

GLOBAL JOURNAL

OF MANAGEMENT AND BUSINESS RESEARCH: D

Accounting and Auditing

Evidence and Implications

Environmental Accounting Disclosure

Highlights

Multinational Firms in Nigeria

Bibliometric Study from 2010 to 2019

Discovering Thoughts, Inventing Future

VOLUME 21 ISSUE 2 VERSION 1.0

© 2001-2021 by Global Journal of Management and Business Research, USA



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: D
ACCOUNTING AND AUDITING

**GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: D
ACCOUNTING AND AUDITING**

VOLUME 21 ISSUE 2 (VER. 1.0)

OPEN ASSOCIATION OF RESEARCH SOCIETY

© Global Journal of
Management and Business
Research. 2021.

All rights reserved.

This is a special issue published in version 1.0 of "Global Journal of Science Frontier Research." By Global Journals Inc.

All articles are open access articles distributed under "Global Journal of Science Frontier Research"

Reading License, which permits restricted use. Entire contents are copyright by of "Global Journal of Science Frontier Research" unless otherwise noted on specific articles.

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without written permission.

The opinions and statements made in this book are those of the authors concerned. Ultraculture has not verified and neither confirms nor denies any of the foregoing and no warranty or fitness is implied.

Engage with the contents herein at your own risk.

The use of this journal, and the terms and conditions for our providing information, is governed by our Disclaimer, Terms and Conditions and Privacy Policy given on our website <http://globaljournals.us/terms-and-condition-menu-id-1463/>

By referring / using / reading / any type of association / referencing this journal, this signifies and you acknowledge that you have read them and that you accept and will be bound by the terms thereof.

All information, journals, this journal, activities undertaken, materials, services and our website, terms and conditions, privacy policy, and this journal is subject to change anytime without any prior notice.

Incorporation No.: 0423089
License No.: 42125/022010/1186
Registration No.: 430374
Import-Export Code: 1109007027
Employer Identification Number (EIN):
USA Tax ID: 98-0673427

Global Journals Inc.

(A Delaware USA Incorporation with "Good Standing"; Reg. Number: 0423089)
Sponsors: [Open Association of Research Society](#)
[Open Scientific Standards](#)

Publisher's Headquarters office

Global Journals® Headquarters
945th Concord Streets,
Framingham Massachusetts Pin: 01701,
United States of America
USA Toll Free: +001-888-839-7392
USA Toll Free Fax: +001-888-839-7392

Offset Typesetting

Global Journals Incorporated
2nd, Lansdowne, Lansdowne Rd., Croydon-Surrey,
Pin: CR9 2ER, United Kingdom

Packaging & Continental Dispatching

Global Journals Pvt Ltd
E-3130 Sudama Nagar, Near Gopur Square,
Indore, M.P., Pin:452009, India

Find a correspondence nodal officer near you

To find nodal officer of your country, please email us at local@globaljournals.org

eContacts

Press Inquiries: press@globaljournals.org
Investor Inquiries: investors@globaljournals.org
Technical Support: technology@globaljournals.org
Media & Releases: media@globaljournals.org

Pricing (Excluding Air Parcel Charges):

Yearly Subscription (Personal & Institutional)
250 USD (B/W) & 350 USD (Color)

EDITORIAL BOARD

GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH

Dr. John D. Theodore

American Military University
JDT Management Consultants, President.
D.B.A., Business Economy
University of South Africa
Ph.D. Aristotelian University
Business Administration
Ph.D. Administration, University of Kansas
USA

Dr. R. Allen Shoaf

B.A., M.A., Ph.D. Cornell University
Cornell University, Teaching Assistant in the English
Department,
University of Florida, US

Dr. Mehdi Taghian

Senior Lecturer
Faculty of Business and Law
BL Deakin Business School
Melbourne Burwood Campus
Australia

Dr. Agni Aliu

Ph.D. in Public Administration,
South East European University, Tetovo, RM
Asociater profesor South East European University,
Tetovo, Macedonia

Dr. Wing-Keung Won

Ph.D., University of Wisconsin-Madison,
Department of Finance and
Big Data Research Center
Asia University,
Taiwan

Prof. Mojí Moatamedí

Honorary Vice Chair
Ph.D., at The University of Sheffield,
MBA, Manchester Business School
University of Manchester
UK

Professor Maura Sheehan

Professor, International Management
Director, International Centre
for Management & Governance Research (ICMGR)
Ph.D. in Economics
UK

Dr. Carl Freedman

B.A., M.A., Ph.D. in English, Yale University
Professor of English, Louisiana State University, US

Dr. Tsutomu Harada

Professor of Industrial Economics
Ph.D., Stanford University, Doctor of Business
Administration, Kobe University

Dr. Xiaohong He

Professor of International Business
University of Quinnipiac
BS, Jilin Institute of Technology; MA, MS, Ph.D.,
(University of Texas-Dallas)

CONTENTS OF THE ISSUE

- i. Copyright Notice
- ii. Editorial Board Members
- iii. Chief Author and Dean
- iv. Contents of the Issue

- 1. Cost Hierarchy: Evidence and Implications. **1-16**
- 2. Environmental Accounting Disclosure and Financial Performance of Listed Multinational Firms in Nigeria. **17-28**
- 3. La Carrera De Contador Y La Sostenibilidad En Universidades De Latinoamérica Y El Caribe Desde Un Ranking Global De Universidades. **29-42**
- 4. Stratégies De Gestion Du Résultat Par Les Dirigeants En Période De Crise Sanitaire COVID – 19. **43-54**
- 5. Accounting Expertise: A Bibliometric Study from 2010 to 2019 in the Main Magazines of Brazil. **55-66**

- v. Fellows
- vi. Auxiliary Memberships
- vii. Preferred Author Guidelines
- viii. Index



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: D
ACCOUNTING AND AUDITING
Volume 21 Issue 2 Version 1.0 Year 2021
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Cost Hierarchy: Evidence and Implications

By Rajiv D. Banker, Gordon S. Potter & Dhinu Srinivasan

Temple University, Cornell University, University of Pittsburgh

Abstract- Empirical evidence on the association between overhead costs and non-volume related cost drivers is mixed. Anderson and Sedatole (2013) offer possible explanations for the lack of evidence and find that the cost hierarchy is descriptive of the association between resource consumption and production activity. In this paper, we provide evidence on the presence of the cost hierarchy by studying the behavior of indirect production labor costs using daily data for five years from seven production departments of an industrial equipment manufacturer. We find that in addition to direct labor costs, the number of setups and number of distinct parts are also significantly associated with indirect production costs in at least six out of the seven production departments. Interestingly, despite our evidence for the existence of the cost hierarchy, the simple method of estimating these indirect costs as a proportion of only direct labor costs performs remarkably well in predicting costs.

Keywords: *cost hierarchy, activity based costing, cost drivers, cost allocation, manufacturing overhead costs.*

GJMBR-D Classification: *JEL Code: M49*



Strictly as per the compliance and regulations of:



Cost Hierarchy: Evidence and Implications

Rajiv D. Banker^a, Gordon S. Potter^a & Dhinu Srinivasan^b

Abstract- Empirical evidence on the association between overhead costs and non-volume related cost drivers is mixed. Anderson and Sedatole (2013) offer possible explanations for the lack of evidence and find that the cost hierarchy is descriptive of the association between resource consumption and production activity. In this paper, we provide evidence on the presence of the cost hierarchy by studying the behavior of indirect production labor costs using daily data for five years from seven production departments of an industrial equipment manufacturer. We find that in addition to direct labor costs, the number of setups and number of distinct parts are also significantly associated with indirect production costs in at least six out of the seven production departments. Interestingly, despite our evidence for the existence of the cost hierarchy, the simple method of estimating these indirect costs as a proportion of only direct labor costs performs remarkably well in predicting costs.

Keywords: cost hierarchy, activity based costing, cost drivers, cost allocation, manufacturing overhead costs.

I. INTRODUCTION

Cost accounting textbooks and extant studies claim that indirect manufacturing costs vary not just with volume-related cost drivers such as direct labor cost, but also with batch and product-related cost drivers (e.g. Lanen et al., 2013). However, the collective empirical evidence to date on the association between overhead costs and non-volume related cost drivers is mixed (Labro, 2004; Anderson and Sedatole, 2013). If non-volume related activities are a key driver of indirect production costs, then managerial decisions based on the traditional product cost information are believed to be suboptimal, as the measured product costs are likely to be distorted (Hilton and Platt, 2014). In this paper, we provide detailed evidence on the presence of the cost hierarchy by studying the behavior of daily indirect production labor costs in multiple departments of an industrial equipment manufacturer.

Anderson and Sedatole (2013) summarize reasons provided in the literature for the failure to detect the association between indirect costs and non-volume related cost drivers. The first reason is due to the innovations in manufacturing that create a correlation between volume-related and non-volume related activities. These innovations restore the relevance of traditional volume-based cost allocation (Ittner and MacDuffie, 1995; Ittner et al., 1997; Abernethy et al. 2001). The second set of reasons pertain to the

limitations of accounting data (Balakrishnan et al., 2004; Cooper and Kaplan, 1992), measurement error in proxies for activities (Foster and Gupta, 1990; Kaplan and Anderson 2004, 2007), and the timing differences between production activities (with shorter, perhaps, daily variations) and typical accounting data collection (with monthly or quarterly variations).

Many prior empirical papers that fail to detect the association between non-volume related activities have relied on cross-sectional data (Foster and Gupta, 1990; Noreen and Soderstrom, 1994; Ittner and MacDuffie, 1995; Ittner et al., 1997). Time-series analysis can address many of the limitations of cross-sectional studies. Our study, similar to Anderson and Sedatole (2013), utilizes daily production and cost data pertaining to direct and indirect labor over a period of five years from seven production departments in two manufacturing plants operated by a Fortune 500 company. Indirect production labor activities comprise materials handling, machine setup and team meetings undertaken within individual production departments and exclude common support activities provided by a separate organizational unit such as engineering and maintenance. The short cycle times (0.05 to 0.14 day, on average) in the production departments at our research site imply a tight matching between indirect labor costs incurred each day in production departments and the daily activity measures that drive these costs. This tight association between daily indirect production labor costs and production activity presents an excellent opportunity to examine the time-series behavior of these variables using daily data.

We provide evidence on the positive association between indirect costs and batch and product-level activities at the daily level, as predicted by the cost hierarchy. We also document that aggregation of data at weekly and monthly level reduces the association between indirect costs and batch and product-level activities. Our research site represents a common manufacturing environment involving multiple production departments ranging from fabrication to assembly, enhancing the external validity of our analysis. In addition, data identified with individual production departments allow us to better match costs with activities and examine patterns in these relations that vary across different production departments with different process characteristics.

Few, if any, studies have explicitly investigated how different production processes moderate cost driver effects (Ittner and Larcker, 2001). Although not

Author a: Temple University.

Author b: Cornell University.

Author p: University of Pittsburgh. e-mail: DHINUS@pitt.edu



highlighted as a part of the main results, we also examine whether indirect costs vary in proportion to activities (Noreen and Soderstrom, 1994) and provide evidence rejecting the proportionality assumption.

In addition to providing empirical evidence on cost hierarchy, we measure the extent of product cost distortions induced by traditional labor-based cost allocations. This analysis provides further evidence on the usefulness of activity based costing systems for managerial decision making (Banker et al., 1990) as it documents that the product cost estimates based on the traditional system may be distorted. However, we do not find that a more detailed cost system based on our cost hierarchy results in substantially better cost prediction. Rather we document that traditional costing system performs as well as a cost system based on non-volume related cost drivers for the prediction/planning of total costs at our research site. This last result cautions that the overall impact of sophisticated costing systems on managerial decision making and firm performance may be limited, and echoes the skepticism of Dopuch (1993) and results of Ittner et al. (2002).

The remainder of this paper is organized as follows. Section 2 describes the research site, and presents descriptive statistics for the data collected at the research site. The estimation models and empirical results are discussed in section 3. Some managerial implication are presented in section 4. Concluding remarks are offered in section 5.

II. RESEARCH SITE AND DATA

a) Research Site

To conduct a time-series analysis of indirect production labor costs we looked for a research site that could provide us with detailed and reliable data on the

variables of interest for a sufficiently long time period. To enhance the external validity of our analysis, we required a site that represented a common manufacturing environment involving multiple production departments ranging from fabrication to assembly. We wanted data identified with individual production departments to allow us to better match costs with activities, and examine patterns in these relations that varied across different production departments with different process characteristics. The research also required detailed data on indirect and direct labor costs and other potential cost drivers. The research site we selected satisfied all of these criteria.

We collected the data for this research from a large manufacturer of floor maintenance equipment such as scrubbers, sweepers, burnishers and other cleaning equipment. The company is a world leader in its industry segment, and has received numerous awards for its manufacturing and employment practices. We obtained daily data for a consecutive five year period from the two plants of the company which are in close proximity to each other. A flow chart of the production process is presented in Figure 1. The production process begins in plant A, where parts and components such as casings, frames, and brushes are manufactured in accordance with production orders. These components are then shipped to plant B for further processing and assembly. The departments in Plant A exhibit a job shop type production environment with many small batches and workers performing a larger proportion of indirect activities, while the departments in Plant B exhibit an assembly line type production environment with fewer and larger batches and workers performing a smaller proportion of indirect activities.

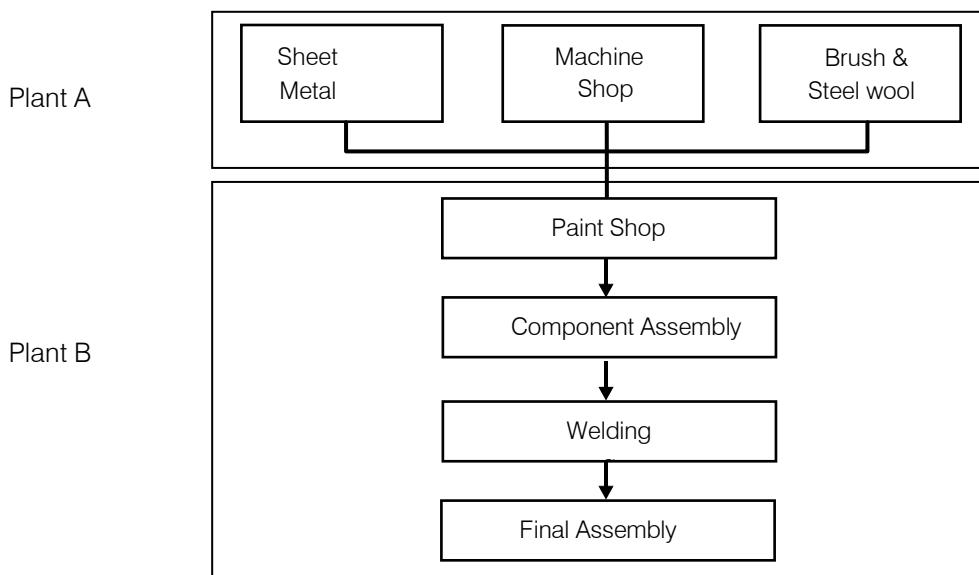


Figure 1: Production Process Flow Chart

Plant A has three production departments: Sheet Metal, Machine Shop, and Brush & Steel Wool. The Sheet Metal department produces the casings and other components made of steel plates. The Machine Shop produces a variety of machine related parts such as engine mountings, frames, brackets, bearings and rods. The Brush & Steel Wool department manufactures different types of brushes that perform the cleaning function in the assembled equipment. The production processes in these three departments are operated in parallel, and there is no sequential dependence among them.

Plant B has four production departments: Paint Shop, Component Assembly, Welding, and Final Assembly. The parts are painted in the Paint Shop and then assembled into components in the component assembly department. These assembled components are welded together in accordance with the product design in welding department. The welded components are finally assembled into the finished product ready for shipment to customers.

