Original article

Variables for measuring social responsibility and social impact of Cuban banks



Variables para la medición de la responsabilidad social e impacto social de los bancos cubanos

Variáveis para medir a responsabilidade social e o impacto social dos Bancos cubanos

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Received: 17/01/2023 Accepted: 22/03/2023

ABSTRACT

Corporate Social Responsibility is a subject widely covered in the scientific literature from different approaches and perspectives, with a growing application in business practice. The banking sector has not been exempt from this influence and it is recognized that banking institutions are characterized by the assumption of social responsibility in their business philosophy and the publication of sustainability reports, which seek to make visible the social impacts of their activity. The objective of this study was to determine the variables for the measurement of social responsibility and the social impact of banks with a view to the preparation of sustainability reports in the Cuban banking sector. The methodology used corresponds to a mixed, cross-sectional, nonexperimental approach research, where the content analysis technique and the Matrice d' Impacts Croisés Multiplication Appliqués à un Classement strategic prospective technique were used. At the theoretical-conceptual level, a definition of Banking Social Responsibility contextualized to the particularities of Cuban banking is proposed. As a result, 17 variables were determined, conceptualized and classified by the triple dimension of social responsibility, of which 12 were classified as key and six as potentially strategic, where capital yield, communication, information and innovation and dissemination stand out. 58.8% of the identified variables correspond to the social dimension. The result of this study creates the bases for the design of indicators contextualized to the country's banking activity, but considering the international experience on the subject.

Keywords: banks; social impact; measurement; social responsibility; variables.

RESUMEN

La Responsabilidad Social Corporativa es un tema ampliamente tratado en la bibliografía científica desde diferentes enfoques y perspectivas, con una creciente aplicación en la práctica empresarial. El sector bancario no ha estado exento de esta influencia y se reconoce que las instituciones bancarias se caracterizan por la asunción de la responsabilidad social en su filosofía de negocios y la publicación de memorias de sostenibilidad, que buscan visibilizar los impactos sociales de su actividad. El objetivo del presente estudio fue determinar las variables para la medición de la responsabilidad social y el impacto social de los bancos con vista a la elaboración de memorias de sostenibilidad en el sector bancario cubano. La metodología utilizada corresponde a una investigación de enfogue mixto, transversal, no experimental, donde se utilizó la técnica de análisis de contenido y la técnica de prospectiva estratégica Matrice d' Impacts Croisés Multiplication Appliqués à un Classement. En el plano teórico-conceptual, se propone una definición de Responsabilidad Social Bancaria contextualizada a las particularidades de la banca cubana. Como resultado, se determinaron, conceptualizaron y clasificaron por la triple dimensión de la responsabilidad social 17 variables, de las cuales 12 clasificaron como clave y seis como potencialmente estratégicas, donde se destacan rendimiento del capital, comunicación, información e innovación y difusión. El 58,8 % de las variables identificadas corresponden a la dimensión social. El resultado de este estudio crea las bases para el diseño de indicadores contextualizado a la actividad bancaria del país, pero considerando la experiencia internacional en el tema.

Palabras clave: bancos; impacto social; medición; responsabilidad social; variables.

RESUMO

A Responsabilidade Social das Empresas é um tema amplamente tratado na literatura científica a partir de diferentes abordagens e perspectivas, com uma aplicação crescente na prática empresarial. O sector bancário não tem estado isento desta influência e é reconhecido que as instituições bancárias se caracterizam pela assunção da responsabilidade social na sua filosofia empresarial e pela publicação de relatórios de sustentabilidade, que procuram tornar visíveis os impactos sociais da sua atividade. O objetivo deste estudo foi determinar as variáveis para medir a responsabilidade social e o impacto social dos bancos com vista à elaboração de relatórios de sustentabilidade no sector bancário cubano. A metodologia utilizada corresponde a uma abordagem mista, transversal e não experimental de investigação, utilizando a técnica de análise de conteúdo e a técnica prospectiva estratégica Matrice d' Impacts Croisés Multiplication Appliqués à un Classement. A nível teóricoconceptual, é proposta uma definição de Responsabilidade Social Bancária, contextualizada com as particularidades da banca cubana. Como resultado, 17 variáveis foram identificadas, conceptualizadas e classificadas pela tripla dimensão da responsabilidade social, das quais 12 foram classificadas como chave e seis como potencialmente estratégicas, nomeadamente retorno do capital, comunicação, informação e inovação, e divulgação. Das variáveis identificadas, 58,8% correspondem à dimensão social. O resultado deste estudo cria a base para a concepção de indicadores contextualizados para a atividade bancária do país, mas considerando a experiência internacional sobre o assunto.

