

Exploratory Factorial Model of Corporate Governance around Vocational Training

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Abstract

In administrative economics, factor analysis models are essential due to their explanatory capacity of institutional responses to a risk event. The objective of this document was to contrast a model that explains the emergence of corporate governance dimensions in the face of the pandemic. For this, an exploratory study was carried out based on a systematic review of the literature from 2020 to 2023, considering the search by keywords in Google Scholar and Microsoft Academic, as well as the validity by judges and the survey of 100 students from a public university. from central Mexico. The results show that corporate identity explains the university's response to the pandemic. In relation to the state of the art, the scope and limits of the model in relation to other proposals are discussed.

Keywords: intellectual capital, training, pandemic, model.

1. Introduction

As of March 2023, after two years, the pandemic has taken the lives of six million people (de la Torre and Quiroz, 2020). The public health system implemented distancing and confinement policies that impacted the educational systems (Ruíz et al., 2021). The transition from the traditional classroom to the virtual classroom supposes the emergence of an innovative link system between the academy and the labor market (Boadas and Marín, 2022). The formation of intellectual capital in the virtual classroom assumes permissible risk gradients, although the relationships with the determinants anticipate risk scenarios (Schebesta, 2021). Analysis of the fuzzy logic of random events has revealed emerging entities such as university governance, corporate reputation or professional training.

University governance, indicated by identity, reputation and corporate image, predicts academic training (González et al., 2020). Defined as a system of negotiation, consensus and responsibility; includes managers, producers and disseminators of knowledge as interested parties. Corporate identity (or sense of belonging) is seen in the rational choice of belonging to a group. Corporate reputation refers to a community's self-concept in the face of a risk event and the availability of resources. The corporate image, defined as the future choice based on expectations of abundance of resources and minimization of costs, reflects university governance.

In the corporate governance structure, training, image, reputation and identity are preponderant factors in the management, production and transfer of knowledge (Legler, 2021). Studies on corporate governance have shown that it is an emerging phenomenon. The description of this process can be done from fuzzy logic. Knowledge managed, produced and transferred reaches its goal when it is the product of academic, professional and work training.

Until now, March 2023, it is known that the corporate reputation of Higher Education Institutions (HEIs) consists of the formation of human capital committed to the sociopolitical context of Mexico (Robayo and Villarreal, 2020). Corporate governance in its identity modality underlines the uses and customs that distinguish a university from others, considering the insertion into the local market. Fuzzy logic is a theoretical and empirical framework that allows explaining the bifurcations of risk events such as the pandemic on corporate governance indicators.

2. Literature Review

Corporate identity, being related to the conflict between the parties due to emotions of belonging, undermines the external image (Ceballos, 2022). An increase in deals fosters inbreeding expectations. The curricula are oriented towards internal capacities and nullify academic competitiveness. The reputation associated with identity consists of the self-concept of the institution. If the policies that favor university members increase, the self-concept of this academic community reduces its comparison with other institutions. Global or national indicators of institutional performance lose meaning when corporate reputation increases.

However, the external image of the university measured through the Program for International Student Assessment (PISA) contravenes the reputation and corporate identity (Finol, 2021). An increase in PISA test scores suggests a reduction in corporate reputation if your communities are inbred in their teaching methods. Conflicts between the university's endogamous criteria and the PISA test increase reputation and identity, but reduce corporate governance to an internal matter.

Instead, corporate governments that have a high identity and reputation manage strategic alliances with other institutions. The mere interdisciplinary or multidisciplinary training, derived from strategic alliances between universities and companies, suggests an open corporate governance (Fernández-Fernández, 2021). The absence of international alliances and tests, as well as an unknown ranking of the university reflect an inbred corporate governance.

In this sense, are there significant differences between the relationships of the categories related to government, identity, reputation, image and training with respect to the observations made in this work, considering the COVID-19 era?

The premises that guide this work suggest: 1) The pandemic and the containment and mitigation policies, focused on the distancing and confinement of people, affected the corporate governance of the universities; 2) Universities and companies formed strategic alliances around the management, production and transfer of knowledge 3) Identity, reputation and corporate image increased, influencing academic, professional and labor training; 4) The policies of immunization, lack of confinement and return to the classroom

affect the corporate governance of the universities; 5) Identity and reputation increased as a reaction to face-to-face educational policies, but the corporate image was reduced due to the conflict between political and social actors.

3. Research Method

For this research, an exploratory and descriptive work was carried out with a selection of sources indexed in international repositories, considering the search by keywords: government, identity, reputation, image and academic formation. The above was investigated in Google Scholar and Microsoft Academic, considering the period between the pandemic from December 2020 to March 2023.

A total of 56 abstracts were selected to establish the relationships between the categories. Based on a Delphi Inventory, judges who are experts in the topics rated the relationships between the summaries; considering 1 for training, 2 for identity, 3 for reputation, 4 for image and 5 for corporate governance.

In three rounds, one qualifying, one feedback and one reiterative, the judges evaluated and compared their appreciations regarding the relationships between categories. Six articles were selected in which corporate governance stands out as a configuration of identity, reputation and image, but with an emphasis on academic training.

Once the categories were established, the Corporate Governance Scale (EGC-18) was developed, considering the validity by judges and a preliminary pilot with 100 students, following the confidentiality and anonymity protocol.