Each production department represents a different production activity and a different pattern of consumption of activity resources. Both direct and indirect labor costs are incurred in all seven production departments. Direct labor hours are associated with productive operations for the manufacture or assembly of parts or components. Indirect labor hours are associated with other activities such as materials handling, machine setup, team meetings and inspection. The cost accounting system at our research site allocates indirect costs to individual products on the basis of direct labor costs. A separate overhead rate is determined for the allocation of each production department's indirect costs.

We interviewed managers and staff from production and cost accounting departments at our research site to assess production processes, products, and existing cost records and procedures. There were no major changes in products or manufacturing operations during the five year period covered by our study. We also obtained sample reports for production planning, cost allocations, daily departmental labor activity and expense summary. We collected production and labor cost data electronically with the assistance of the plants' information systems personnel. The data set includes the daily activities of all production department workers. The time spent on different activities is classified into direct and indirect labor. Direct labor hours are further identified with a part number, work center where the part was produced, customer order number and quantity, standard labor hours, and quantity produced.

The data we obtained are an integral part of the company's information system for production labor accounting. These data are entered directly into the company's computerized system daily by production

workers in the presence of their supervisors. The data are maintained by the central information systems department of the company and constitute the source information for periodic reports for payroll, accounting and manufacturing department managers. Payroll staff use these data to process labor wage payments. Accounting staff use these data for cost allocation, inventory valuation, standard costing and variance analysis. Manufacturing staff use these data for production planning purposes and for updating manufacturing standards. Because of the importance of these data, several internal checks exist to ensure the integrity and reliability of the data. We cross-checked the data with summary reports obtained from senior managers. We also plotted the data to visually scan for outliers or otherwise unusual data records. We determined that these data are a reliable record of the daily work in the plants' production departments.

b) Variable Construction

We measure the daily indirect production labor cost (ILCOST) separately for each of the seven production departments. The detailed daily data also allow us to construct cost drivers based on the cost hierarchy framework of unit-related, batch-related, product-sustaining and facility- sustaining activities described by Cooper and Kaplan (1991). The demand for unit-related activity resources varies directly with the number of units produced. Examples include direct labor and direct materials. We selected direct labor dollars (DLCOST) as the unit-level cost driver in our analysis because the present cost accounting system at our research site allocates indirect costs based on this measure¹.

Batch-related activities occur each time a batch is processed or at the beginning or end of each production run. These activities include machine setup, material movement and material requisition. We chose the number of setups (NUMSETUPS) as a batch-level activity cost driver (Cooper and Kaplan, 1987; Anderson and Sedatole, 2013). Setup activities differ across departments. For example, in the Machine Shop, a setup involves only changing and correctly positioning the tools in the machines. Setups in the Paint Shop are longer because machines require a thorough cleanup before colors are changed. Setups are also lengthy in the Final Assembly department because they involve coordination and movement of many sub-assemblies.

Product-sustaining activities are required to handle the additional complexity resulting from an increase in the number of products or parts. Examples of product sustaining activities include engineering change orders, process engineering, maintaining bill of materials, and preparing routing sheets. Within a

¹ DLCOST is highly correlated to direct labor hours (DLHOURS), and the results reported here do not change appreciably when this alternative unit-level cost driver is employed in our analysis.

production department, product-sustaining activities are performed to deal with the increased need for coordination on the shop floor and among production team members when more distinct parts are manufactured. In keeping with prior studies (Cooper and Kaplan 1991, Banker et al. 1995, Banker et al. 1990)², we included the number of distinct parts (NUMPARTS) produced in a production department on each day as a product-sustaining cost driver in our analysis. The number of distinct parts produced in a day reflects the demand for additional activities such as increased coordination, material movements, and storage that are not captured by number of setups. In the Machine Shop, distinct parts produced are the different types of mountings, frames and brackets. In the Paint Shop and Welding departments, distinct parts produced are the different painted and welded components. In the Final Assembly department, the parts represent the assembled products sold to the customers.

Table 1: Descriptive Statistics (Daily Data) (Standard deviations are in parentheses)

Variable (Per day)	Sheet Metal (n=1365)	Machine Shop (n=1423)	Brush & Steel Wool (n=1314)	Paint Shop (n = 1302)	Component Assembly (n=1368)	Welding (n =1327)	Final Assembly (n = 1391)
Number of Workers (NUMWORKER)	26.38 (5.87)	30.97 (9.16)	15.09 (3.28)	16.80 (3.06)	30.12 (7.24)	32.60 (5.84)	32.86 (9.13)
Number of Distinct Parts (NUMPARTS)	136.71 (39.22)	58.34 (18.34)	13.96 (4.20)	55.99 (23.50)	30.96 (10.67)	59.44 (13.70)	21.06 (5.72)
Number of Setups (NUMSETUPS)	191.72 (62.76)	54.45 (21.75)	15.89 (8.48)	11.85 (4.770)	20.31 (10.34)	53.41 (17.48)	7.37 (7.09)
Number of Direct Labor Hours (DLHRS)	126.99 (36.24)	184.19 (64.89)	87.64 (27.20)	97.57 (32.33)	188.24 (57.27)	217.40 (57.75)	226.73 (77.13)
Number of Indirect Labor Hours (ILHRS)	73.52 (24.13)	58.10 (27.35)	23.19 (14.49)	26.91 (12.54)	34.79 (19.53)	45.92 (16.83)	24.49 (20.90)
Indirect Labor Cost (ILCOST) as a % of Direct Labor Cost (DLCOST)	58.24 (13.53)	34.11 (117.31)	28.76 (36.34)	30.19 (50.25)	21.23 (79.84)	21.79 (12.36)	13.10 (67.04)

A comparison across the seven production departments reflects different patterns of consumption of the activity resources. The averages for the number of workers, the number of distinct parts produced and the number of setups required are very different across departments, reflecting the differences in the requirements of the production process at each stage. Overall, there are systematic differences between the departments in Plant A and those in Plant B that reflect the job shop type environment in the former and the assembly line type setting in the latter. The departments in Plant A have more setups and a higher proportion of

Our data set enabled us to construct the following daily variables by production department to examine the behavior of indirect production labor costs: number of workers (NUMWORKER), number of setups performed (NUMSETUPS), number of distinct parts manufactured (NUMPARTS), direct labor hours (DLHOURS), direct labor cost (DLCOST), indirect labor hours (ILHOURS), and indirect labor cost (ILCOST). Table 1 presents descriptive statistics for these variables for each of the seven production departments.

indirect labor to direct labor than the departments in Plant B. In particular, the Sheet Metal department has considerably more distinct parts and setups than the other six departments. It also has more setups than parts as some of the parts require more than one setup for certain operations. The Brush & Steel Wool and Paint Shop departments are small, employing relatively few workers and requiring few setups. The number of distinct parts manufactured daily is high relative to the number of setups in the Paint Shop reflecting the flexible automation in that department.

² Facility-sustaining activities relate to plant management and facilities maintenance. We do not include any measure to reflect these activities because labor assigned to production departments is not responsible for any facility- sustaining activities

In Final Assembly, the number of distinct parts is small, reflecting only the number of products, rather than all the parts and components. The number of setups is low indicating the long production runs in that department. The department also has the fewest number of workers and the lowest proportion of indirect to direct labor reflecting the high level of labor intensity of its production process. For each department the standard deviations and distribution deciles (not shown here) of all variables reveal considerable variation in the daily data within each year. Their distributions exhibit little skewness, with the median values (not shown here) very close to the means.

Table 2 reports, by department, Pearson correlations between ILCOST, DLCOST, NUMSETUPS and NUMPARTS in the upper triangles and Spearman correlations in the lower triangles. Except where noted, all of the correlations are significant at the 1% level suggesting that omitting cost drivers may result in biased coefficients. ILCOST is significantly correlated

with each of the other three variables. The magnitude of the Pearson correlation of ILCOST with DLCOST is the lowest for the three departments in Plant A, but the highest in three of the four departments in Plant B, reflecting once again the differences in the job shop versus assembly line type settings in the two plants. Because different parts usually require separate setups, NUMPARTS and NUMSETUPS are highly correlated in all departments except the Paint Shop and the Final Assembly departments. The magnitudes of all correlation coefficients differ considerably across departments and plants, reflecting differences in process characteristics. Pearson correlation coefficients range between 0.65 and 0.93 in the Sheet Metal and Machine Shop departments, and between 0.48 and 0.60 in the Brush & Steel Wool department. All except two of the coefficients range from only 0.02 to 0.43 for three of the four departments in Plant B, but they are between 0.50 and 0.84 in the Welding department.

Table 2: Panel a Pearson and Spearman Correlations for Production Departments in Plant A (Daily Data)

Sheet Metal

Variable	ILCOST	DLCOST	NUMSETUPS	NUMPARTS
ILCOST	1.00	0.65	0.68	0.68
DLCOST	0.59	1.00	0.73	0.78
NUMSETUPS	0.68	0.56	1.00	0.93
NUMPARTS	0.63	0.62	0.93	1.00

Machine Shop

Variable	ILCOST	DLCOST	NUMSETUPS	NUMPARTS
ILCOST	1.00	0.76	0.88	0.83
DLCOST	0.57	1.00	0.82	0.78
NUMSETUPS	0.80	0.68	1.00	0.93
NUMPARTS	0.76	0.68	0.94	1.00

Brush & Steel Wool

Variable	ILCOST	DLCOST	NUMSETUPS	NUMPARTS
ILCOST	1.00	0.48	0.54	0.56
DLCOST	0.53	1.00	0.55	0.60
NUMSETUPS	0.57	0.50	1.00	0.70
NUMPARTS	0.58	0.56	0.71	1.00

Please see Table 1 for the definition of variables. Pearson correlations are above the diagonal, Spearman correlations are below the diagonal. All correlations are significant at the 1% level.

Table 2: Panel B Pearson and Spearman Correlations for Production Departments in Plant B (Daily Data)

Paint Shop

Variable	ILCOST	DLCOST	NUMSETUPS	NUMPARTS
ILCOST	1.00	0.37	0.20	0.25
DLCOST	0.34	1.00	0.41	0.43
NUMSETUPS	0.21	0.35	1.00	0.30
NUMPARTS	0.27	0.38	0.29	1.00

Component Assembly

Variable	ILCOST	DLCOST	NUMSETUPS	NUMPARTS
ILCOST	1.00	0.34	0.36	0.34
DLCOST	0.28	1.00	0.37	0.43
NUMSETUPS	0.41	0.19	1.00	0.80
NUMPARTS	0.35	0.14	0.77	1.00

Welding

Variable	ILCOST	DLCOST	NUMSETUPS	NUMPARTS
ILCOST	1.00	0.50	0.50	0.51
DLCOST	0.45	1.00	0.67	0.71
NUMSETUPS	0.50	0.51	1.00	0.84
NUMPARTS	0.47	0.56	0.83	1.00

Final Assembly

Variable	ILCOST	DLCOST	NUMSETUPS	NUMPARTS
ILCOST	1.00	0.31	0.09	0.26
DLCOST	0.38	1.00	0.02@	0.60
NUMSETUPS	0.26	0.06*	1.00	0.30
NUMPARTS	0.34	0.48	0.35	1.00

Please see Table 1 for the definition of variables. Pearson correlations are above the diagonal, Spearman correlations are below the diagonal. @ indicates not significant at conventional levels. * indicates significant at 5% level. All other correlations are significant at the 1% level.

III. ESTIMATION MODELS AND RESULTS

Following prior studies, we estimate two cost models. The first one to reflect the existing labor-based cost accounting system at our research site that allocates indirect production labor costs to individual jobs based on direct labor costs separately for each production department and is based on the assumption that for each production department, direct labor cost is the only cost driver. We estimate the second cost model to test the presence of the cost hierarchy. Production

managers at our research site indicated that indirect production labor hours arise because of activities such as machine setup, materials movement, and inspection. Therefore, we estimate a multiple regression model of indirect production labor costs and three cost drivers: direct labor costs (unit-related driver), number of setups (batch-related driver) and number of parts (product-sustaining driver) identified for this study.

$$\text{Model 1: } \text{ILCOST}_t = \beta_0 + \beta_1 \text{DLCOST}_t + \epsilon_t$$

$$\text{Model 2: } \text{ILCOST}_t = \gamma_0 + \gamma_1 \text{DLCOST}_t + \gamma_2 \text{NUMSETUP}_t + \gamma_3 \text{NUMPART}_t + \epsilon_t$$

The hypothesis that indirect production labor costs are related to cost drivers other than production volume is verified by conducting a joint test of whether the coefficients of both NUMSETUPS and NUMPARTS are zero. Based on our discussion of the production process characteristics, we expect systematic differences in the estimated coefficients of model 2 between the departments in the two plants. For the job shop type production departments in Plant A, we expect the coefficient γ_2 (for setups) to be greater and the coefficient γ_3 (for number of parts) to be smaller than the corresponding estimated coefficients for the assembly line type production departments in Plant B.³

measure, direct labor costs (Noreen and Soderstrom 1994). Although our main research questions do not pertain to the issue of whether costs are proportional to the underlying activity (Noreen and Soderstrom, 1994), a straightforward test of proportionality involves estimating the above linear regression model using time-series observations and then testing whether the intercept is zero ($\beta_0=0$). The proportionality assumption in Model 2 is evaluated as before by testing whether $\gamma_0 = 0$. Although not discussed in the results section but shown in Table 3, the proportionality assumption ($\beta_0 = 0$) is rejected at the 1% significance level for all seven departments. In each case, the estimated β_0 coefficient is positive, suggesting increasing returns to scale for indirect activities. The estimated γ_0 coefficient in Model 2 (shown in Table 4) is positive for all seven departments, but significant only for four suggesting violation of proportionality assumption and presence of increasing returns to scale for these departments.

Tests based on the Box-Cox (1964) transformation (Greene 2011) reject the linear specification, but not the loglinear specification, of

³ Implicit in this allocation procedure is the assumption that indirect production labor costs vary proportionally with the unit-related

For each of the seven production departments, we estimated a separate regression, for the two models specified above. To ensure that inferences from the estimated models are reasonable, we examined the assumptions underlying OLS regression and checked for potential data problems. First order serial correlation was 0.46 for the Brush & Steel Wool department and ranged between 0.16 and 0.27 for the other six departments for both models. Durbin-Watson statistics indicated that first order serial correlations were significant in all cases. All of the estimation results reported in this paper are after correcting for serial correlation using the Park-Mitchell (1980) variant of the Prais-Winsten (1954) method.

We checked the OLS residuals for consistency with the assumption that they are distributed normally. No deviations from normality were indicated at conventional levels of significance using the Kolmogorov test statistic. After the logarithmic transformation of dependent and independent variables, Glesjer's (1969) test did not reject homoskedasticity, but White's (1980) general test for misspecification indicated the presence of heteroskedasticity for all seven departments for model 2, and for three cases for model 1. Therefore, in Table 4 we report results based on White's heteroskedasticity consistent standard errors, but in Table 3, we report standard t- and F-statistics. None of the test results based on White's corrected statistics are different from the corresponding results based on Standard t- and F-statistics for model 1, but for model 2 White's corrected statistic does not reject the null hypothesis that $\gamma_3=0$ in Machine Shop and Component Assembly. We also checked for contemporaneous correlations between the residuals for

different departments, found no significant contemporaneous correlations and, therefore, concluded that there was no need for estimating our models as a system of seemingly unrelated regressions.

both models for all seven departments. The rejection of the linear model with DL COST as the only cost driver can also be interpreted as further evidence against proportionality. Test of proportionality with the loglinear version of model 1 corresponds to the test of the null hypothesis: $\beta_1 = 1$ because proportionality, (i.e. $ILCOST = w^*DL COST$) implies, $\ln(ILCOST) = \ln w + 1^*\ln(DL COST)$. The results (not shown) indicate that proportionality is rejected for five departments. Tests of proportionality with the loglinear version of model 2 correspond to the test of constant returns to scale hypothesis: $\gamma_1 + \gamma_2 + \gamma_3 = 1$. This null hypothesis is rejected for five departments (results not shown). We also estimated both models 1 and 2 separately for each of the five years covered by our data set for each of the seven departments. Proportionality (results not shown) is rejected in 28 out of 35 regressions. Estimation results (not shown) based on weekly data rejected proportionality in all seven departments. Estimation of model 1 based on monthly data (Table 5) indicated that proportionality is rejected for four of the seven departments. In the multiple drivers model 2 based on monthly data (Table 6), γ_0 is significant in only one department.