Palavras-chave: bancos; impacto social; medição; responsabilidade social; variáveis.

INTRODUCTION

Corporate Social Responsibility (CSR) or Enterprise (CSE)¹ is a subject widely covered in the scientific literature. Numerous authors have ventured into the subject from different approaches and perspectives (Burgos Romero, 2018; Carroll, 1979; Freeman, 1984; Lizcano Prada & Lombana, 2018;

¹ CSR and CSE are used interchangeably.

Pache Durán & Nevado Gil, 2020). However, they all agree, explicitly or implicitly, that it represents a level of commitment to ethical and responsible behavior by the company towards its stakeholders, society and the environment, based on the recognition that business activity generates negative impacts.

This term is defined for the first time by the American Bowen (1953) when he expresses that corporations have a social responsibility to restore to society part of what it had provided them. This first definition of the term assumes that CSR represents the obligations of businessmen to apply policies in their businesses and follow lines of action in correspondence with the objectives and values of society.

Based on this definition, there are multiple actions developed in the past and current century in the field of CSR, related to the formation of international organizations, best practice standards, forums and reports. Simultaneously, important contributions are made in academia, where the studies of Carroll (1979) stand out, which defines for the first time the responsibilities of the company such as: economic, legal, ethical and philanthropic and the Theory of Stakeholders, developed by Freeman (1984) that specifies as the center of Corporate Social Responsibility any person or group that affects or is affected by the activity of the company. However, it is in the last two decades that Corporate Social Responsibility has become an important factor of business growth and has been the center of interest of management, as a way of informing its stakeholders about the concern and occupation by a socially responsible act with society and the environment.

In the regulatory field, the promulgation of the International Standard for Social Responsibility ISO 26000 stands out, a joint effort of the International Organization for Standardization, the Swedish Standardization Institute, the Brazilian Association of Technical Standards and 52 countries. This standard promotes the use of a common vocabulary, culture and conscience in the field of Social Responsibility.

These events, both at the academic and practical levels, have made it possible to develop a broad and agreed theoretical framework on the subject. However, it is recognized that the design and implementation of a universal model that measures all aspects considered in CSR has not been achieved. The banking sector has not been exempt from this influence and it is recognized that banking institutions are characterized by the assumption of CSR in their business philosophy and the publication of sustainability reports, which seek to make visible the social impacts of their activity.

But, what is meant by social responsibility for this sector?

Social Responsibility for the banking sector has been defined in different ways, where the following meanings stand out:

- European Union (2011), cited in Sanchis and Rodríguez (2018, pp. 210-211):
 - A banking entity is socially responsible if, in its investment, asset management and financial intermediation activity, it adequately manages the risks, opportunities and impacts that said activity has on society. It will be socially responsible if environmental, ethical and social issues are considered in the design of the products and services it offers, in its credit and investment policy and ultimately in its entire business strategy, as well as if it has mechanisms to control it.
- De la Haza (2010, p. 331):
 - "The use of knowledge and financial experience to raise the level of bankarization through mechanisms of social inclusion."
- Ulaje Escobedo et al. (2019, p. 36):
 - The permanent commitment by banking organizations to contribute to economic development and care for the environment, while improving the quality of life of their employees and their families, the community to which they belong and society in general.

These ideas show the absence of a fully agreed definition for this sector.

