	4.46
11.	Relevant information for members of the council or managers.	14	4.93	5	5.00	22	4.86	28	4.89
12.	Selection process for management positions.	14	4.21	5	3.60	22	3.68	28	4.25
13.	Size of the supreme council or management council.	14	3.64	5	4.00	22	4.05	28	3.82
14.	Functions of the council (setting strategies)	14	1.14	5	1.60	22	1.18	28	1.14
15.	Functions of the council (advice).	14	2.64	5	2.00	22	2.36	28	2.36
16.	Functions of the council (control).	14	3.21	5	2.80	22	3.41	28	3.18
17.	Functions of the council (supervision).	14	2.93	5	3.60	22	3.05	28	3.32
18.	Priority economic allocation (research).	14	3.93	5	4.00	22	4.09	28	4.11
19.	Priority economic allocation (teaching).	14	4.71	5	4.00	22	4.00	28	4.29
20.	Priority economic allocation (university welfare).	14	2.57	5	3.20	22	2.45	28	2.25
21.	Importance of accreditation.	14	4.86	5	4.80	22	4.86	28	4.96
22.	National ranking.	14	2.64	5	2.40	22	3.00	28	3.57

Source: Own elaboration

Results and discussion

Before establishing the characteristics of the groups, we will jointly analyse some of the most relevant items. First, we highlight the low score for all of the conglomerates in the item that refers to the eradication of corrupt practices (Ho, 2005). It may be that in the sphere of education this type of practice is infrequent. Moreover, the low score for all of the groups in the case of some of the 'functions of the council' is also quite noteworthy, specifically in the case of setting strategies. These functions are fundamental in order to ensure long-term growth and as a means of support for the normal development of activities. Both of these functions are strongly supported in the business community, although it might be the case that they are present in organizations where CG mechanisms are well developed whereas in the sphere of Colombian universities this seems to be a novel concept, as can be seen in the fact that there has been no real agreement about these questions. We also observe a low score for all of the groups in relation to concern for university welfare, although this may be due to the greater concern shown about other questions which are closer to the quality of the university. Finally, in general, the institutions surveyed did not show any great interest in appearing in national rankings, except for the last group as we shall now see.

Figure 1. Dendrogram obtained with the Ward method.