Finally, even in ARMA models (Table 7), the proportionality hypothesis is rejected for five out of the seven departments. However, the magnitudes of β_1 range between 1.00 and 1.05 in four of the seven departments. This suggests a need to evaluate the economic significance of the deviation from proportionality. In summary, all different specifications of our models reject proportionality of costs.



Table 3: Tests of a Labor Based Cost Model (Daily Data) (t-statistics in parentheses)Model 1: $ILCOST_t = \beta_0 + \beta_1 DLCOST_t$

Variable	Sheet Metal (n=1365)	Machine Shop (n=1423)	Brush & Steel Wool (n=1314)	Paint Shop (n=1302)	Component Assembly (n=1368)	Welding (n=1327)	Final Assembly (n=1391)
Intercept t-stat ($\beta_0=0$)	93.80 (6.44)**	84.83 (5.14)**	45.67 (5.74)**	131.84 (13.26)**	126.20 (7.23)**	152.68 (8.54)**	78.80 (4.30)**
DLCOST t-stat ($\beta_1=0$)	0.50 (45.28)**	0.27 (32.24)**	0.20 (16.79)**	0.14 (14.66)**	0.12 (13.81)**	0.14 (20.83)**	0.08 (8.86)**
Adj. R ²	0.60	0.42	0.18	0.14	0.12	0.25	0.08
Durbin-Watson statistic Before Prais-Winsten Correction After Prais- Winsten Correction	1.48** 2.04	1.45** 1.99	1.07** 2.14	1.62** 2.00	1.61** 2.02	1.71* 2.01	1.66** 2.05

ILCOST = Indirect Labor Cost

DLCOST = Direct Labor Cost

NUMSETUPS = Number of Setups

NUMPARTS = Number of Distinct Parts

* indicates significant at the 5% level.

** indicates significant at the 1% level.

Estimation results for model 1 are presented in Table 3. The adjusted R² varies across regressions, ranging from 0.08 to 0.60. Estimation results for the multiple regressions relating overhead costs to unit, batch and product level cost drivers are presented in Table 4. The adjusted R² are higher for model 2 than for model 1, ranging from 0.09 to 0.78.⁴ Results in Table 4 also indicate that all three cost drivers are associated significantly and positively with indirect production labor costs, except for the Paint Shop department regression in which NUMSETUPS is not significant and for the Machine Shop and Component Assembly department regressions where NUMPARTS is significant only at the 12% level. The joint test of $\gamma_2=\gamma_3=0$ is rejected at the 1% level for all seven departments, indicating that indirect production labor costs are associated with cost drivers other than direct labor costs alone. With the exception of Brush & Steel Wool department, the coefficients of NUMSETUPS are generally greater and those for NUMPARTS are generally smaller for the Plant A departments than the corresponding coefficients for the Plant B departments.

⁴ A drop in the estimated γ_0 is expected as the portion of the setup and parts impact not captured by the volume variable (DLCOST) becomes imbedded in the intercept in model 1.

Table 4: Parameter Estimates Relating Overhead Costs to Multiple Cost Drivers (Daily Data)
(White's adjusted statistics in parentheses)

$$\text{Model 2: } \text{ILCOST}_t = \gamma_0 + \gamma_1 \text{DLCOST}_t + \gamma_2 \text{NUMSETUPS}_t + \gamma_3 \text{NUMPARTS}_t$$

Variable	Sheet Metal (n=1365)	Machine Shop (n=1423)	Brush & Steel Wool (n=1314)	Paint Shop (n=1302)	Component Assembly (n=1368)	Welding (n=1327)	Final Assembly (n=1391)
Intercept	47.06 (22.22)**	22.75 (0.58)	12.28 (1.54)	114.28 (48.91)**	86.64 (6.00)**	72.42 (7.54)**	24.84 (0.34)
DLCOST	0.09 (34.52)**	0.11 (55.85)**	0.05 (9.26)**	0.11 (95.69)**	0.08 (33.29)**	0.07 (62.96)**	0.06 (33.53)**
NUMSETUPS	3.40 (222.64)**	6.99 (31.49)**	6.66 (108.43)**	1.10 (1.38)	5.41 (32.70)**	2.33 (29.76)**	2.62 (9.75)**
NUMPARTS	0.78 (4.90)*	1.66 (1.01)	8.07 (26.10)**	0.67 (13.98)**	1.38 (1.55)	3.02 (27.72)**	4.73 (7.39)**
Adj. R ²	0.78	0.51	0.33	0.15	0.18	0.30	0.09
P(Model)	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
P(Multiple Drivers: $\gamma_2=\gamma_3=0$)	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Durbin-Watson Statistic	1.67*	1.43**	1.07**	1.62*	1.64**	1.69*	1.65*
Before Prais-Winsten Correction	2.01	1.98	2.11	2.01	2.02	2.01	2.04
After Prais-Winsten Correction							

ILCOST = Indirect Labor Cost

DLCOST = Direct Labor Cost

NUMSETUPS = Number of Setups

NUMPARTS = Number of Distinct Parts

* indicates significant at the 5% level.

** indicates significant at the 1% level.

a) Sensitivity Analysis

Models 1 and 2 are misspecified if their maintained assumption of linearity (albeit, weaker than the testable assumption of proportionality) is not valid. In addition, as in Noreen and Soderstrom (1994), our linear models are likely to have heteroskedastic residuals. Furthermore, tests based on the Box-Cox (1964) transformation (Greene 2011) reject the linear specification, but not the loglinear specification, of both models for all seven departments. Therefore, in keeping with Noreen and Soderstrom (1994) and Bunker et al. (1995), we also estimated loglinear model after logarithmic transformation of the variables.⁵ Consistent with the linear model (results not shown here), NUMSETUPS is significant for six and NUMPARTS for all seven departments.

We employed Belsley, Kuh and Welsch (1980) collinearity diagnostics to examine multicollinearity between independent variables. Both the condition index and VARPROP are above the cutoffs suggested by Belsley, Kuh and Welsch (1980) for all seven regressions, indicating a very high degree of

multicollinearity. As a result, coefficient estimates are sensitive to small model changes, although they are unbiased. Since collinearity is a data problem, we examined the robustness of our results with different subsets of sample data. We re-estimated both models separately for each of the five years covered by our data set for each of the seven departments. DLCOST has a significant and positive coefficient in 27, NUMSETUPS in 28, and NUMPARTS in 20 out of the 35 estimated regressions. The joint test of $\gamma_2=\gamma_3=0$ is rejected in only 3 of the 35 regressions. These results provide additional support for the significance of multiple cost drivers.

We also examined the impact of extreme and influential observations using the criteria outlined in Belsley, Kuh and Welsch (1980). We computed the RSTUDENT, COV, DFFITS and h metrics. We classified observations as influential if two or more of the computed metrics exceeded the cutoff values suggested by Belsley, Kuh and Welsch (1980), deleted them from the sample and re-estimated both models for all departments. This procedure did not lead to any appreciable change in the results.

b) Aggregating Costs and Activities on a Monthly Basis

Because our focus is on indirect labor costs within each production department, and because production cycle times in all departments are

⁵ We also estimated two other models: one linear and the other loglinear, with labor hours instead of costs as the two variables. The results (not shown here) remain qualitatively the same

considerably shorter than a day, there is tight matching of indirect costs with their cost driver levels each day. Therefore, our analysis at the daily level provides the most powerful tests. However, to further assess the robustness of our results, we also aggregated the data at the weekly and monthly levels and re-estimated the models. Anderson and Sedotale (2013) had found that, at their research site, monthly aggregation obscured the link between resource consumption and batch-related activities. Estimation results based on weekly data (not shown here) indicate that DLCOST is significant in all except the Brush & Steel Wool and Welding departments. NUMSETUPS is significant in all the departments of Plant A and two departments in Plant B. However, NUMPARTS is significant in only three departments of Plant B.

Estimation results based on monthly level data are displayed in Tables 5 and 6. DLCOST is significant in all except the Brush & Steel Wool department.

NUMSETUPS is significant in all the three departments of Plant A but none of the four departments in Plant B, consistent with our expectations that setups are more important in job shop type settings. NUMPARTS is significant in only the Welding department. However, the hypothesis that the coefficients of both NUMSETUPS and NUMPARTS are zero is rejected for all except the Paint Shop and Final Assembly departments. We surmise that this results from the severe multicollinearity between NUMPARTS and NUMSETUPS. Re-estimating the regression after deleting either of these two variables yields a positive and significant coefficient for the other variable for all seven departments. Thus, with aggregated monthly data, direct labor and either one of NUMSETUPS or NUMPARTS continue to account for a large share of the variation in indirect labor costs.

Table 5: Tests of a Labor Based Cost Model (Monthly Data) (t-statistics in parentheses)

$$\text{Model 1: } \text{ILCOST}_t = \beta_0 + \beta_1 \text{DLCOST}_t$$

Variable	Sheet Metal (n=60)	Machine Shop (n=60)	Brush & Steel Wool (n=60)	Paint Shop (n=60)	Component Assembly (n=60)	Welding (n=60)	Final Assembly (n=60)
Intercept t-stat ($\beta_0=0$)	4621.71 (3.94)**	6060.65 (4.24)**	-408.73 (-0.63)	2549.49 (4.26)**	1624.25 (1.49)	1544.75 (2.05)**	448.73 (0.37)
DLCOST t-stat ($\beta_1=0$)	0.41 (10.45)**	0.21 (8.60)**	0.32 (5.90)**	0.13 (4.04)**	0.14 (5.06)**	0.17 (10.76)**	0.10 (4.91)**
Adj. R ²	0.65	0.56	0.37	0.21	0.30	0.66	0.29
Durbin-Watson Statistic Before Prais-Winsten Correction After Prais- Winsten Correction	1.42** 1.49	1.87 1.92	0.94** 1.36	1.29** 1.79	1.35** 1.78	1.35** 1.69	1.63 1.98

ILCOST = Indirect Labor Cost

DLCOST = Direct Labor Cost

NUMSETUPS = Number of Setups

NUMPARTS = Number of Distinct Parts

* indicates significant at the 5% level.

** indicates significant at the 1% level.

c) ARMA Models

In our earlier models we assumed that time-series effects are captured by a first-order autoregressive process. There are two problems with this assumption. First, it is possible that time-series data over a five-year exhibit non-stationarity. For instance, indirect production labor costs and the three explanatory variables may exhibit an upward trend over time because of an increase in sales over this period. Second, all of these variables may exhibit persistence because they represent committed resources that cannot be adjusted in the short-run (Cooper and Kaplan 1992) and because seasonality in demand patterns for the finished products persists over several days. Non-stationarity and persistence in time-series data increase

the probability of spurious correlations between the variables in a regression (Harvey 1981, McCleary and Hay 1981).

To detect non-stationarity, we first employ the Dickey-Fuller tests for unit roots (Hamilton 1994, pp.486-501). This procedure involves estimating the model $Y_t = \alpha + \rho Y_{t-1} + u_t$ (where Y is the variable under consideration) by OLS regression using daily data and testing whether $\rho = 1$. Because the t-statistic obtained under the null hypothesis is not normally distributed, modified critical t-values (T-values) tabulated by Schmidt (1988) are used. The results of the univariate models of the dependent and independent variables indicate that the processes are stationary. Since

stationarity assumptions hold, we can estimate the ARMA models without correcting for non-stationarity.

Next, we model the indirect production labor costs as an ARMA process with direct labor cost (for model 1), and direct labor costs, number of setups and number of distinct parts (for model 2), as the explanatory variables. We estimated several linear models with only autoregressive or moving average terms using the maximum likelihood method. Diagnostic tests based on the Q-statistic indicated that the resulting error terms were not consistent with the white noise assumption. Since trend and seasonal

components of economic time series tend to combine multiplicatively, logarithmic transformations are usually applied to obtain an additive formulation upon which the statistical treatment is based (Harvey 1993, pp. 107). Therefore, we took logarithms of all variables, observing that seasonal patterns were more stable after the logarithmic transformation. For model 1, higher order ARMA processes without differencing resulted in errors that are not white noise. Therefore, we estimated the ARMA processes after differencing by specifying the following models:

$$\text{Model 3: } \ln \text{ILCOST}_t = \beta_0 + \beta_1 \ln \text{DLCOST}_t + \alpha_1 \ln \text{ILCOST}_{t-1} - \mu_1 \varepsilon_{t-1} + \varepsilon_t$$

$$\text{Model 4: } \ln \text{ILCOST}_t = \gamma_0 + \gamma_1 \ln \text{DLCOST}_t + \gamma_2 \ln \text{NUMSETUPS}_t + \gamma_3 \ln \text{NUMPARTS}_t + \delta_1 \ln \text{ILCOST}_{t-1} - \mu_1 \varepsilon_{t-1} + \varepsilon_t$$

Here α_1 and δ_1 are the autoregressive coefficients and μ_1 is the moving average coefficient. The coefficients β_1 , γ_1 , γ_2 and γ_3 are interpreted as the short-term or impact effects of the independent variables on ILCOST (Greene, 2011).

We used the Akaike Information Criterion (AIC) and the Schwarz Bayesian Criterion (SBC) to select the

best model among higher order ARMA processes. The first-order ARMA model yielded the minimum AIC and SBC values indicating that the error process was best represented by a first-order ARMA process. The resulting Q-statistics were insignificant indicating that this first-order ARMA model is the best parsimonious model.

Table 7: Tests of a Labor Based Cost Model with an ARMA (1,1) Model (Daily Data) (t-statistics in parentheses)

$$\ln(\text{ILCOST}_t) = \beta_0 + \beta_1 \ln(\text{DLCOST}_t) + \alpha_1 \ln(\text{ILCOST}_{t-1}) - \mu_1 \varepsilon_{t-1} + \varepsilon_t$$

Variable	Sheet Metal (n=1365)	Machine Shop (n=1423)	Brush & Steel Wool (n=1314)	Paint Shop (n=1302)	Component Assembly (n=1368)	Welding (n=1327)	Final Assembly (n=1391)
Intercept	-0.0002 (-2.14)**	-0.0002 (-0.61)	0.0006 (0.72)	-0.0001 (-0.15)	-0.0003 (-0.47)	-0.0001 (-0.43)	-0.0006 (-0.37)
ε_{t-1} (MA parameter)	0.98 (215.56)**	0.97 (148.69)**	0.95 (106.37)**	0.96 (125.66)	0.97 (122.37)**	0.98 (175.36)**	0.93 (81.23)**
$\ln \text{ILCOST}_{t-1}$ (AR parameter)	0.14 (5.30)**	0.19 (6.95)**	0.09 (3.04)**	0.06 (2.21)*	0.17 (5.92)**	0.10 (3.57)**	0.16 (5.24)**
$\ln \text{DLCOST}$ $H_0 : \beta_1 = 0$ $H_0 : \beta_1 = 1$	1.03 71.57** (1.75)*	1.32 (70.69)** (17.04)**	0.85 (21.63)** (-3.85)**	1.05 (36.04)** (1.81)*	1.12 (30.53)** (3.18)**	1.02 (43.60)** (0.82)	1.03 (13.86)** (0.46)

ILCOST = Indirect Labor Cost

DLCOST = Direct Labor Cost

NUMSETUPS = Number of Setups

NUMPARTS = Number of Distinct Parts

* indicates significant at the 5% level.