The authors of this study define Banking Social Responsibility (RSB in Spanish) as "The commitment and occupation of banking institutions to contribute to sustainable development with financial and social inclusion, through internal and external management that is transparent and responsible for the impacts, risks and the opportunities of its activity, prioritizing environmental, ethical and social aspects in the design of its products and services, in its credit policy, in the development of responsible investments and timely attention and information to its interest groups". To arrive at this conceptualization of Banking Social Responsibility, studies on the subject, the objectives of the United Nations 2030 Agenda and current trends in banking, both internationally and in the national context, were taken into account. These trends are fundamentally related to the use of virtual platforms for essential processes and main businesses, alliances with non-bank financial technology institutions (fintech), the growth of financial innovations, the increase in banking risks and the adoption of financial management oriented towards financial and social inclusion.

However, it is worth noting that different authors consider that publications on CSR in the banking sector are fundamentally aimed at analyzing the content of banks' annual reports, their internet pages and advertising with the essential purpose of knowing the impact they have on their groups of interest, while emphasizing the non-existence of a single and consensual model in this sector (Alonso Cañadas et al., 2018; De la Haza Barrantes, 2010; Sanchis Palacio & Rodríguez Pérez, 2018; Ulaje Escobedo et al., 2019).

In the national context, studies on social responsibility and social impact of banks were located from the following perspectives:

- Caballero Moya (2016): addresses the evaluation of the economic impacts of granting loans to the non-state sector on the financial results of Banco Popular de Ahorro de Villa Clara.
- Borrás Atiénzar (2017): approaches from a social perspective the influence that banking institutions exert on equity and sustainable development.
- Thomas Perez et al. (2018): carry out an analysis from an environmental perspective, proposing a group of measures to reduce the impacts of banking activity.
- Lima and Fernández (2018): from the perspective of community communication, it addresses the implication of the practices that daily affect the internal life of workers, as well as the importance of building a culture of organizational participation and its impact on the quality of services.
- Soler Ferrer et al. (2020): from the environmental point of view, they reflect a diagnosis of the environmental aspects and impacts in the branches of the Banco de Crédito y Comercio (Bandec) Guantánamo branch, making a procedural proposal for the integration of environmental activities in the system of accounting information.
- Borrás Atiénzar (2020): addresses financial inclusion, social impact and intellectual capital from different approaches in a comprehensive analysis of development proposals necessary to introduce in Cuban banking.

As can be seen, there is no agreed framework on the measurement and exposure of banking social responsibility at the international level and in the national context it is a recent research topic in this sector.

It is known that as part of the improvement that the country undertakes in the Cuban banking sector, work is being done in order to measure social responsibility and the social impact of banking activity, as a premise for the preparation of sustainability reports.

In this context, the objective of the present study is to determine the variables for the measurement of the social responsibility and the social impact of the banks with a view to the elaboration of sustainability reports in the Cuban banking sector, since the determination of the variables constitutes a previous step for the delimitation of the indicators that will be considered in these reports.

MATERIALS AND METHODS

The study presented corresponded to a mixed, cross-sectional, non-experimental approach research, where content analysis techniques and the MICMAC strategic prospective technique were used. This study consisted of three moments:

Moment 1. Determination of the sample of banks to participate in the study.

To determine the sample of banks to participate in the investigation, intentional sampling was used, where the main banks in each region were selected based on their level of assets.

Table 1 reflects the sample of banks and their distribution by region, where it is evident that the highest percentage corresponds to the region of the Americas because it responds to the geographical area where the research is carried out.

Region	Amount	%
America	25	44.6
Europe	18	32.1
Asia	7	12.5
Australia	3	5.4
Africa	3	5.4
Total	56	100

Table 1. Sample of banks by region

Source: Own elaboration

The reports, memories or sustainability reports and the integrated management reports of the 56 banks studied correspond to 32 countries in the period between 2019-2021. The most representative years were 2020 (50%) and 2019 (33.9%)

It was worked with 5 identification variables (name of the bank, name of the report, continent, country, year of publication).

Moment 2. Analysis of the main variables for measuring social responsibility and the social impact of banks from the study of reports, reports or sustainability reports

<u>Step 1.</u> Through the content analysis technique of the 56 reports, the Bank Social Responsibility variables present in these are determined and the agreement between the banks is sought, applying the relative frequency, where the authors assume that a result e" 70% is valid to consider it as a variable. However, by applying the content analysis technique, the authors can make contributions to the results obtained.