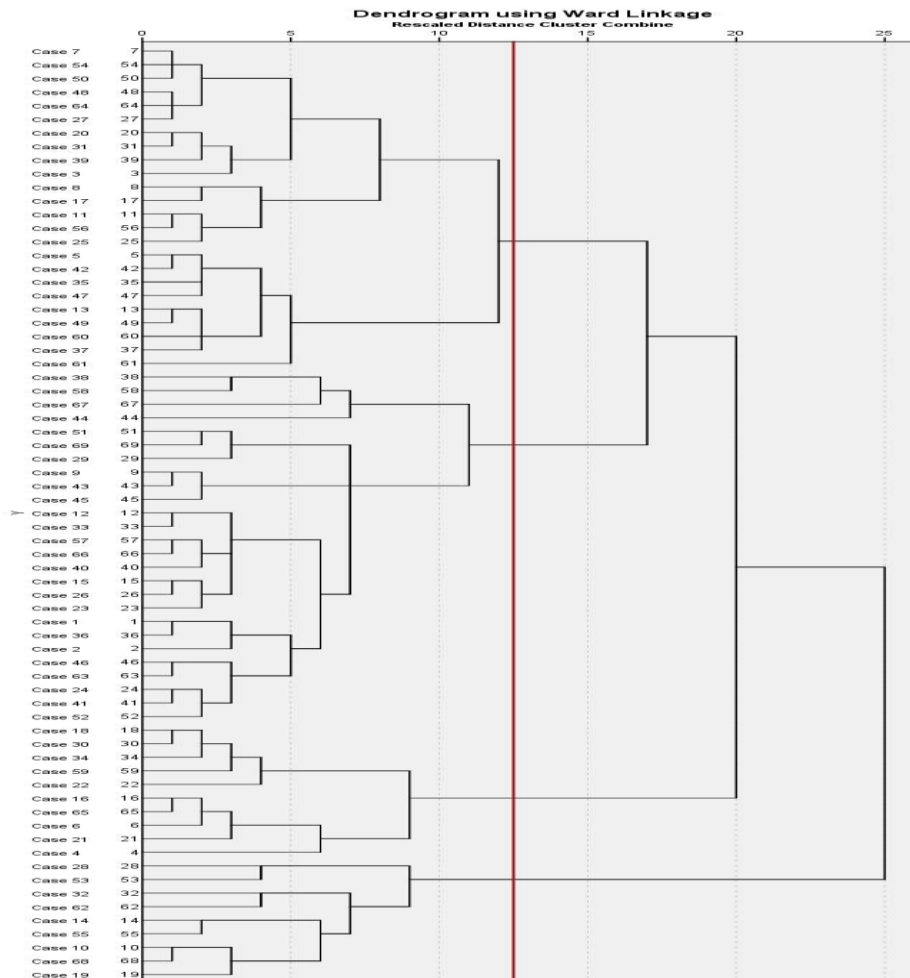
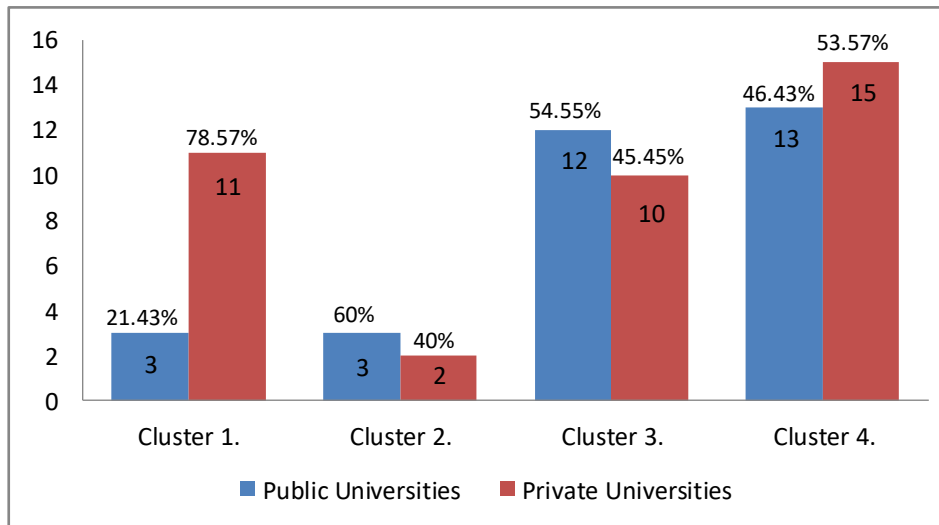


Figure 2. Universities included in each cluster.



Source: Own elaboration.

In Cluster 1, the universities could mainly be identified with the European management model, which is characterized by its orientation towards stakeholders and collegiate management. In this cluster, the main group is formed by public institutions (55 percent). The aspects which coincide most in terms of fulfilment are the setting of the mission and vision, and less importance is attached to organizational structure and reports. A similar score is given to priority in the allocation of resources both to research and to teaching, and show a budgetary interest in raising the level of research. At the same time, if we compare it with the other clusters, this is the group that places the greatest value on welfare, typical in the stakeholders model (Hung, 1998). Regarding the commitments included in the codes, first is the commitment to quality followed by the commitment to corporate social responsibility, which indicates the importance for management of taking into account the views of different stakeholders (Huisman et al., 2015). In relation to CG structure, the highest-scoring questions are the composition and size of the supreme council, and the availability of information. The most valued function of the council is advice and supervision, which are characteristics of the stakeholder model, against control that fits with the managerial model (Kehm, 2012). The institution is committed to justifying its actions to society at large, and is based on the relevant legal framework (Oliva, 2009). We must also consider the need to meet the requirements established by the state in terms of accountability to Colombian public institutions, that is, management of the budget.