** indicates significant at the 1% level.

Table 8: Parameter Estimates Relating Overhead Costs to Multiple Cost Drivers in an ARMA (1,1) Model (Daily Data)
(t-statistics in parentheses)

$$\ln(\text{ILCOST}_t) = \gamma_0 + \gamma_1 \ln(\text{DLCOST}_t) + \gamma_2 \ln(\text{NUMSETUPS}_t) + \gamma_3 \ln(\text{NUMPARTS}_t) + \alpha_1 \ln(\text{ILCOST}_{t-1}) - \mu_1 \varepsilon_{t-1} + \varepsilon_t$$

Variable	Sheet Metal (n=1365)	Machine Shop (n=1423)	Brush & Steel Wool (n=1314)	Paint Shop (n=1302)	Component Assembly (n=1368)	Welding (n=1327)	Final Assembly (n=1391)
Intercept	1.26 (14.06)**	-0.10 (-0.65)	1.40 (5.21)**	-1.43 (-6.66)**	-0.51 (-1.69)*	-0.33 (-1.69)*	-1.80 (-3.19)**
ε_{t-1} (MA parameter)	0.84 (25.99)**	0.23 (2.19)*	--	--	0.54 (6.69)**	0.19 (1.94)*	0.69 (14.97)**
$\ln(\text{ILCOST}_{t-1})$ (AR parameter)	0.94 (45.01)**	0.45 (4.63)**	0.49 (20.11)**	0.16 (5.77)**	0.72 (10.67)**	0.45 (3.16)**	0.87 (27.77)**



<i>InDLCOST</i>	0.16 (6.58)**	0.38 (10.31)**	0.25 (5.19)**	0.91 (23.78)**	0.60 (12.62)**	0.51 (11.84)**	0.65 (7.27)**
<i>InNUMSETUPS</i>	0.74 (16.08)**	0.57 (10.56)**	0.43 (14.12)**	0.01 (0.07)	0.28 (7.17)**	0.31 (7.04)**	0.17 (7.01)**
<i>InNUMPARTS</i>	0.11 (2.02)*	0.35 (4.09)**	0.46 (6.18)**	0.17 (4.76)**	0.29 (4.01)**	0.34 (4.70)**	0.60 (5.61)**

ILCOST = Indirect Labor Cost

DLCOST = Direct Labor Cost

NUMSETUPS = Number of Setups

NUMPARTS = Number of Distinct Parts

* indicates significant at the 5% level.

** indicates significant at the 1% level.

Estimation results for the ARMA models appear in Tables 7 and 8. In the multiple cost driver model, we find that NUMSETUPS is significant at the 5% level for six of the seven departments, and NUMPARTS is significant for all seven departments, thus supporting our earlier inference about the significance of these cost drivers.

IV. MANAGERIAL IMPLICATIONS

The findings of this study are useful to managers at our research site. The results document that indirect production labor costs are driven by number of setups and number of parts, in addition to the direct labor cost based measure of production volume, and thus the findings provide a more detailed understanding of how these costs arise. More importantly, these results support their cost control efforts by providing specific estimates of the monetary impact of the number of daily setups and parts produced on indirect production labor costs that can be used to evaluate and justify cost- benefit aspects of programs to reduce these aspects of production complexity.

Ittner and Larcker (2001) assert that studies on costs need to determine whether an improved understanding of cost drivers may lead to better decision making by managers. To examine the existence of potential costing errors, we estimated the cost distortion or difference between the traditional labor based cost system and a cost model based on multiple

cost drivers. Recall that our statistical analysis is based on daily indirect production labor costs and not average product costs for a year. To estimate product costs, therefore, we need to translate our daily cost estimates to average product costs. For this purpose, we first estimated the cost of each batch of parts on the day it was manufactured by inserting the actual values of the number of setups and parts produced on that day in our multiple cost driver model. We then calculated the average indirect production labor costs for each part as a weighted average of daily unit indirect production labor costs for that part based on all the batches manufactured in a year. We compared these average costs with the unit indirect production labor costs calculated using the existing method of estimating indirect production labor costs as a percentage of direct labor costs alone where the percentage factor in each department is the ratio of the total indirect production labor costs to the total direct production labor costs in the preceding year. We calculated the percentage cost difference as [(estimate based on existing method) - (estimate based on multiple cost driver model)] / [estimate based on multiple cost driver model] (Banker et al., 1990). We find that low volume parts tend to be under - costed and high volume parts tend be over-costed. Percentage cost difference for a part is significantly positively correlated ($r=0.43$, $p=0.0001$) with its annual production volume, consistent with the literature on the behavior of overhead costs.

Table 9: Errors in Cost Predictions

Panel A: Mean Absolute Percentage Errors

Department	Simple Method*	Single Driver Regression	Multiple Drivers Regression
Sheet Metal	20.36	25.16	14.20
Machine Shop	47.93	55.05	33.79
Brush & Steel Wool	39.34	46.39	39.30
Paint Shop	39.53	55.00	50.73
Component Assembly	55.32	59.58	48.90
Welding	23.54	32.01	25.96
Final Assembly	86.95	72.45	69.90

Panel B : Mean Squared Percentage Errors

Department	Simple Method*	Single Driver Regression	Multiple Drivers Regression
Sheet Metal	666.48	1157.58	357.23
Machine Shop	15074.90	26104.84	4468.52
Brush & Steel Wool	7308.71	4818.04	2576.89
Paint Shop	7053.32	44463.26	39217.46
Component Assembly	8707.42	14657.80	7705.59
Welding	1089.13	10149.26	3477.02
Final Assembly	46946.06	28694.67	24251.18

- The simple method used at our research site estimates indirect production labor costs for each production department by multiplying the daily production labor costs by the ratio of its total indirect production labor costs to its total direct production labor costs in the preceding year.

The documented violation of the fundamental assumptions underlying the existing labor-based cost accounting system suggests that many of the cost estimates based on that system may be distorted. We explore this issue by evaluating how these different methods perform in providing cost predictions useful for daily departmental production planning and budgeting. For this purpose, we re-estimated both the single and the multiple cost driver models 1 and 2 using daily data for only the first four years. We then obtained a prediction for the daily indirect production labor costs for the holdout year five for each production department based on its actual activity levels and the parameters estimates based on the first four years' data. We also predicted daily indirect production labor costs using the simple method described earlier that is currently in place at our research site. For this purpose, we multiply the daily direct production labor costs for each production department by the ratio of its total indirect production labor costs to its total direct production labor costs in the preceding year. Finally, we calculated mean absolute and squared percentage deviations for each department based on the daily cost prediction errors. Table 9 presents a comparison of the prediction errors using the three methods.

The multiple cost driver model results in the lowest mean percentage absolute and squared deviations for five of the seven departments, while the single cost driver regression model performs the worst in all but one department. More interestingly, we find that the simple method used by the company predicts daily costs almost as well as our multiple cost driver regression model. This finding can be interpreted in two different ways. First, we may infer that the simple method of forecasting indirect production labor costs as a proportion of direct labor costs performs well even when multiple factors drive these indirect costs because direct labor costs are highly correlated with these other drivers. Alternatively, we may infer that managers assign resources to indirect production labor activities in the

observed manner because the existing accounting system budgets resources in proportion to direct labor costs. It is, of course, impossible to discriminate between these two alternative inferences at our research site because the same accounting system has continued to be used throughout our sample period.

Although, our findings seem to indicate that the traditional costing system performs as well as a sophisticated costing system for prediction/planning purpose, our earlier finding on cost distortions indicate that a costing system based on the hierarchy of cost drivers may be more useful for pricing, product mix and perhaps other decisions such as outsourcing. These mix results seem consistent with studies that find that only about 20% to 30% percent of firms adopt more elaborate costing systems (Innes et al. 2000; Schoult, 2011). The findings also echo the results of Ittner et al. (2002) who document that the extensive use of ABC by firms has no significant association with return on assets and that benefits may be contingent on firm characteristics.

V. CONCLUDING REMARKS

Labro (2015) recently noted that compared to research on management controls, there is little research on information to support decision making, even though this is highly relevant to business practice and teaching. In the present study, we use time-series data from seven production departments of a manufacturing company to test the assumption that indirect production labor costs are not associated with other batch-related and product-sustaining activity cost drivers such as number of setups and number of distinct parts. We also test the assumption that indirect production labor costs are proportional to direct labor costs. The assumption that indirect production labor costs are proportional to a single unit-related cost driver, such as direct labor cost, is common in most traditional cost accounting systems. Our results document a strong relation between indirect production labor costs

and both number of setups and number of distinct parts, as suggested by the cost hierarchy. In addition, our empirical results rejected the proportionality assumption for all seven departments. In sum, our results suggest that indirect production labor costs are associated with multiple cost drivers, and the relation between these variables is not proportional.

Since managers make daily operating decisions based on their information, we measure the extent of product cost distortions induced by traditional labor-based cost allocations. This result provides evidence on the usefulness of activity based costing systems for managerial decision making as it documents that the product cost estimates based on the traditional system may be distorted. We then examined the predictability of the cost hierarchy model. We find that the simple method used at our research site to estimate indirect production labor costs performs remarkably well in predicting daily departmental costs. Whether this finding reflects the true underlying production and cost relation, or whether it is an artifact only of managers reacting to the existing information system remains as another direction for future research. Specifically, it will be insightful to evaluate whether and how indirect cost behavior changes when a firm changes its cost accounting system. Our result on the usefulness of cost hierarchy for cost prediction cautions that the overall impact of sophisticated costing systems on managerial decision making and firm performance may be limited, and echoes the skepticism of Dopuch (1993) and results of Ittner et al. (2002).

REFERENCES RÉFÉRENCES REFERENCIAS

1. Abernethy, M.A., Lillis, A.M., Brownell, P. and P. Carter. 2001. Product Diversity and Costing System Design: Field Study Evidence. *Management Accounting Research* 12, 261–280.
2. Anderson S. W. and K. L. Sedatole. 2013. Evidence on the Cost Hierarchy: The Association Between Resource Consumption and Production Activities. *Journal of Management Accounting Research* 25 (1): 119-141.
3. Balakrishnan, R., K. Sivaramakrishnan, and S. Sunder. 2004. A Resource Granularity Framework for Estimating opportunity costs. *Accounting Horizons* 18 (3): 197-206.
4. Banker, R.D., S.M. Datar, S. Kekre, and T. Mukhopadhyay. 1990. Costs of Product and Process Complexity. *Measures for Manufacturing Excellence*. 2nd edition. Boston, MA: Harvard Business School Press: 269-290.
5. Banker, R.D., G. Potter and R. Schroeder. 1995. An Empirical Study of Manufacturing Overhead Cost Drivers. *Journal of Accounting and Economics* 19 (1): 115-137.
6. Belsley, D.A., E. Kuh and R.E. Welsch. 1980. *Regression Diagnostics: Identifying Influential Data and Sources of Collinearity*. New York: NY: John Wiley & Sons.
7. Box, G. and D. Cox. 1964. An Analysis of Transformations. *Journal of the Royal Statistical Society* 26 (2): 211-252.
8. Cooper R. and R.S. Kaplan. 1987. How Cost Accounting Systematically Distorts Product Costs. *Accounting & Management: Field Study Experiments*. Boston, MA: Harvard Business School Press: 204-228.
9. Cooper R. and R.S. Kaplan. 1991. *The Design of Cost Management Systems: Accounting Horizons Text, Cases, and Readings*; Prentice-Hall Inc.
10. Cooper R. and R.S. Kaplan. 1992. Activity-Based Systems: Measuring the Costs of Resource Usage. *Accounting Horizons* 6 (3): 1-12.
11. Dopuch, N., 1993. A Perspective on Cost Drivers. *The Accounting Review*, 615-620.
12. Foster, G. and M. Gupta. 1990. Manufacturing Overhead Cost Driver Analysis. *Journal of Accounting and Economics* 12 (1): 309-337.
13. Glesjer, H. 1969. A New Test for Heteroskedasticity. *Journal of the American Statistical Association*, 64 (325): 316-323.
14. Greene, W.H. 2011. *Econometric Analysis*. 7th edition. Prentice Hall.
15. Hamilton, J. 1994. *Time Series Analysis*. 2nd edition. Princeton University Press.
16. Harvey, A.C. 1981. *The Econometric Analysis of Time Series*. 1st edition. Oxford, England: Philip Allan Publishers Ltd.
17. Harvey, A.C. 1993. *Time Series Models*. 2nd edition. Hertfordshire, England: Harvester Wheatsheaf.
18. Hilton, R.W. and D.E. Platt. 2014. *Managerial Accounting: Creating Value in a Dynamic Business Environment*. 10th Edition. McGraw-Hill
19. Ittner, C.D., W.N. Lanen, and D.F. Larcker. 2002. The association between activity based costing and manufacturing performance. *Journal of Accounting Research*: 711-726.
20. Ittner, C. D., D. F. Larcker, and T. Randall. 1997. The Activity-based Cost Hierarchy, Production Policies and Firm Profitability. *Journal of Management Accounting Research* 9: 143–162.
21. Ittner, C.D., and D.F. Larcker. 2001. Assessing Empirical Research in Managerial Accounting: a Value-based Management Perspective. *Journal of Accounting and Economics*, 32(1): 349- 410.
22. Ittner, C. D., and J. P. MacDuffie. 1995. Explaining Plant-level Differences in Manufacturing Overhead: Structural and Executonal Cost Drivers in the World Auto Industry. *Productions and Operations Management* 4 (4): 312–334.
23. Innes, J., F. Mitchell, and D. Sinclair. 2000. Activity-based Costing in the UK's Largest Companies: a

- Comparison of 1994 and 1999 Survey Results. *Management Accounting Research*, 11(3), 349-362.
24. Kaplan, R.S., and S.R. Anderson. 2004. Time-driven Activity-based Costing. *Harvard Business Review* 82:131–138.
25. Kaplan, R.S. and S.R. Anderson. 2007. *Time-driven Activity-based Costing: A Simpler and More Powerful Path to Higher Profits*. Boston, MA: Harvard Business School Press.
26. Labro, E. 2004. The Cost Effects of Component Commonality: a Literature Review Through a Management-accounting Lens. *Manufacturing & Service Operations Management*, 6(4), 358-367.
27. Labro, E. 2015. Hobby Horses Ridden. *Journal of Management Accounting Research*, 27(1), 133-138.
28. Lanen, W.N., S.W. Anderson, and M.W. Maher. 2013. *Fundamentals of Cost Accounting*. 4th Edition. McGraw-Hill.
29. McCleary, R. and R.A. Hay. 1981. *Applied Time Series Analysis for the Social Sciences*. Beverly Hills, CA: Sage Publications.
30. Noreen, E. and N. Soderstrom. 1994. Are Overhead Costs Strictly Proportional to Activity? Evidence From Hospital Service Departments. *Journal of Accounting and Economics*, 17, (1-2): 255-278.
31. Park, R.E. and B.M. Mitchell. 1980. Estimating the Autocorrelated Error Model with Trended Data. *Journal of Econometrics* 13: 185-201.
32. Prais, S.J. and C.B. Winsten. 1954. Trend Estimators and Serial Correlation. *Cowles Commission Discussion Paper*, no. 383, Chicago, IL.
33. Schmidt, P. 1988. Dickey-Fuller Tests With Drift. *Advances in Econometrics*: 161-200.
34. Schouten, M. 2011. The Relationship Between Product Diversity, Usage of Advanced Manufacturing Technologies and Activity-based Costing Adoption. *The British Accounting Review*, 43(2), 120-134.
35. White, H. 1980. A Heteroskedasticity - Consistent Covariance Matrix Estimator and a Direct Test for Heteroskedasticity. *Econometrica* 48 (4): 817-838.