<u>Step 2.</u> Conceptualization and classification of the variables determined in the previous step.

The authors, taking into account the theoretical treatment given to these variables in the reviewed reports and the particularities of Cuban banking, conceptualize the variables.

Subsequently, the variables identified by the triple dimension of Social Responsibility are classified: Economic-financial, social and environmental.

Moment 3. Influence and interrelationships between the variables defined and conceptualized by strategic prospective techniques.

Structural analysis was carried out, in order to relate the variables in dependency and influence parameters, using the MICMAC prospective tool.

Step 1. Creation of the group of specialists.

Intentional sampling is applied, where individuals that meet certain parameters are selected. In the case of this study, the following requirements are established:

- a) Have an experience of 10 or more years as a worker in the banking sector
- b) Have university level
- c) Have knowledge about Banking Social Responsibility

Step 2. Determination of the matrix of influence and dependence of the variables by the specialists.

First, each specialist selected in the previous step analyzes the degree of influence and dependence of each variable, using the following scale to assess the degree of influence:

- (0) There is no influence
- (1) If the influence is weak
- (2) If the influence is medium
- (3) If the influence is strong
- (P) If the influence is potential

Subsequently, the responses of the specialists are processed by mode and the matrix of influence and dependence of the consensus variables is determined.

Step 3. Identification of the types of variables.

The objective of this step is to identify those variables with great influence on Bank Social Responsibility. The foregoing focuses on the analysis of the behavior of direct influences and also what is the intensity of the variables through qualitative evaluations through the preparation of the influence graph and the dependencies of the variables.

Godet and Durance influence quadrants (2007).

Godet (2007), cited in Velásquez Lugo (2020), defines the following types of variables:

- Environment variables: They are little dependent variables.
- Regulatory variables: They are input variables and establish the guidelines to meet the objectives of other variables, especially the keys.
- Secondary lever: They are little influential variables and are not so important within the system. They have low motor skills and directing strategies towards them allows the key variables to level up.
- Objective variables: They are variables that are highly dependent on others and have a medium level of motor skills. Depending on the strategies and actions directed towards them, they can evolve into another type of variable.
- Key variables: They are known as challenge variables, they have a high mobility and a high degree of dependency and they determine their own way of acting in the system, they are not very stable and belong to the challenges to be overcome by the system.
- Result variables: They are variables with few drivers and are dependent on other variables together with the objective ones that describe the behavior of the system indicators.
- Autonomous variables: They are variables of very little motor skills and depend very little on other variables, they do not influence future development.
- Determining variables: They are highly dependent variables and with great motor skills they can promote or stop development.

The analysis of the influence and dependency graph makes it possible to identify the most influential and/or strategic variables in the RSB.

RESULTS AND DISCUSSION

The application of the content analysis technique in the review carried out on the 56 reports, reports or sustainability reports and the integrated management reports allow the initial determination of 25 variables, of which 16 (64%) are selected for having a relative frequency e" 70%.

In the analysis carried out, the authors consider it is pertinent to eliminate the variable **investment in education** and distribute its content in the aspect corresponding to the amount of financing allocated to the preparation of personnel to the variable **education and training for personnel development** and the part corresponding to amount of financing that the banking institution allocates to the preparation of the population in general, pass it to the **financial education variable**, since the financing destined to the education and training of personnel and the population enables the development of these actions.

Besides, **improvement of the standard of living of customers and employees** is separated into two variables: **Financial and social inclusion** and **improvement of the standard of living of workers** as they correspond to two interest groups with very specific characteristics and thus be able to draw up differentiated strategies for both.

The variable **support for community activities** changes its name to **support for community development**, as it is more comprehensive.

Despite not reaching 70% in the processing of the relative frequency, the variable **intangible banking added value** is added according to the authors' criterion. This decision responds to the importance that intangibles currently play in the success of organizations and the role that they can play in generating value for stakeholders.

Finally, 17 variables are determined, which are shown in table 2 with their corresponding conceptualization.