In relation to Cluster 2, the universities that make up this conglomerate are mainly public (60 percent). Their model cannot be clearly identified as a welldefined model. The number of universities in this group is not significant, which indicates that it is not a widespread model. Although they have lower scores than those in the previous group, the universities in this group give significant value to the fulfilment of their vision, their strategic plan and, to a lesser extent, transparency in their reports. Their priorities in terms of allocating resources are the same as those of the previous group, that is, research and teaching. This group gives great priority to quality – the accreditation of their degrees. They also take account of stakeholders' welfare and, at the same time, one of the most important

commitments for this group is accountability to provide relevant information to the members of the council, which is typical of a managerial model.

The model represented by Cluster 3 shows a greater tendency to follow the American model – focused on accountability – as can be seen in questions such as the importance of control, the commitment to quality and transparency (De Boer et al., 2010; Dixon and Coy, 2007), the allocation of most of the funding to cover teaching, or the importance of the selection of university managers and the availability of the information necessary to control management (Kehm, 2012). Moreover, this cluster adopts some aspects of the European model – which is identified more with collegiate management and is aimed at stakeholders – in the setting of its mission, vision and in the commitment to social responsibility as well as the consideration of university welfare as a priority in the allocation of funding. Although there is a mix of the two models, this conglomerate shows a strong tendency towards the Anglo-American model, since its scores are higher for items related to that model.

Cluster 4 is the one which is most closely identified with the managerial model. Specifically, it has the highest score in terms of vision, which is very typical of the Anglo-American model. The score for the existence of an organizational structure and the division of functions is relevant, whereas this was scarcely relevant for the other groups. Moreover, this cluster attaches considerable importance to the process of selecting university managers, the composition of management structures and the information that these managers should receive in order to carry out their work. Regarding commitments, the most relevant ones are quality – with the most importance attached to the part of the budget allocated to teaching and research (Bernasconi, 2008) and accountability (Faccio et al., 2001). In relation to the functions of the council, the most relevant question is control, followed by supervision, which are typical aspects of the managerial model (Hung, 1998; Mora, 2001).

Although each group has a specific set of characteristics, we should point out that for some items there is a high degree of homogeneity due to the existence of a regulatory framework that establishes the number of members. These regulations are influenced by and originate in the European collegiate model.

Nevertheless, there are some differences in terms of the contents of the codes. The most important aspect for all concerned is quality and, in the case of Clusters 3 and 4, these groups apply more elements from the managerial or Anglo-American model, whereas for Cluster 3 social responsibility is also an important aspect, which is more closely identified with the stakeholder model. In this sense, Cluster 3 could be considered a hybrid model.

Regarding the functions of the council, Clusters 1 and 2 attach more importance to the functions of setting strategies. It could be said that they are more oriented towards the stakeholder model, since Colombian universities have traditionally adopted the European model of management. For Clusters 3 and 4, the most relevant function is control, and thus we can state that their management is more focused on accountability and can be identified with the Anglo-American model of management (Hung, 1998; Mora, 2001).

Moreover, Cluster 4 values questions such as research and competitiveness more highly than the universities in Clusters 1, 2 and 3. This group, which is mainly composed of private universities, has to be accountable and show its competitiveness due to the way

in which it is funded. Private universities need to look for other alternatives – companies, benefactors, graduates – in order to generate new sources of funding in addition to student fees. The way in which they are funded, mainly through private capital, leads to the adoption of the Anglo-American model. Furthermore, the practice of publishing information about external evaluations and measures of prestige (rankings) is linked to the Anglo-American model, as these are indicators of the efficiency and the effectiveness of the management system in place (Leydesdorff and Shin, 2011).