This page is intentionally left blank



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: D
ACCOUNTING AND AUDITING
Volume 21 Issue 2 Version 1.0 Year 2021
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Environmental Accounting Disclosure and Financial Performance of Listed Multinational Firms in Nigeria

Olusola Esther Igbekoyi (PhD), Festus Taiwo Solanke, Sunday Amos ADEUSI (PhD), Muyiwa Ezekiel Alade (PhD) & Wale Henry Agbaje (PhD)

Adekunle Ajasin University

Abstract- The study investigated environmental accounting disclosure and financial performance of listed multinational companies in Nigeria. This study was conducted by firstly assessing the level of compliance, and then exploring the effect of environmental disclosure on financial performance with a focus on multinational companies in the face of continued environmental abuse witnessed in the Nigerian business space owing to the non-availability of sustainability reporting legal framework. The study used secondary data obtained from the published annual reports of the companies from 2011 to 2020. Data collected (Environmental disclosure index, return on asset, earnings per share), were analyzed using descriptive statistics and panel regression analysis. It was discovered that in assessing level of compliance, out of the three sectors assessed, oil and gas was the least compliant. Also, results showed that environmental accounting disclosure had a significant and positive effect on earnings per share (EAPS) but a negative and insignificant effect on return on asset (RETA). The study, therefore, concluded that the extent of responsiveness of companies to environmental accounting disclosure influences how the company is valued. The study, therefore, recommended that multinational companies and other Nigerian firms, should make effort to disclose their environmental-related activities even though it is not required by law, as it has shown evidence of its influence on earnings on shares of companies.

Keywords: environmental disclosure index, earnings per share, multinational firms, nigeria and return on asset.

GJMBR-D Classification: JEL Code: M49



Strictly as per the compliance and regulations of:



RESEARCH | DIVERSITY | ETHICS

Environmental Accounting Disclosure and Financial Performance of Listed Multinational Firms in Nigeria

Olusola Esther Igbekoyi (PhD) ^a, Festus Taiwo Solanke ^a, Sunday Amos ADEUSI (PhD) ^b,
Muyiwa Ezekiel Alade (PhD) ^c & Wale Henry Agbaje (PhD) ^d

Abstract- The study investigated environmental accounting disclosure and financial performance of listed multinational companies in Nigeria. This study was conducted by firstly assessing the level of compliance, and then exploring the effect of environmental disclosure on financial performance with a focus on multinational companies in the face of continued environmental abuse witnessed in the Nigerian business space owing to the non-availability of sustainability reporting legal framework. The study used secondary data obtained from the published annual reports of the companies from 2011 to 2020. Data collected (Environmental disclosure index, return on asset, earnings per share), were analyzed using descriptive statistics and panel regression analysis. It was discovered that in assessing level of compliance, out of the three sectors assessed, oil and gas was the least compliant. Also, results showed that environmental accounting disclosure had a significant and positive effect on earnings per share (EAPS) but a negative and insignificant effect on return on asset (RETA). The study, therefore, concluded that the extent of responsiveness of companies to environmental accounting disclosure influences how the company is valued. The study, therefore, recommended that multinational companies and other Nigerian firms, should make effort to disclose their environmental-related activities even though it is not required by law, as it has shown evidence of its influence on earnings on shares of companies.

Keywords: environmental disclosure index, earnings per share, multinational firms, nigeria and return on asset.

I. INTRODUCTION

The current change in information needs of stakeholders and the move to respond to enlarged profit horizon in the business world have led most corporations to social, ecological, and humanitarian issues (Ntim, 2016). The resultant effects of the activities of these corporations negatively affect the social and ecological well-being of the society. The impression of the adverse effect of business activities on the stakeholders has necessitated the clamour for more information disclosure requirements in conformity with global best business practices (Ndlovu & Dzomira, 2021).

Author a p c d: Adekunle Ajasin University, Akungba-Akoko, Ondo State, Nigeria. e-mail: olusola.igbekoyi@aaaua.edu.ng

Author a: Federal University, Oye-Ekiti, Ekiti State, Nigeria.

Oladimeji and Folayan (2018) stated that the increasing impact of industrialization and business expansion in all public and private organizations through a new channels of enhanced product quality and innovations have brought about economic development in Nigeria, still it is, however practicable that this positive impact will not come without a cost. The manufacturing sector have highly impacted the Nigerian economy in recent time, especially in the advent of corona virus 2019 pandemic, where the significance of innovation in production methods for the survival of the economy is redefined. The societal cost of this expansion redefinition is the injection of hazardous component to the ecological and societal environment. A proactive action is should be taken to ensure that the environment is preserved while encouraging the manufacturing sector to grow in line with global demand.

Studies have been submitted on the significance of environmental disclosures on financial performance in Nigeria and other developed countries. Ezeagba, et al. (2017) stated it had a significant relationship with financial performance, in the sense that it ensured greater return and a competitive edge in the global market. This finding was supported in similar studies conducted by Arumona et al. (2020); Igbekoyi (2017); Omaliko et al. (2020); among others. Okechukwu and Okeke-Muogbo (2020) however studied the health care sector and revealed that a negative relationship exists between environmental disclosure and firm performance. Although the submissions of previous studies are divergent, the studies that upheld the significant positive effect of environmental accounting disclosure on financial performance are on the high side. Despite the increased rate of discussions and submission of existing studies on the subject matter, the incidences of environmental abuse are still persistent; these environmental abuses have led to degradation of the environment and defacement of the green nature of the land space.

Environmental accounting disclosure still falls under the voluntary information disclosure component of the financial reports of listed firms in Nigeria. This loophole has made companies continue to hide under the existing laws to shy away from disclosing

environmental related information. In the case of multinational companies in Nigeria, apart from doing business in Nigeria, they have affiliation with companies and stock exchange markets in developed countries, so they the obligation by law of those countries to prepare sustainability reports that captures their economic, social, and environmental activities in a given period. But unfortunately, the case is different as most environmental information disclosed had poor outcomes (Adegbie & Nwobodo, 2020). This argument is evident in the increasing cases of environmental abuse, with some of these multinational companies caught in the web. Although some of these multinational companies prepare sustainability reports and disclose environmental information, the question is whether there is full compliance with environmental information disclosure as stated in the environmental reporting index. There is a need, therefore, to conduct an appraisal of the level of compliance of multinational firms in Nigeria, especially those whose activities affect the ecological environment.

This study, is therefore, firstly conducted an intra-sector appraisal of the extent of compliance of multinational firms in Nigeria to environmental accounting disclosure in line with global best practices and then investigated the effect of these environmental disclosures on the financial performance of the firms. This study will give a clue into the quality of environmental information disclosed, which will give a hint on why there are still cases of environmental degradation despite claims of environmental disclosure by Nigerian firms. It may also form a roadmap for developing of a regulatory frame work for environmental accounting disclosure in Nigeria in the future.

Apart from the introductory part of this study discussed, there are other four sections; which captures the review of related literature in the second, the third section discusses the methods, and the analysis of data and interpretation of results featured in the fourth section at the same time, conclusion and recommendations are stated in the fifth section which is the concluding section.

II. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Environmental accounting is defined as the process of providing information regarding the environmental and social costs, which may include environmental conservation and preservation costs as a way of social responsibility to stakeholders (Makori & Jagongo, 2013). Muhammed (2018) broadly define environmental accounting as a term that covers the financial and non-financial information regarding the environmental and ecological impact of company activities on humanity and resultant reactions to their

impacts. Wozuru and Micah (2018) also described environmental accounting as the costing of the energy component of an organization activity and the efforts of preserving the environment and producing environmentally friendly products. Environmental accounting disclosure depicts the act of reporting the environmental accounting information to stakeholders as a form of responsibility of adhering to the assumptions of environmental principles (Solomon, 2020; Alok *et al.*, 2018).

The ideology of environmental accounting disclosure is not a function of an organization's ideal but a report of stewardship in the public interest (Vanda, Burgwal & Viera, 2014). However, attempts have been made to redefine environmental accounting disclosure from various dimensions and conceptual perspectives. This study however observes the concept from the perspective of the laid down indicators that are used to evaluate the environmental responsibility level of firms. The environmental disclosure index developed by the global reporting initiative (GRI) has been gradually accepted as a form of environmental disclosure yardstick and it has got global acceptance. This study therefore captures the environmental disclosure indices as stated in the report as adopted in a similar study conducted by Galani *et al.* (2017) in Greece. This study purposively selected environmental disclosure indices peculiar to the Nigerian ecological system to capture the unique environmental degradation issues to determine the extent of responsibility of companies to stakeholders in the form of full disclosure of these actives. The disclosure items covered in this study are itemized in the measurement of variables in the methodology section of this paper.

Financial performance measures the achievement of firms using various criteria. Solomon (2020) stated that financial performance can be measured through profitability and issued shares capital for the year. Arumona *et al.* (2020) however stated that return on asset and earnings per share are symbols of firms' improvement and as such, serve as an approach of assessing firms' performance for a specific period. This study assessed the firms' performance using return on assets and earnings per share. Arumona *et al.* (2020) described return on assets as a ratio that measures assets and turnover for a particular period. A higher return on assets is advantageous to firms, as it can be used as bait to attract investors to subscribe to their shares. The earnings per share is measured by dividing total profit after tax by total issued shares capital for a year. The choice of these performance yardsticks attempts to appraise the firms from the internal and external perspectives of their performance. This attempt is done by appraising the ratio of profits to the total assets and the issued share; at the same time the former considers that internal assessment of the extent

of return, the latter evaluates that performance at the market.

a) Theoretical Underpinning

This study is hinged on the combination of three theories. The study combined the assumptions of the sustainability, stakeholder and agency theories. The sustainability theory developed by Edward Barbier in 1987 hinges on the prioritization of the responsibility of firms to the atmospheric environment, such that the environment will be maintained in a way that will lead to preservation of its green state into the unforeseeable future. The stakeholder theory developed by Edward Freeman in 1984 is borne from the perspective of business operations carried on, bearing in mind the impact of the company's activities on individuals and groups that may be affected by their actions and inactions (Freeman, 1984, Walsh, 2005). The main argument of the theory is that firms should perform their business operations so that the value of all stakeholders will be created and not only the shareholders. From the perspective of agency theory developed by Jensen & Meckling (1976), it is theorized that a business operation is likened to a principal-agent relationship; where the agent has a fiduciary duty to the principal, who are the shareholders of the company. The fiduciary duty as assumed in the theory as a duty of trust to work on behalf of the principal for profit and wealth maximization.

The link of these theories to this study can be deduced from their assumptions. The focal points of the theories include; the environment, society and the shareholders. This study attempted to show the link between how firms account for their social and environmental activities while sustaining the core objectives of their owners. These theories have been applied in varying studies such as; sustainability reporting, corporate social responsibility, and audit and internal control. But the attempt to link these three models exposes the ability of companies to maintain all aspects of their performance evaluation without compromise.

The underpinning theories are relevant to this study because environmental accounting disclosure is a responsibility to the society and the ecosystem, especially in Nigeria where there is no existing regulation that enforces environmental disclosure. Evidence from existing literature has, however shown that although environmental disclosure is voluntary; it has shown significance in determining firm performance. The agency theory captures the financial performance aspect of this study. This study attempted to assess financial performance from the returns on invested assets and share appreciation in terms of earnings per share owned by shareholders. The theoretical link of this study is corroborated in studies conducted by Mahoney *et al.* (2007) and Tuwajirji *et al.* (2004) in separate studies where they posited that there is a significant association

between environmental performance and economic performance especially when there is more quantitative disclosure.

b) Environmental Accounting Disclosure in Nigeria

Although various studies have explored the effects of environmental accounting disclosure on financial performance, and the majority showed positive results. There is a need, however to investigate the extent of environmental disclosure of these firms, especially in the case of Nigeria and developing countries where these disclosures are voluntary.

Norha *et al.* (2015) investigated environmental disclosure and financial performance among the top 100 companies in Malaysia for the year 2011. The result showed mixed results regarding environmental disclosure practices in Malaysia. The study submitted that there are still ongoing debates regarding the disclosure levels because of the increasing rate of environmental abuse and the major moderating factor is the fact that there is no statutory requirement for companies in Malaysia to disclose their environmental sustainability activities. The result is not different in a study conducted by Eliyash *et al.* (2013) in Arab doing a comparative study of the environmental disclosure practices of national and international oil and gas corporations the country. It was found that despite a slight increase in the disclosure level, the variations are still significant.

The Nigerian case is not different, as evident in the findings of existing studies. Uwujibe & Jimoh (2012) studied corporate environmental disclosure in manufacturing firms in Nigeria; and discovered that the level of disclosure is still in the embryonic stage as most of the disclosures were still voluntary. Oba and Fodio (2012) also supported this finding in a study conducted to compare oil and gas and construction companies. It was found that the disclosure level was generally small, but the oil and gas companies' disclosure was still more. Musa *et al.* (2015) conducted an x-ray on environmental accounting practices in Nigeria and found that the disclosures were not uniform which is majorly owing to lack of regulatory framework. In a recent study conducted by Adegbai & Nwobodo (2020), in the banking sector, the disclosure is said to be significant but still had poor outcomes.

In developed countries, studies have attempted to investigate the extent of environmental accounting disclosure in some developed countries. Mitchell *et al.* (2006) conducted a study to examine the environmental disclosure level of firms in Australia using content analysis and discovered that firms disclosed, but all disclosures were positive. Similarly, a study conducted by Cowan & Gadenne (2005) and Tilt (2001) in the same country, it revealed a positive environmental disclosure level. In China, Ane (2012) assessed the quality of

environmental information disclosed in the annual reports of corporations; and found that the disclosure content is restricted and insufficient. The reporting pattern was single sided. The implication of these findings is that firms' disclosure level is selective to purposively capture only indices that reflect positive results. This assertion was supported by Nguyen & Tran (2019) in Greece & Hughes *et al.* (2001) posited that the rating of social and environmental responsibility of firms is based on the positivity of their environmental disclosures, and this will force firms to manipulate results to appear responsible.

Evidence from these literatures imply that disclosure of environmental activities remains an issue of global discussion as the discussion is moving away from whether a company discloses or not, but rather to full disclosure. The developing countries, including Nigeria, are still peculiar because of lack of statutory enablement. However, the multinational corporations in Nigeria have affiliations with international companies that are situated in countries where environmental accounting disclosures are mandatory and regarded as governance and strategic issues. The moral perception is that these firms will make full disclosure of their environmental related activities as a part of the organizational norm in line with global best business practices and not necessarily responding to domestic regulations. Based on these, it is, therefore, logical to state the hypothesis thus:

H_{0j} : There is no full compliance with environmental disclosure in Nigerian multinational firms

c) Environmental Accounting Disclosure and Financial Performance

The drive for environmental atmospheric preservation and demand for socially responsible business practices in the event of threatening signals indicated in climate change and global warming have made the study on environmental accounting attractive to scholars globally. Also, the contractual agreement between the managers (agents) of the firms and the providers of capital (owners), according to the agency theory, that focus on maximizing the investments of the owners to increase returns, made the concept of financial performance an accompanying area of discussion in environmental accounting; especially as it relates to disclosure. In a bid to link these variables, several studies have been conducted to determine the association that exists between them, measuring financial performance from various perspectives; and the findings are divergent.

In determining the effect of environmental disclosure on profitability, Nahiba (2017); and Makori & Jagongo (2013) conducted studies in India and discovered that environmental accounting disclosure had a significant positive relationship with net profit

margin and dividend per share, still a significant negative relationship exists with return on capital employed. In studies conducted in Kenya and Malaysia, Gatimbu & Wabwire (2016) and Al-Tuwaijri (2004) found a significant relationship between environmental accounting and financial performance. In Nigeria, Arumona *et al.* (2020) using annual reports of 12 oil and gas companies quoted on the floor of the Nigeria Stock Exchange (NSE) for ten years ranging from 2010-2019, submitted that a positive and significant relationship exists between environmental accounting and financial performance. The same findings were made in studies conducted by various studies when appraising the different sectors of listed companies in Nigeria. These include: Omaliko *et al.* (2020); Yahaya (2018); Oyedokun *et al.* (2019); Oyedokun *et al.* (2019); Ezeagba *et al.* (2017); and Utile (2017).