Table 2. Variables identified for the measurement of RSB and the social impact of Cuban banks

 and their conceptualization

Variable denomination	Code MICMAC	Variable conceptualization
Nondiscrimination	V01	It represents the right of people to use banking services and products without distinction of any kind, expressed in the composition of clients with emphasis on the composition by age and gender.
Social Integrality	V02	It represents the analysis of the customer base based on its composition by different criteria, such as educational level, age, occupation, among others.
Working environment	V03	It reflects the analysis of the stability and satisfaction of the human capital that works in the banking institution to put into practice the approved policies.
Return on capital	V04	It represents the analysis of the financial economic position of the banking institution as a result of the efficient use of resources, expressed in performance indicators.
Independence and transparency in information systems	V05	It evaluates whether the information systems and operating manuals used by the banking institution generate reliable, transparent, useful and timely information; as well as the independence in the use and exploitation of computer systems as technological supports of banking activity
Prevention of money laundering, terrorist financing and other illegal activities	V 06	It expresses whether the actions used by the banking institution lead to the timely detection of signs of money laundering operations, financing of terrorism and illegal activities; as well as the supervision of the transactions and operations carried out.

Contribution to institutional development as a result of education and training processes	V07	It expresses how the investment in education and training of personnel is reflected in the economic, social and environmental indicators of the banking institution.
Communication and information	V08	Evaluates the effectiveness of the application of the communication strategy of the banking institution within the organization and towards its stakeholders
Education and Training for Staff Development	V09	It expresses the amount of financing that the banking institution allocates to the preparation of its personnel, as well as the actions and projects that are developed for the preparation of the workers and managers of the banking institution.
Innovation and diffusion	V10	It expresses the development and introduction of new products and the problems solved by the personnel of the banking institution, as well as their diffusion towards the banking sector of the country and other interested social actors.
Financial Education	V11	It expresses the amount of financing that the banking institution allocates to the preparation of the population in financial topics, materialized in financial education programs aimed at different segments of the population, as well as the number of people trained.
Collaboration between financial institutions and other professional and social organizations	V12	It shows the agreements, covenants, and activities that the banking institution carries out in collaboration with other organizations (Academy, professional organizations, other companies) in the educational, business, social, and environmental fields.
Financial and social inclusion	V 13	Evaluates financial and social inclusion through the financial services and products provided to clients, expressed through indicators of access, use, and quality of financial products and services, with priority attention to vulnerable neighborhoods and groups.

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Improvement of the standard of living of workers	V14	Evaluates the attention provided to the workers of the banking institution and their families to increase their quality of life.					
Community development support	V15	It represents the contribution of the banking institution in number of actions, activities, programs and economic amounts to support community development in the communities where it has a presence.					
Contribution to environmental protection	V16	It expresses the activities carried out by the banking institution to contribute to the care of the environment and environmental sustainability within the organization, as well as the offer of sustainable banking products and services.					
Intangible Banking Value Added	V17	It expresses the quantification of the intangible benefits that customers receive for using the services of the banking institution as an offer of banking products and services at lower interest rates, aimed at vulnerable groups or prioritized sectors for economic or social development.					

Source: Own elaboration based on the study carried out

Of the 17 variables identified, the variables work environment, return on capital, independence and transparency in information systems, prevention of money laundering, financing of terrorism and other illegal activities, innovation and dissemination, and intangible banking added value, which represent 35, 3% of the variables correspond to the economic-financial dimension. The variables non-discrimination, social integrality, contribution to institutional development as a result of education and training processes, communication and information, education and training for personnel development, financial education, collaboration between financial institutions and other professional and social organizations, financial inclusion and social, improvement of workers' standard of living and support for community development (58.8%) belong to the social dimension, while the environmental dimension only corresponds to the variable contribution to environmental protection (5.9%).