The publication of their position in the national ranking compensates for the fact that Colombian universities are not well placed in international rankings. In the national ranking, there is a great deal of competitiveness on the part of both public and private universities in order to reach the top positions. Furthermore, not all Colombian universities currently have their academic programmes accredited since this is not a mandatory requirement. Therefore, we must highlight the importance that all of the groups attach to accreditation.

Therefore, and according to the results obtained from the cluster analysis, we can state that Colombian universities have three types of management divided into clearly identified groups: the first model is what we could call a mixed one, as it uses elements from both the European management model and the Anglo-American model (Clusters 2 and 3); the second management model gives priority to questions included in the stakeholder model (Cluster 1) and, finally, the managerial or Anglo-American model which incorporates the greatest number of characteristics related to control and accountability (Cluster 4). Both models, market orientation and stakeholders, have been adopted, showing that there is no single valid model of governance in Colombia. We see the influence of both America and Europe, but also the culture, tradition and history of the country (Kehm, 2012).

Conclusions

In general, Colombian universities are immersed in a process of transformation and reform that is affecting the model of governance. CG is a novel concept (Taylor, 2012) and the results show that there is no agreement about a common model of governance and possibly about the idea of university (Jemielniak and Greenwood, 2015; Levy, 1986). These changes can be an opportunity to overcome the problems of universities in Colombia, typical of those of Latin America (Bernasconi, 2008), without losing the traditions and characteristics of that cultural context (Kehm, 2012; Readings, 1996).

Colombian universities have traditionally applied and implemented the European management model, as is demonstrated by the importance that they attach to questions such as establishing the mission, vision or the justification for their actions. As changes have gradually been introduced in the European model to bring it closer to the stakeholder model, modifications have also taken place at Colombian universities and they have been aimed at achieving increased participation of different stakeholders from the academic community in the management of universities and greater concern for quality in terms of both teaching and research.

Furthermore, the influence of the Anglo-American world has led to changes in the management of Colombian universities, and perhaps this has been even more notable in the case of private universities. Questions such as transparency, the increased importance

attached to the task of supervision or the issue of accountability at Colombian universities can be the means through which management can legitimize its actions.

Our results show that Colombian universities apply three models, in one of which there is a predominant presence of the characteristics of the stakeholder or collegiate model, in another there is a stronger presence of the managerial or Anglo-American model, and a third model which takes elements from both. The implementation of the Anglo-American model is due not only to the strong influence of American universities who occupy the top positions in the world rankings (Leydesdorff and Shin, 2011) but also to the introduction of a series of laws that seek to implement CG mechanisms in public sector organizations in order to make these institutions more efficient and more effective (Hung, 1998).

Our research has shown that Colombian universities incorporate CG questions into their management. An indication of this is the interest shown by their leaders in greater transparency in terms of publishing information about their mission, their vision, their strategic plan and their organizational structure as well as the functions performed by universities and even their annual reports on their different websites. The CG measures implemented help us to understand the different models of governance adopted at the universities.

The interest shown by Colombian universities in CG-related questions and the differences in the models that currently exist lead us to argue for the importance of developing a process of homogenization and unification of CG information and the adoption of a model that could allow for comparison between universities and analysis by external observers. First, they must define the model of university. The adoption of CG mechanisms may help to achieve greater effectiveness and efficiency in the management of resources, but it is important to improve awareness towards society that has characterized Latin American universities.

One implication of our study is that there is a need to promote the establishment of a common legal framework without which the data provided depend on the preferences and influences exerted on management organs or from other cultures. The model should be flexible to include different opinions and preferences. The observation of laws in other countries shows the broad debate, the different opinions about the management model and the lack of consensus on them. This issue should be taken into account when setting the normative framework in those countries in which there is no legal framework.

A possible limitation of this study is that it has analysed the perception of rectors regarding the CG model in universities, and in the Colombian context this may be influenced by their professional profile and the public or private nature of their institutions. Therefore, the study could be extended taking into account these factors and other related aspects as well as being applied to other countries. This could be the basis for further research and could lead to a more indepth understanding of the phenomenon as well as a comparison of the different results obtained.

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