The findings however vary in the researches of Tafadzwa & Fortune (2019); Ezejiofor *et al.* (2016) and Adeniran & Alade (2013), where they found a negative effect. While Okechukwu *et al.* (2020) submitted that environmental sustainability disclosure did not have impact on firm performance. Similarly, Saman (2019) researched on the environmental accounting disclosure and financial performance of the oil and gas companies in Nigeria and found no significant relationship between the variables. Also, when Nyirenda *et al.* (2013) studied environmental management practices and firm performance in South African mining firms, no significant effect was found. Likewise, In Indonesian companies, Sarumpaet (2005) found that there is no significant relationship between environmental performance and financial performance of the companies. The results are also similar in Malaysia, Singapore and Thailand companies as Rahman (2009); and Ponnu & Karthigeyan (2010) in separate studies found that no relationship exists.

For studies specifically conducted on return on assets and earnings per share, Gelb (2017), studying environmental disclosures and corporate performance in Japan, found a positive relationship between environmental disclosures and corporate performance when using return on assets as a proxy for financial performance. Okechukwu and Okeke-Muongbo (2020) worked on environmental and social responsibility sustainability disclosure and firm performance of quoted health care and consumer goods companies in Nigeria. They found that environmental sustainability disclosure did not have impact on firm performance. Saman (2019) researched on the environmental accounting disclosure and financial performance of oil and gas companies in Nigeria using 11 companies selected based on environmental information available in the annual reports. The result revealed that the explanatory variables, ROCE, NPM, EPS, and DPS, have an insignificant relationship with environmental accounting

Financial Performance				
Return on Assets	It is a ratio that measures assets and turnover for a particular period	Total income divided by Total assets	Okechukwu & Muogbo (2020)	Okeke-
Earnings per Share	This is total earnings per each share held by investors for a specific period	Total profit after tax divided by total issued shares capital for the year.	Solomon (2020); JhvH (2013).	JhvH

Source: Authors' Compilation, 2021

IV. DATA ANALYSIS AND DISCUSSION OF FINDINGS

a) Descriptive Statistics

Table 2 shows the descriptive statistics of the variables. Each variable is examined based on observations, mean median, maximum, minimum, and standard deviation. The mean of edindex (environmental disclosure index), which is the explanatory variable has a value of 0.106 with an associated standard deviation of value 0.222. This presentation imply that the environmental disclosure index of these multinational companies was just 10.6% in informing the host communities of degradation of the environment. While the value standard deviation was 22%, which means it surpassed the mean, this showed that mean is being validated and reliable of its truism. On the maximum and

minimum values were 1 and 0 and the associated median was 0. This implies that when the multinational disclosed is 1 otherwise 0, for the fact the minimum and median have the same have value of 0, this showed that majority of the firms did not disclose information on the externalities in their corporate reporting. On the explained variables, that Earnings Per Share (EAPS) and Return on Assets (RETA). These dependent variables have average values of 3.503 and 5.324, respectively. While the associated standard deviation values were 8.048 and 19.349 which surpass the mean of the distribution, this implied that the average value of performance metrics was reliable and validated the distribution of the performance proxies with the Minimum -20.23 and -179.917, maximum 57.63 and 176.267 and median 0.97 and 4.7587 respectively.

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max	Median
Edindex	340	.106	.222	0	1	0
Eaps	339	3.503	8.048	-20.23	57.63	0.97
Reta	339	5.324	19.349	-179.917	176.267	4.7587

Source: Authors' computation, 2021

b) Test of variables

Table 3 shows the result of correlation analysis for both the dependent variables and independent variables. The coefficients of correlation analysis revealed there subsist positive and but weak association between environmental disclosures index and performance metrics of return on assets (RETA) and

earnings per share (EAPS). Also, the correlation coefficient among these variables shows nonserial correlation which suggests that no multicollinearity exists. Thus, to achieve the stated objectives, the study used a panel regression analysis to dissect the assumed causality. The panel regression results showed, presented and discussed in table 3.

Table 3: Pairwise correlations

Variables	Deindex	(EAPS)	(RETA)
(1) edindex	1.000		
(2) EAPS	0.127*	1.000	
	0.020		
(3) RETA	0.051	0.299*	1.000
	0.352	0.000	

* Show significance at the .05 level

Source: Authors' computation (2021)

c) Sectoral Analysis of Environmental Accounting Disclosure Compliance of Listed Multinational firms

Figures 1, 2, and 3 show the sectoral analysis of the extent to which the selected sectors which are involved in the production comply with the environmental disclosure index. The sectors selected

are the; industrial goods, consumer goods, and oil and gas sectors. The individual assessment of industrial goods, as shown in figure 1 indicate period from 2011 to 2020, the sector had only one full disclosure of their environmental activities; following that, there were two times they had 85% disclosures followed by 60% and

50% disclosures. It was however discovered that there are parts of the period that showed that their environmental disclosure level was zero 0, which imply that there were no disclosures at all during this period.

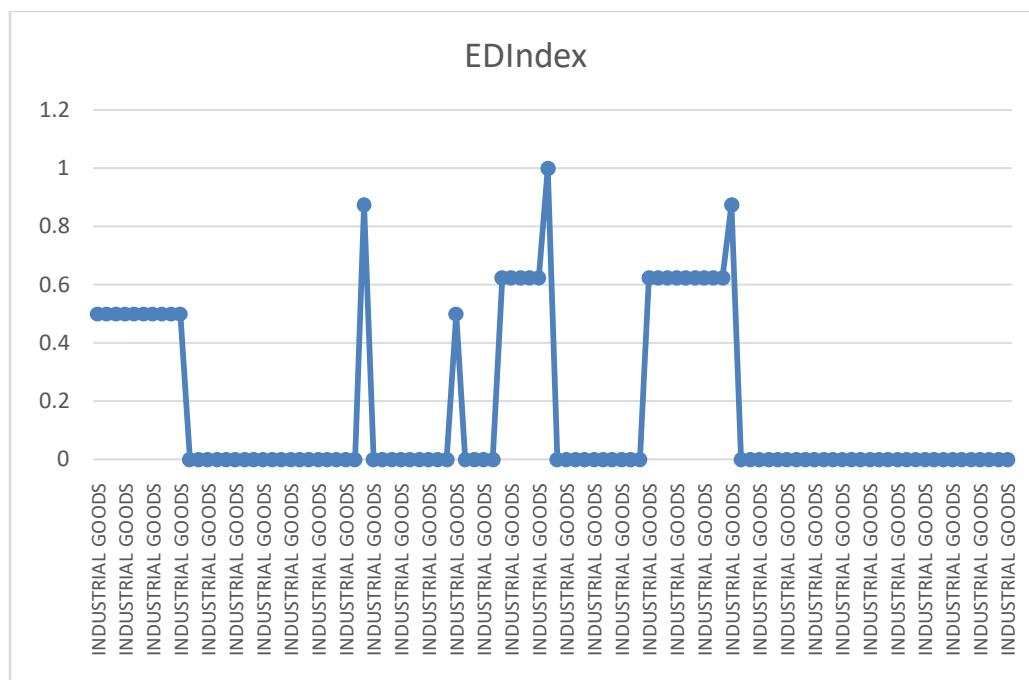
In figure 2, the graph shows the trends of environmental disclosures by the consumer goods sector of Nigeria Exchange Group. The trend showed that the sector never had any time within the scope of this study where they had full disclosure of their environmental activities. The result also showed that there was a period which had zero percent which implies non-disclosure.

In the case of the oil and gas sector as shown in figure 3, the trends of environmental disclosure in the sectors how that the highest disclosures of these sectors 13 percent and the rest which is the larger part constitute non-disclosures.

An appraisal of the trend analysis indicates that none of the multinational companies have full disclosure of environmental disclosure according to the laid down environmental disclosure index. The implication of this is that the multinational companies despite their affiliations with companies that are situated in countries where

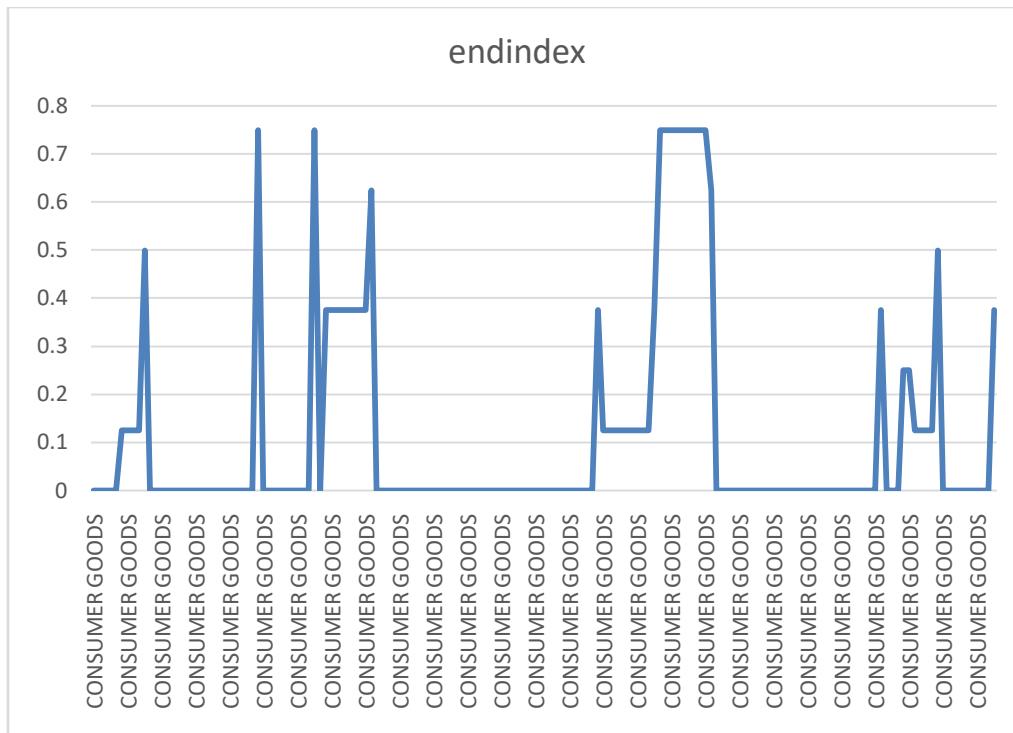
sustainability reporting is mandatory, still indulge in non-disclosure. The individual evaluation showed that from the three sectors, the oil and gas sector had the least level of compliance with environmental disclosure as disclosed in the index. This is confirmed by the increased rate of environmental degradation, oil spillage and other negative externalities that ravage the ecological system of their host communities. It can therefore be implied that multinational companies in Nigeria are not fully compliant with disclosing their environmental activities following global best practices.

The implication of these findings going by policy, is that multinational companies in Nigeria, despite their affiliation with the international community and the developed countries are not making an effort to comply with environmental accounting disclosure. They are majorly leveraging on the loophole in the financial regulations. This assertion is also confirmed in the sectoral assessment done in this study which revealed that the multinational companies' level of compliance with environmental accounting disclosure requirements is below the benchmark.



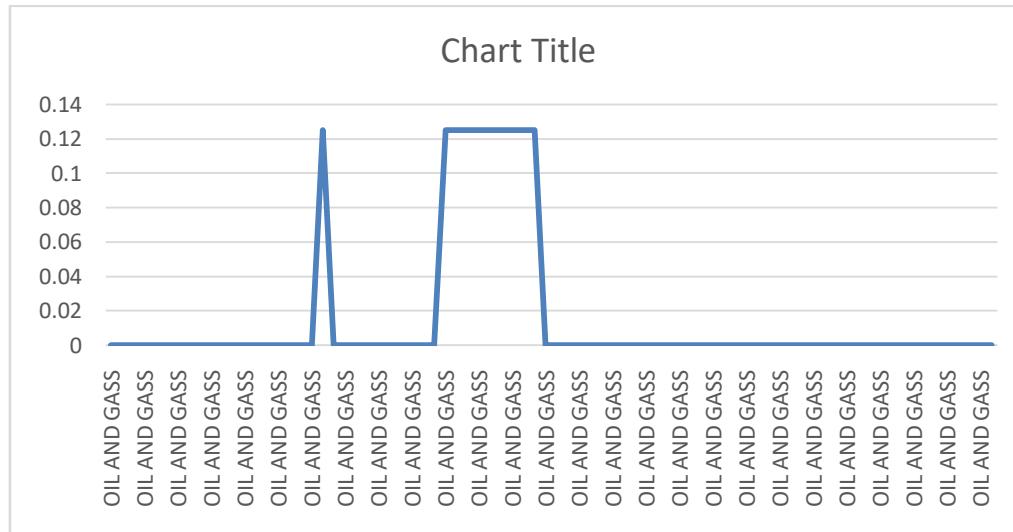
Source: Researcher's Computation, 2021

Figure 1: Industrial Goods Sector



Source: Researcher's computation, 2021

Figure 2: Consumer Goods Sector



Source: Researcher's computation, 2021

Figure 3: Oil and Gas Sector

d) Environmental Accounting Disclosure and Financial Performance

The F-statistics value of 3.91 (0.00) and 3.31 (0.00) for fixed and random effect models respectively shown in table 4 revealed that results are valid for inferential testing since they are both statistically significant at 5%. In testing for the cause-effect relationship between the variables, in model 1, the two widely used panel data regression estimation techniques (fixed effect and random effect) were

adopted. Table 4 present the two panel data estimation techniques results (fixed effect and random effect). In selecting from the two panel regression estimation results, the Hausman test was conducted based on the null hypotheses that the random effect is preferred to fixed effect, for model 1.

The result of the p-value of the Hausman test (0.9073), imply that we reject the null hypothesis and accept the alternative hypothesis at a 5 percent level of significance. The study adopted the fixed effect panel

regression results in discussing results. Following table 4, the discussion of the fixed effect results became imperative. In testing the stated hypothesis, edindex {fixed effect 4.4044 (0.049)} as an independent variable to environmental disclosure index has a positive and statistically significant at 5% influence on the earnings per share. Hence, the study accepted alternative hypothesis stated.

On the other hand, when the return on assets (ROA) was proxy is used to proxy financial performance; the result of the Hausman test has value (0.0192) implies that we should accept the null hypothesis and reject the alternative hypothesis at a 5 percent level of significance. This implies that the study adopted the random effect panel regression results in drawing our conclusion and recommendations. The result shows that edindex {random effect -0.0331 (0.995)} as an independent variable to environmental discourse index has a negative and statistically insignificant influence on the return on asset. Hence, the study accepted the null hypothesis stated.

The findings of this study concerning its significant effect on financial performance corroborate the findings of previous literatures as stated that environmental accounting disclosure influences financial performance (Oladimeji & Folayan, 2018; Igbekeyi, 2017; Nahiba, 2017; Arumona, et al., 2020; Uwaigbe, 2012).

Table 4: Regression Analysis of environmental disclosure index and financial performance

VARIABLES	MODEL 1		MODEL 2	
	(Fixed) EAPS	(Random) EAPS	(Fixed) RETA	(Random) RETA
Edindex	4.044** (2.046)	4.118** (1.945)	-15.51* (8.774)	-0.0331 (5.766)
Constant	3.075*** (0.317)	3.059** (1.229)	6.965*** (1.358)	5.326*** (1.574)
Observations	339	339	339	339
R-squared	0.013		0.010	
F statistics	3.91**		3.13**	
Number of id	34	34	34	34

Hausman test: Model 1 (0.9073);

Model 2 (0.0192).

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Source: Researcher's computation, 2021

V. CONCLUSION AND RECOMMENDATIONS

The study attempts to provide environmental accounting disclosure and financial performance of listed multinational firms in Nigeria. The previous studies conducted on environmental accounting disclosure and financial performance have revealed outcomes that are divergent. The study first conducted an intra-sector appraisal of the level of compliance of these firms to environmental accounting in line with global best practices and then conducted an investigation on the

An in-depth analysis of the financial performance indicators showed that environmental accounting disclosures affect earnings per share positively and significantly. The finding further upholds the assumptions of existing theories and literatures that compliance with environmental accounting has a significant effect on how the firms are valued externally by stakeholders in the economic market (Ezeagba, et al., 2017; Zamil & Hassan, 2019). Inspite of the non-regulatory framework, companies must strive to comply with these laid down indices in line with global best practices.