For the application of the MICMAC, a group of 10 specialists from Camagüey's commercial banking who met the established requirements was formed. As a result of the individual work of the specialists and the processing by fashion, the following influence matrix was obtained:

	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17
V1	0	1	0	1	2	0	4	2	3	2	2	2	3	0	0	2	4
V2	1	0	2	2	1	1	2	1	2	1	0	1	1	0	0	0	0
V3	0	3	0	2	3	1	3	3	2	3	1	1	1	0	3	0	3
V4	0	4	3	0	3	1	3	1	1	3	2	2	1	0	2	0	4
V5	3	1	2	3	0	2	2	2	2	2	1	0	0	0	1	0	2
V6	0	2	3	2	2	0	1	1	1	1	0	0	1	0	0	0	2
V7	4	1	3	3	1	1	0	3	1	1	1	0	0	0	0	0	1
V8	4	2	2	4	2	1	1	0	1	2	2	1	0	0	1	0	1
V9	4	3	2	4	2	2	1	2	0	3	1	1	1	0	1	0	2
V10	3	2	1	3	1	1	1	2	2	0	1	1	1	0	0	0	2
V11	3	2	2	3	1	2	2	3	1	2	0	2	1	0	0	0	1
V12	2	3	0	2	1	1	1	2	2	1	2	0	1	0	0	0	1
V13	3	2	2	2	1	1	1	1	1	1	1	1	0	0	1	0	1
V14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
V15	0	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0
V16	0	1	0	1	1	1	1	2	1	0	2	1	1	0	0	0	0
V17	3	1	4	2	1	1	1	2	1	2	1	0	0	0	0	0	0

Graph 1. Matrix of Influence resulting from specialists
Source: Own elaboration

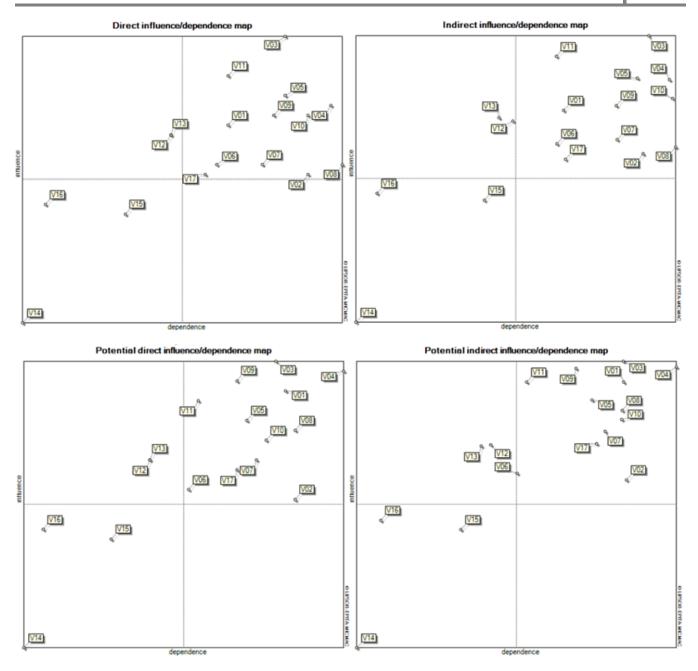
When processing by MICMAC Version 6.1.2 - 2003/2004, the classification of the variables by type was obtained, which is shown in graph 2.

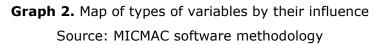
ISSN: 2310-340X | RNPS: 2349 | COODES Vol. 11 No. 1 e581 (January-April)

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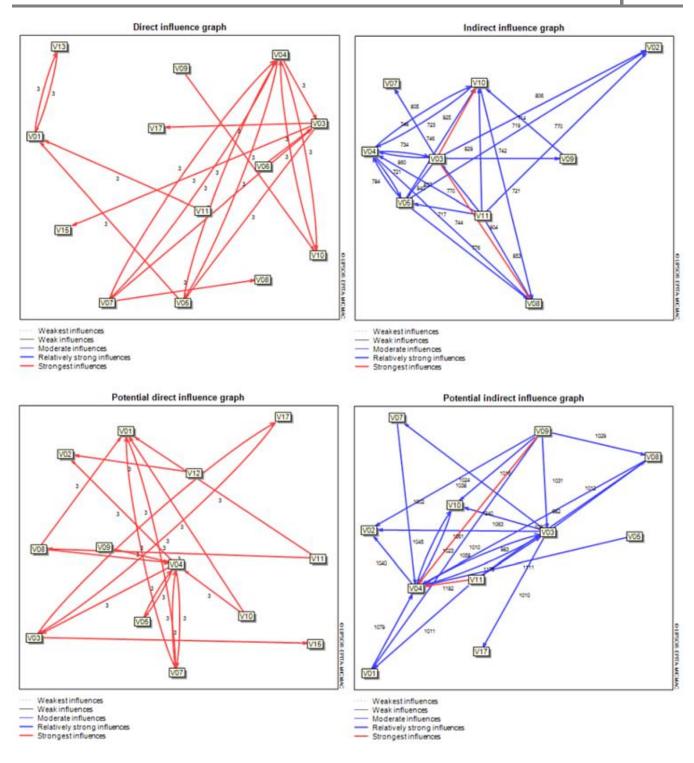
As observed, 12 variables (non-discrimination, social integrity, work environment, return on capital, independence and transparency in information systems, prevention of money laundering, financing of terrorism and other illegal activities, communication and information, education and training for development personnel, innovation and diffusion, financial education and intangible banking added value) show a high dependency and are influential for the development of RSB in the organization.