As a result, the instrument was sent to the students' institutional mail. An informed consent form was attached, following the anonymity and confidentiality protocol. The data was captured in Excel and processed in JASP version 15, considering the values of distribution and contrast of contingent relationship hypotheses, as well as structural, adjustment and residual modeling.

4. Findings and Discussions

The values related to the non-parametric distribution, and contingency relationships between the categories evaluated by the judges in three rounds: qualifying, feedback and reiterative. Distributions are appreciated that allowed analysis of relationships between variables due to the internal consistency of the scale (see Table 1).

Table 1 . KMO Adequacy of the instrument

<u>Kaiser-Meyer- Olkin test</u>	
<u>MSA</u>	
Overall MSA	0.621
r1	0.305
r2	0.731

r3	0.751
r4	0.519
r5	0.704
r6	0.672
r7	0.328
r8	0.643
r9	0.510

Note. Own elaboration with the study data: McDougal = .794; Cronbach = .815; Bartlett X²

= 1663.772 (153 gl) p < .001

For its part, the structure of relationships between the categories identity, reputation and corporate image that explain the configuration of corporate governance in the study literature. Corporate identity was more identified by the evaluation of the judges regarding reputation and image (see Table 2). The finding is limited to the theory of corporate governance, where identity is revealed as a process underlying risk events that exalt the institution, but reduce its image with respect to its training capabilities.

Table 2. Factors of Corporate Governance: identity, reputation and image in the formation of intellectual capital

	Factor 1	Factor 2	Factor 3	uniqueness
r1			0.930	0.218
r2	-0.924			0.170
r3		0.697		0.391
r4		0.416	0.500	0.403
r5	-0.959			0.088
r6	0.673	0.537		0.123
r7				0.821
r8	0.821			0.363
r9		-1002		0.090

note. Applied rotation method is promax .

Note. Own elaboration with the study data: $\chi^2 = 300.065$ (102 gl) $p < .001$; TLI = .800; RMSEA = .126 | F1 = Identity, F2 = Reputation, F3 = Image, r = Reactive, e = Measurement error

The corporate reputation is configured from evaluations in which the judges determined the self-concept of the institution through the articles analyzed. A lesser structure is appreciated with respect to identity, but greater with respect to the image. The finding corroborates the theory of corporate governance. In a risk scenario such as the pandemic, institutions take care of their self-concept by synchronizing objectives, tasks, and goals. Corporate identity and reputation increase, but the image of the institutions decreases due to their agenda of internal priorities.

The corporate image understood as the self-perception of the respondents regarding the evaluations of other institutions on their academic, professional and work level. The construct is associated with the other two factors in the explanation of corporate governance in the face of risk events. In this way, the corporate image indicates that the institution took care of its image, even when the training of talents was managed in exceptional settings.

The adjustment and residual parameters suggest the non-rejection of the null hypothesis regarding the significant differences between the categories subtracted from the literature, with respect to the evaluations of expert judges on the subject.

The contribution of this work lies in the establishment of three dimensions: identity, reputation and image, related to the corporate governance of a university in central Mexico. The identity dimension, alluding to the institution's soft resources, was configured based on eight items referring to trust, empathy, values, motives, and dispositions. The reputation dimension, concerning cognitive resources such as skills, intentions, and strategies, explains the internal capacities of the university in the face of the pandemic. The image dimension, corresponding to external concepts, suggests strategic alliances between the university and companies (Riggirozzi , 2020). The contrast of the model established in other samples will allow delineating future studies to corroborate the theory of corporate governance.

In relation to the theory of corporate governance, which explains the emergence of identity, reputation and image in the face of a risk event, this paper has established the link between the three factors. The established three-dimensional model suggests the prevalence of identity as a central factor of corporate governance in the face of Covid-19. It means then that the soft capacities of affects, emotions and feelings explain the greatest variance of corporate governance. That is, the university in the face of the pandemic closed the interaction with other institutions and strengthened human relations (Díez-Gutiérrez, 2021). The procurement of emotions led to a distance from other institutions that resulted in a closed image of corporate governance. In addition, the absence of hard skills such as competencies, skills, and strategies reduced adaptation to change at the university. The contrasting of the hypothesis regarding soft capacities as preponderant of the institutions in risk scenarios should anticipate the emergence of hard capacities in post-contingency situations.

Regarding the instrument to measure corporate governance, which reached values higher than the essential minimum consistency; This paper suggests the use of the Corporate Governance Scale (EGC) in order to explain the responses of institutions to the pandemic. The EGC will make it possible to compare the corporate governance of universities and the dimensions that make it up. In the case of identity as a preponderant factor, the EGC will make it possible to compare the levels of reputation and image of universities against Covid- 19.

5. Conclusion

Corporate governance was explained from three dimensions reported in the literature and formed in the observations made in this work. Corporate identity is the preponderant factor that the literature identifies as an emerging factor in risk events. The corporate governance made up of the three dimensions suggests that the pandemic activated an inbred response from the university, closing collaborations with other universities, but strengthening internal relations. Corporate identity is the result of the contingent situation. Social distancing and confinement increased the soft capabilities of the university. Emotions, affections and feelings increased trust and empathy among the members of the university. However, it reduced its comparison with other universities in terms of entrepreneurship, innovation, productivity and competitiveness. The corporate identity meant a high degree of satisfaction and a sense of belonging to the institution, but without sufficient collaboration to face the challenges of the local labor market. The policies of confinement and social distancing, when replaced by policies of return to the face-to-face classroom, will promote an increase in reputation and/or corporate image.

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