Previous studies conducted on the effect of environmental accounting disclosure on financial performance using return on asset showed a positive and significant effect (Okechukwu & Okeke-Muongbo, 2020; Gelb, 2017); others found insignificant effect (Ponnu & Karthigeyan, 2010); while Zamil & Hassan (2019) found a significant negative effects on financial performance. The findings of this study however showed that in the context of the time frame of this study, the effect of environmental accounting disclosure is negative and insignificant. Although the argument of companies to shy away from environmental costs is because they reduce profits and returns, with the findings of this study, it is established that although this assertion may be true, it is found to be insignificant.



effect of these environmental disclosures on the financial performance of the firms. The environmental accounting disclosure in this study is tailored around the environmental disclosure index which is the index that captures environmental appraisal indices in line with global best practices to determine how these influence the financial performance of the listed multinational firms in Nigeria. The financial performance is measured using the return on assets and earnings per share; this is done to determine the internal and external outlook of performance.

The study found that in the sectoral analysis, all of the three sectors studied majorly defaulted in full disclosure of environmental disclosure, with the oil and gas sector showing least with majority of the years falling to zero disclosure. When investigating the effect of disclosure on financial performance, the study found that environmental disclosure index had a significant positive effect on earnings per share. While in the case of return on assets, the results showed that environmental disclosure index has an insignificant negative effect. The study, therefore, concludes that multinational companies in Nigeria are not doing well enough in terms of full disclosure despite their affiliations with developed countries. Also, it was concluded that the environmental disclosure index significantly influences the earnings per share of companies within the time frame of this study. Based on these findings, the study, therefore, concludes that earning per share has a significant influence on the environmental accounting disclosure of listed multinational firms in Nigeria; the study there recommends that;

- i. Environmental accounting disclosure should not be seen as a mere report but more as governance and strategic issue, such that irrespective of the presence of regulation, full disclosure will be maintained to legitimize the position of the firms in the society.
- ii. The significance of earnings per share when compared with the return on assets is an indication that environmental accounting disclosure determines how a firm is valued in the economic market, so the disclosure should be prioritized by multinational firms.
- iii. The determining

REFERENCES RÉFÉRENCES REFERENCIAS

1. Akamelu, P. F. & Umeoduagu, O.L. (2017). Environmental accounting disclosure and firm value of industrial goods companies in Nigeria. *IOSR Journal of Economics and Finance (IOSR-JEF)*, 10(1),7-27.
2. Alok, K. P., Nikhil C.S & Bhagaban D. (2018). Corporate environmental reporting; an emerging issue in the corporate world. *International Journal of Business and Management*, 3(12), 146-156.
3. Al-Tuwaijri, S. A., Christensen, T. E., & Hughes, K. II. (2004). The relations among environmental disclosure, environmental performance, and economic performance: a simultaneous equations approach. *Accounting, Organizations and Society*, 29(5-6)447-471.
4. Ane, P. (2012). An assessment of the quality of environmental information disclosure of corporation in China. *Systems Engineers Procedia*, 5(2012), 420–426.
5. Arumona, J., Lambe, I. & Ogunmakinde, I.(2020). Examined effect of environmental disclosure on financial performance of quoted oil and gas companies in Nigeria. *Bingham University Journal of Accounting and Business (BUJAB)*, 1-286.
6. Ezeagba, C. E., John-Akamelu, C.,& Umeoduagu, C. (2017).Environmental accounting disclosures and financial performance of Food and Beverage Companies in Nigeria. *International Journal of Academic Research in Business and Social Science*, 7(9), 162-174 www.hrmars.com.
7. Ezejiofor, R. A., John-Akamelu, C. R., & Chigbo, B. E. (2016). Effect of sustainability environmental cost accounting on financial performance of Nigerian corporate organizations. *International Journal of Scientific Research and Management*, 4(8),4536-4549
8. Freeman, R.E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman Publishing Inc.
9. Galani, S. O., Gravas, T., & Stravropoulos(2017). Effect of environmental disclosure on financial performance of quoted oil and gas companies in Nigeria. *Bingham University Journal of Accounting and Business*
10. Gatimbu, K.K & Wabwire, J.M. (2016). Effect of corporate environmental disclosure on financial performance of firms listed at the Nairobi Stock Exchange, Kenya. *International Journal of Sustainability Management and Information Technology*, 1-6.
11. Gelb, B. (2017). Environmental disclosures and corporate performance in Japan. *Social and Basic Sciences Research Review*, 1(4), 49-56.
12. Hughes, S., Anderson, A., & Golden, S. (2001). Corporate environmental disclosures: Are they useful in determining environmental performance? *Journal of Accounting and Public Policy*, 20 (3), 1-17.
13. Igbekoyi, O. E. (2017). Causal effect of corporate social responsibility (CSR) on value drivers in the Nigerian manufacturing sector. *Journal of Emerging Trends in Economics and Management Sciences*, 8(3), 169-177.
14. JHVH, D.W (2013). Earnings per share as a measure of financial performance: does it obscure more than it reveals? *Corporate ownership and Control*, 10(4), 265-275
15. Mahoney, L., & Roberts, R. W. (2007). Corporate social performance, financial performance and institutional ownership in Canadian firms *Accounting Forum*, 31 (3), 233-253.
16. Makari, D., & Jagongo, A. (2013). Environmental Accounting and firm profitability: An empirical

- analysis of selected firms listed in Bombay Stock Exchange, India. *International Journal of Humanities and Social Science*, 3(18), 248-256.
17. Mitchell, J., Percy, M., & McKinlay, B. (2006). Voluntary environmental reporting practices: A further study of "poor" environmental performers. *Australian Journal of Corporate Law*, 19(2), 64-81
 18. Muhammed, A. I. (2018). Environmental Accounting. Springer International Publishing AG, DO1:10.1007/978235141.https://www.researchgate.net/publication/32090312.
 19. Nahiba, M. (2017). Non-financial disclosures and performance of manufacturing firms in India. *Journal of Empirical Literature*, 7(9), 21-29.
 20. Ndlovu, I., & Dzomira, S. (2021). Environmental accounting adoption and disclosure: Zimbabwe Stock Exchange listed companies. *Journal of Accounting and Management*, 11(1), 7-18
 21. Nguyen, L & Tran, M. (2019). Disclosure levels of environmental accounting information and financial performance: the case of Vietnam. *Management Science Letters*, 9(4), 557-570.
 22. Norhasimah, M.N., Norhabibi, A.S.B., Adan, N.A., Sheh-Mohamed., Q.A.K., & Ali, I.M. (2015). The effects of environmental disclosure on financial performance in Malaysia. *Procedia Economics and Finance*, 35(2016), 117-126.
 23. Ntim, C.G. (2016). Corporate governance, corporate health accounting, and firm value: The case of HIV/AIDS disclosures in Sub-Saharan Africa. *International Journal of Account*, 51,155–216.
 24. Nyirenda, G., Ngwakwe, C. C., & Ambe, C. M. (2013). Environmental management practices and firm performance in a South African mining firm. *Managing Global Transitions*, 11(3), 243–260.
 25. Okechukwu, E. A. & Okeke-Muongbo, G. N. (2020).Effect of environmental and social responsibility sustainability disclosure on firm performance of quoted health care and consumer goods companies in Nigeria. 6(6), www.cird.online/EJFAI/.
 26. Oladimeji, T. T. and Folayan, G. B. (2018). Information and communication technology (ICT) and its impact on national development in Nigeria. *Journal of Engineering and Technology*, 7(1), e-ISSN:2319-9873.
 27. Omaliko, E. L., Nweze, A. U. & Nwadiator, E. O. (2020).Effect of social and environmental disclosures on performance of non-financial firms in Nigeria. *Journal of Accounting and Financial Management*, 6, 2695-2211, 6, www.iiardpub.org. E-ISSN 2504-8856 P-ISSN
 28. Oyedokun, G. E., Egberioyinemi, E., & Tonademukaila, A. (2019). Environmental accounting disclosure and firm value of industrial goods companies in Nigeria. *IOSR Journal of Economics and Finance*, 10(1),7-27.
 29. Perry, M., & Singh, S. (2011). Corporate environmental responsibility in Singapore and Malaysia: The potential and limits of voluntary initiatives. *Technology, Business and Society Programme Paper*, 3
 30. Ponnu, C. H., & Karthigeyan, R.M. (2010). Board independence and corporate performance .*African Journal of Business Management*, 4(6), 859-868.
 31. Rahman, S. A., Yusoff, R. b., Mohamed, W. N. 2009. Environmental disclosure and financial performance: An empirical study of Malaysia, Thailand and Singapore. *Social and Environmental Accountability Journal*, 29(2), 46-58.
 32. Saman, U. P. (2019). Environmental accounting and financial performance of oil and gas companies in Nigeria. *Research Journal of Finance and Accounting*; 10(10), 192-200.
 33. Sarumpaet, S. 2005. The Relationship between Environmental Performance and Financial Performance of Indonesian Companies. *Journal Akuntasi and Keuangan*, 7(2), 89-98.
 34. Solomon, P.J. (2020). Environmental disclosure and financial performance of listed oil and gas companies in Nigeria: a review on literature. *IOSR Journal of Business and Management (IOSR-JBM)* 22(9), 58-68 www.iosrjournals.org.
 35. Tafadzwa, M. W. & Fortune, G. (2019). Relationship between Corporate Sustainability Disclosure and Firm Financial Performance in Johannesburg Stock Exchange (JSE) Listed Mining Companies. *Africa Centre for Sustainability Accounting and Management (ACSAM) Journal*, 11(4496), 2-23.
 36. Utile, B. J., Tarbo, D. I., & Ikya, E. A. (2017).Corporate Environmental Reporting and the Financial Performance of listed manufacturing firms in Nigeria. *International Journal of Advanced Academic Research Social and Management Sciences*, 3(8), 15 –25.
 37. Uwugbe, U. & Jimoh, J. (2012). Corporate environmental disclosure in the Nigerian Manufacturing and industry. *An International Multidisciplinary Journal Ethiopia* 6(3), 352-365
 38. Vanda, O., Burgiwal,S. H., & Viera, W. E. (2014). Corporate sustainability disclosure and firm financial performance in Johannesburg Stock Exchange (JSE) listed mining Companies. *IOSR-JBM*, 22(9),58-6, www.iosrjournals.org.
 39. Walsh, J.P. (2005). Taking stock of stakeholder management. *Academy of Management Review*, 30(2), 426-438.
 40. Wozuru, D., & Muah, O. (2018). Environmental reporting practices and financial performance of listed environmentally-sensitive firms in Nigeria.

Journal of Environmental and Social Sciences, 24(2),
403-412.

41. Yahaya, O.A. (2018). Environmental Reporting Practices and Financial Performance of Listed Environmentally-Sensitive Firms in Nigeria. *Journal of Environmental and Social Sciences*, 24(2), 403-412.
42. Zamil, G. M. S., & Hassan, Z. (2019). Impact of environmental reporting on financial performance: study of global fortune 500 companies. *Indonesian Journal of Sustainability Accounting and Management*, 3(2), 109.





GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: D
ACCOUNTING AND AUDITING
Volume 21 Issue 2 Version 1.0 Year 2021
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

La Carrera de Contador y la Sostenibilidad en Universidades de Latinoamérica y el Caribe desde un Ranking Global de Universidades

By Norma B. Geba, Marcela C. Bifaretti, Paula A. Longhi & Patricia B. Rovelli

Resumen - Existe una convicción de que la educación es un motor para garantizar los Objetivos del Desarrollo Sostenible. Se interpreta de la Federación Internacional de Contadores que el interés global sobre cómo las empresas y los mercados responden a la crisis climática desafía a los contadores para desempeñar un papel más activo. Es el objetivo general conocer según el *Impact Rankings 2021*, la presencia de la sostenibilidad en las Universidades de países de América Latina y el Caribe, y entre los específicos conocer la presencia de la carrera de contador público, o equivalente, y el de la sostenibilidad en el perfil profesional, o en la descripción de la carrera.

Palabras clave: sostenibilidad; países de américa latina y el caribe; universidades; carrera de contador público; perfil profesional; información contable financiera y no financiera.

GJMBR-D Classification: JEL Code: M41, Q56



Strictly as per the compliance and regulations of:



La Carrera de Contador y la Sostenibilidad en Universidades de Latinoamérica y el Caribe desde un Ranking Global de Universidades

Norma B. Geba ^a, Marcela C. Bifaretti ^a, Paula A. Longhi ^b & Patricia B. Rovelli ^c

Resumen- Existe una convicción de que la educación es un motor para garantizar los Objetivos del Desarrollo Sostenible. Se interpreta de la Federación Internacional de Contadores que el interés global sobre cómo las empresas y los mercados responden a la crisis climática desafía a los contadores para desempeñar un papel más activo. Es el objetivo general conocer según el *Impact Rankings 2021*, la presencia de la sostenibilidad en las Universidades de países de América Latina y el Caribe, y entre los específicos conocer la presencia de la carrera de contador público, o equivalente, y el de la sostenibilidad en el perfil profesional, o en la descripción de la carrera.

Se realiza una investigación empírica mayormente descriptiva. Del análisis de los resultados se infiere que para contribuir mejor a *desarrollar las habilidades y competencias futuras de la profesión contable, incluyendo la comprensión de información no financiera*, el perfil profesional, o descripción de la carrera, debería incluir un enfoque más holístico abarcador de los ODS.

Palabras clave: sostenibilidad; países de América Latina y el Caribe; universidades; carrera de contador público; perfil profesional; información contable financiera y no financiera.

I. INTRODUCCION

Las problemáticas originadas por el cambio climático, así como la necesidad de buena información homogénea que contribuya a gestionar más sosteniblemente a las organizaciones económicas han adquirido un rol protagónico a nivel global y local.

Distintas iniciativas promueven la emisión de informes de sostenibilidad. Entre las diversas iniciativas existentes, se selecciona que en la página de la Global Reporting Initiative (GRI) se informa que se ha anunciado en julio de 2021 una Declaración de cooperación entre GRI y el Grupo de trabajo del proyecto European Financial Reporting Advisory Group (EFRAG). Dicha cooperación es a efectos de “co-construir nuevos estándares de informes de sostenibilidad de la UE y contribuir a una mayor convergencia global” (GRI, 2021). Sobre la colaboración de GRI con EFRAG, se aclara que: “respalda la visión de la organización de lograr un sistema global de

Author a o p GJ: e-mails: normageba@econo.unlp.edu.ar, mbifaretti@hotmail.com, panalonghi@yahoo.com, patricia.rovelli@econo.unlp.edu.ar

informes corporativos en el que la divulgación financiera y de sostenibilidad estén interconectadas, sean obligatorias y estén en pie de igualdad.” (GRI, 2021).

En América Latina y el Caribe, la Organización para la Cooperación y el Desarrollo Económicos (OCDE) ha realizado una encuesta para conocer “sobre las prácticas, las oportunidades y los retos relacionados con la conducta empresarial responsable (CER) en América Latina y el Caribe (ALC)” (OCDE, 2021, p. 20). La encuesta se ha circularizado entre empresas con sede o actividad comercial en Argentina, Brasil, Chile, Colombia, Costa Rica, Ecuador, México, Panamá y Perú y, desde OCDE, se considera que esta “encuesta es única en el sentido de que se centra en la forma en que las empresas de ALC abordan los riesgos de la CER y llevan a cabo la debida diligencia basada en el riesgo de forma exhaustiva.” (p. 2). Dentro del *Resumen ejecutivo* del documento se expresa que:

Los resultados de la encuesta revelan que la mayoría de las empresas encuestadas han tomado medidas para gestionar estos riesgos en términos generales, y un 75 % de los encuestados señala que dispone de una política en la que se establecen las expectativas para la gestión de al menos una de las cuestiones relativas a la CER, tales como los derechos humanos, el empleo y los derechos laborales, el medio ambiente, la lucha contra la corrupción, los intereses de los consumidores o la divulgación de información. (OCDE, 2021, p. 2).