Variable V04 (return on capital) is recognized as the one with the highest risk, since it has the highest level of influence on the rest of the variables, but it is also the one with the greatest dependence on the rest of the variables.

Potentially strategic variables are determined: return on capital, work environment, nondiscrimination, communication and information, innovation and dissemination, and independence and transparency of information systems.

Graph 3 shows the influences between variables.

ISSN: 2310-340X | RNPS: 2349 | COODES Vol. 11 No. 1 e581 (January-April)Gálvez Fernández, A. R.; Borrás Atienzar, F. F.; Quiroz Serrano, L.; Torres Moras, I. J. "Variables
for measuring social responsibility and social impact of Cuban banks"2023Available at: https://coodes.upr.edu.cu/index.php/coodes/article/view/5812023



Graph 3. Influences between variables Source: MICMAC software methodology

As shown in graph 3, the direct influence shows that actions in the short term should be projected towards the efficient use of resources reflected in performance indicators, to the satisfaction and stability of human capital, the independence and transparency of the systems. informative, investment in education and training of personnel that is reflected in the economic, social and environmental indicators of the banking institution and the development of innovation and diffusion as the main technological support of this sector.

When analyzing the medium-term projection, the variables linked to the return on capital, innovation and dissemination, and the independence and transparency of information systems are ratified. Communication and information is added.

As can be seen in graph 3, there are variables that, from the short to the long term, are very influential for the organization (capital return and innovation and diffusion). It is interesting to note that despite the fact that financial education was not represented in the short and medium term as an influential variable, it must be taken into account for the long-term projection.

The identification of 17 variables by the content analysis technique with its corresponding conceptualization constituted the basis for the determination of the 12 key variables for the Cuban banking system, where, the return on capital, work environment, non-discrimination, communication and information, innovation and dissemination, as well as independence and transparency of information systems stand out as potentially strategic variables.

The analysis of the relationships and influences reflect the return on capital as the most influential and dependent variable, thus constituting the riskiest.

The variables identified with a strong social component (58.8% of the variables correspond to the social dimension) reflect the country's policy for sustainable and inclusive development, together with those of an economic-financial nature (35.3%) that reflect as a primary occupation of the Cuban banking sector the need for efficiency, quality and sanitation of the country's finances.

The result of this study creates the bases for the design of a system of indicators contextualized to the country's banking activity, but which takes into account the international experience on the subject.

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ISSN: 2310-340X | RNPS: 2349 | COODES Vol. 11 No. 1 e581 (January-April) Gálvez Fernández, A. R.; Borrás Atienzar, F. F.; Quiroz Serrano, L.; Torres Moras, I. J. "Variables for measuring social responsibility and social impact of Cuban banks" Available at: https://coodes.upr.edu.cu/index.php/coodes/article/view/581

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Conflict of interest

Authors declare that they have no conflicts of interest.

Authors' contribution

Francisco Fidel Borrás Atienzar and Anisabel Regla Gálvez Fernández designed the study, analyzed the data and prepared the draft.

Laritza Quiroz Serrano and Inés Josefina Torres Moras were involved in data collection, analysis and interpretation.

All the authors reviewed the writing of the manuscript and approve the version finally submitted.



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