Se señala que el 55 % de las empresas encuestadas “realiza un informe sobre sus prácticas en relación con la CER”, pero “que solo una pequeña parte de las empresas parece realizar evaluaciones del riesgo a lo largo de la cadena de suministro a fin de minimizar el impacto negativo de sus actividades y maximizar su contribución positiva al desarrollo sostenible.” (OCDE, 2021, p. 2).

De los resultados de la encuesta se desprende que la aplicación de un enfoque estratégico y sistemático para ejecutar operaciones comerciales de forma responsable es fundamental para la capacidad de recuperación de las empresas que operan en y



desde América Latina y el Caribe en relación con sus cadenas de suministro, trabajadores y resultados financieros. (OCDE, 2021, p. 3). En el documento se sobresaltan determinadas expresiones, tales como:

Las empresas son el motor de la economía. Contribuyen al progreso económico y social a través de la creación de empleo, el desarrollo de competencias y tecnología y la prestación de bienes y servicios. Al mismo tiempo, las actividades comerciales pueden tener efectos negativos sobre las personas, el medio ambiente y la sociedad. (OCDE, 2021, p. 6).

Desde el ámbito contable, se interpreta que en Junio de 2021 la Federación Internacional de Contadores (IFAC) da a conocer, como *Visión general*, que la atención global sobre cómo las empresas y los mercados de capital están respondiendo a la crisis climática desafía a los contadores profesionales a desempeñar un papel activo en la determinación de la forma en que se brinda información sobre el cambio climático en el próximo ciclo de informes de 2021. Si bien los estándares de información financiera no han cambiado, los inversionistas y otras partes interesadas consideran que el cambio climático es un problema material que puede tener consecuencias financieras para la mayoría de las empresas. (IFAC, 2021). Considera que para abordar tales demandas, los contadores profesionales tienen un papel fundamental en:

1. Alinear e integrar la información y las divulgaciones relacionadas con el clima con los compromisos, objetivos y decisiones estratégicas climáticas de la empresa.
2. Cuantificar, cuando proceda, los impactos económicos de los problemas climáticos.
3. Asegurar que los informes relacionados con el clima cumplan con los requisitos de informes sin omisiones o errores importantes, según una determinación de materialidad específica de la empresa.
4. Apoyar iniciativas globales para mejorar el clima y los informes más amplios relacionados con la sostenibilidad a través de estándares establecidos por una nueva Junta de Normas Internacionales de Sostenibilidad (ISSB) que abordará los impactos materiales en el valor empresarial de una empresa. (IFAC, 2021).

Se expresa que las empresas deberán considerar la posibilidad de proporcionar divulgaciones adicionales cuando el cumplimiento estricto de los requisitos específicos de las normas de información financiera no les permita a los inversores comprender el impacto de los asuntos relacionados con el clima en la posición financiera y el desempeño financiero de la empresa. (IFAC, 2021).

Según Blood, Director Ejecutivo de la Confederación de Contadores de Asia y el Pacífico (CAPA), y Hong, Directora Ejecutiva de Partes Interesadas y Estrategia de CAPA, para ayudar a identificar qué define la profesión y lo que la ha de definir en el futuro previsible han llevado a cabo encuestas, investigaciones y discusiones en los foros de miembros de CAPA. En la encuesta que han realizado a principios de julio de 2021, “a la que respondió el 81% de los miembros de CAPA”, ha surgido entre las “tres (3) fuertes observaciones”, y que se han desarrollado más en un foro entre los miembros, que:

“La necesidad de centrarse en la próxima evolución de la profesión es ‘ahora’”.

De profundizar sobre qué debe hacer la profesión para seguir siendo relevante y cómo debe definirse a sí misma, se interpreta que han surgido cuatro (4) áreas de enfoque: a. **“Desarrollo de habilidades y competencias ‘futuras’”;** b. **“Desarrollo de habilidades técnicas adicionales, incluida la comprensión de la información no financiera”;** c. **“Revisión de programas educativos y modelos de licencia”;** y d. **“Elevar la influencia y el perfil de la profesión”**, las áreas en las que se ha considerado “que la profesión puede posicionarse adecuadamente a la vanguardia incluyeron el apoyo al logro del desarrollo sostenible y el aprovechamiento de la tecnología para aumentar el valor agregado.” (Blood y Hong, 2021).

Se entiende que para que la profesión desempeñe un papel más predictivo y proactivo y evolucione hacia lo requerido “puede incluir tomar la iniciativa para medir, contabilizar, informar, analizar y asegurar tanto la información financiera como la no financiera; asumir roles en los que la profesión ya posee las competencias y habilidades requeridas”... conectar los puntos y ayudar a que “tenga sentido para todas las partes interesadas.” (Blood y Hong, 2021).

Amerita tener en cuenta que en el desarrollo de habilidades y competencias para los profesionales contables, incluyendo la información no financiera para un desarrollo más sostenible, entre otras, las Universidades adquieren, o deben adquirir, un rol protagónico. Desde una perspectiva global, los *Times Higher Education Impact Rankings* “son las únicas tablas de desempeño global que evalúan a las universidades en... los Objetivos de Desarrollo Sostenible (ODS) de las Naciones Unidas.” (The World University Rankings, s.f.).

En una investigación preliminar se ha detectado que en el *Impact Rankings 2021* si bien los diez (10) países con mayor presencia de Universidades que incluyen la sostenibilidad “son: 1. Japón; 2. Federación de Rusia; 3. Reino Unido; 4. India; 5. Turquía; 6. Estados Unidos; 7. Brasil; 8. España; 9. Irak; y 10. Pakistán” (Geba, Bifaretti y Pascuzzi Rey, 2021, p. 10),

también se incluyen otros países de América Latina y el Caribe.

De lo expresado, y ante la importancia que adquiere la educación para el cumplimiento de los ODS, surgen diversos interrogantes, entre tales: ¿Cuál es el grado de presencia de cada país de América Latina y el Caribe en el *Impact Rankings 2021*? ¿En las Universidades de América Latina y el Caribe que incluyen la sostenibilidad según el *Impact Rankings 2021* se imparte la carrera de contador, contador público o equivalente? ¿Cuando se imparte la carrera de contador, contador público o equivalente se incluye la sostenibilidad en el perfil del egresado o perfil profesional? Para dar respuesta a los interrogantes mencionados se plantean los siguientes objetivos.

II. OBJETIVOS

Es el objetivo general del presente conocer el grado de presencia o inclusión de la sostenibilidad en las Universidades de cada país respecto al conjunto de países de América Latina y el Caribe, según el *Impact Rankings 2021*. Constituyen objetivos específicos determinar en la muestra de las Universidades de los países de América Latina y el Caribe incluidas en el *Impact Rankings 2021*:

- El grado de presencia de la carrera de contador, contador público o equivalente en el total de la muestra y en cada país;
- La relación porcentual, o proporción, de cada país de América Latina y el Caribe que incluye de la carrera de contador, contador público o equivalente respecto al conjunto seleccionado;
- Cuando se imparte la carrera de contador, contador público o equivalente, el grado de presencia de la sostenibilidad en el perfil del egresado o perfil profesional, o en su caso en el objetivo, visión o misión de la carrera; y
- La relación porcentual, o proporción, de cada país de América Latina y el Caribe que incluye la sostenibilidad en el perfil del egresado o perfil profesional, o en su caso en el objetivo, visión o misión, de la carrera de contador, contador público o equivalente, respecto al conjunto seleccionado.

III. REVISIÓN DE LA LITERATURA E HIPÓTESIS

En el marco de un Proyecto de Investigación y Desarrollo (I+D)¹ acreditado ante la Universidad Nacional de La Plata, República Argentina, de sucesivas investigaciones sistemáticas se selecciona que Geba, Bifaretti, Rovelli y Pascuzzi Rey (2020) indagan sobre las cuarenta y seis (46) Universidades Privadas en Argentina, según Univérsico y cuya fuente es el Ministerio de Educación, detectando “que se imparte la

Carrera de Contador Público, Contador Público Nacional o Contador, como carrera de grado... en el 84,78% de las Universidades analizadas desde sus páginas web.” (p. 915).

Geba, Pascuzzi Rey y Rovelli (2021), en una investigación empírica realizada sobre una muestra mayor al 60% de las primeras Instituciones universitarias públicas nacionales argentinas informadas en la lista del Consejo Interuniversitario Nacional a marzo de 2021, revelan que a abril de 2021 “de las 36 Universidades analizadas se observa que en 25 de sus Facultades (69,44%) se dicta la carrera de Contador Público (CP), sea en la misma Facultad y/o a través de sus centros.” (p. 9). También observan que “la Carrera de Contador Público se centra en la perspectiva económica-financiera tradicional” (p. 13) y la sostenibilidad “en el Perfil profesional o para la carrera de Contador Público, o Contador Público Nacional, es No importante o escasa.” (p. 13). Consideran que:

La inclusión de la sostenibilidad en el perfil de las carreras de Ciencias Económicas y, una mayor formación académica en sostenibilidad contribuiría a generar lineamientos enmarcados en la [Responsabilidad Social Universitaria] RSU y a una formación integral ciudadana de los educandos, así como a generar elementos de sostenibilidad para organizaciones de todo tipo. Además, si bien en Latinoamérica pueden presentarse determinadas particularidades, la formación académica sobre los aspectos de la sostenibilidad no debería ser muy distinta a los países más desarrollados, pues podrían presentarse desventajas competitivas y en la calidad de vida en general. (Geba, Pascuzzi Rey y Rovelli, 2021, pp. 12, 13).

En la investigación preliminar realizada por Geba, Bifaretti y Pascuzzi Rey (2021), se observan incluidos en el *Impact Rankings 2021* a 94 países y un mil ciento dieciocho (1.118) Universidades. Se ha concluido, entre otros aspectos, que el “grado de presencia de la contabilidad como tema, en las Universidades incluidas en el *Impact Rankings 2021*, puede ser considerado alto.” (p. 12).

Las expresiones precedentes y los avances realizados, entre otros, permiten elaborar la siguiente hipótesis de trabajo: el grado de presencia o inclusión de la sostenibilidad en las Universidades de cada país respecto al conjunto de países de América Latina y el Caribe, según el *Impact Rankings 2021* es Bajo, excepto por Brasil.

Con respecto a la muestra seleccionada de países de América Latina y el Caribe se consideran las siguientes hipótesis:

H1: el grado de presencia de la carrera de contador, contador público o equivalente en las Universidades de

¹El presente trabajo se realiza en el marco del Proyecto I+D: E/173, acreditado ante la Universidad Nacional de La Plata, Argentina.

América Latina y el Caribe incluidas en el Impact Rankings 2021 es Alto;

H2: el grado de presencia de la sostenibilidad en el perfil del egresado o perfil profesional, o en su caso en el objetivo, visión o misión, para la carrera de contador, contador público o equivalente impartida en las Universidades de América Latina y el Caribe incluidas en el Impact Rankings 2021 alcanza un grado Muy Bajo; y

H3: las proporciones, o relaciones porcentuales, de cada país de América Latina y el Caribe analizados que en este conjunto incluye la carrera de contador, contador público o equivalente, y la sostenibilidad en el perfil del egresado o perfil profesional, o en su caso en el objetivo, visión o misión, de la carrera no difieren entre sí más del 10%.

IV. METODOLOGÍA

Para este estudio, se respetan, y en caso de ser necesario se adaptan, criterios establecidos en anteriores investigaciones y se realiza una investigación empírica mayormente descriptiva. En septiembre 2021 se busca en Internet la lista brindada por el *Impact Rankings 2021*, luego de los noventa y cuatro (94) países incluidos en la lista se seleccionan los países de América Latina y el Caribe.

De la cantidad de Universidades de América Latina y el Caribe incluidas en la lista, se conforma una muestra de Universidades mayor al 75% con los primeros países que se informan. La muestra se compone por noventa y una (91) Universidades públicas o privadas de ocho (8) países, de un total de trece (13) países. Durante septiembre y octubre 2021 se ingresa en la web de cada Universidad y se indaga si en sus Facultades, centros, departamentos o similares se imparte la carrera de contador, contador público, o equivalente, ya sea de manera virtual y/o con presencialidad física. Cuando se imparte la carrera se analiza si en el perfil profesional, perfil del egresado o similares, en su caso en el objetivo de la carrera, visión o misión, contiene de manera expresa y en forma escrita los términos sostenibilidad, desarrollo sostenible u objetivos de desarrollo sostenible. Se determinan las relaciones respecto del total y los grados de presencia.

Para determinar los grados de presencia se considera como Alto: más del 70%, Importante: menos de 70% a 45%; Medio: menos de 45% a 20%; Bajo: menos de 20% a 5%; y Muy bajo: menos del 5% de inclusión. Se confeccionan matrices de relevamiento y análisis de datos. Se elabora un marco conceptual que incluye avances realizados en contabilidad social y ambiental enmarcada en la sostenibilidad y, considerando los resultados obtenidos y los análisis realizados, se infieren conclusiones.

Se entiende necesario aclarar que: la inclusión o registro en los *Times Higher Education Impact*

Rankings es voluntaria, el Impact Rankings 2021 es la tercera edición, la cantidad de Universidades existentes en los distintos países es diferente y que puede haber Universidades que imparten la carrera de contador, contador público o equivalente, e incluyan la sostenibilidad y no se encuentren en el Ranking, entre otras variables relacionadas.

V. MARCO CONCEPTUAL

Tener en cuenta a los Objetivos de Desarrollo Sostenible (ODS), o la sostenibilidad, significa considerar que los ODS se han adoptado "como un llamado universal para poner fin a la pobreza, proteger el planeta y garantizar que todas las personas gocen de paz y prosperidad para 2030." (PNUD, 2021 a). Los ODS se relacionan entre sí, "están integrados" y "el desarrollo debe equilibrar la sostenibilidad medio ambiental, económica y social" (PNUD, 2021 a). Se considera que: "Se necesita la creatividad, el conocimiento, la tecnología y los recursos financieros de toda la sociedad para conseguir los ODS en cada contexto" (PNUD, 2021 a). Los diecisiete (17) ODS son:

1. FIN DE LA POBREZA
2. HAMBRE CERO
3. SALUD Y BIENESTAR
4. EDUCACIÓN DE CALIDAD
5. IGUALDAD DE GÉNERO
6. AGUA LIMPIA Y SANEAMIENTO
7. ENERGÍA ASEQUIBLE Y NO CONTAMINANTE
8. TRABAJO DECENTE Y CRECIMIENTO ECONÓMICO
9. INDUSTRIA, INNOVACIÓN E INFRAESTRUCTURA
10. REDUCCIÓN DE LAS DESIGUALDADES
11. CIUDADES Y COMUNIDADES SOSTENIBLES
12. PRODUCCIÓN Y CONSUMO RESPONSABLE
13. ACCIÓN POR EL CLIMA
14. VIDA SUBMARINA
15. VIDA DE ECOSISTEMAS TERRESTRES
16. PAZ, JUSTICIA E INSTITUCIONES SÓLIDAS
17. ALIANZA PARA LOGRAR LOS OBJETIVOS (PNUD, 2021 a).

Según PNUD (2021 b), el "objetivo de lograr una educación inclusiva y de calidad para todos se basa en la firme convicción de que la educación es uno de los motores más poderosos y probados para garantizar el desarrollo sostenible." Con este objetivo se aspira también "a proporcionar acceso igualitario a formación técnica asequible y eliminar las disparidades de género e ingresos, además de lograr el acceso universal a educación superior de calidad."

Para Romero (2021) la debida diligencia del riesgo es un elemento central de la CER, considera que para llevar a cabo la debida diligencia del riesgo es necesario "conocer el proceso y la guía de diligencia debida que se sustenta en las Líneas Directivas de la

OCDE para empresas multinacionales." Expresa en: *Proceso de debida diligencia y medidas de apoyo*, que tal "proceso se sustenta en 6 pasos:

1. Integrar la conducta empresarial responsable en las políticas y los sistemas de gestión. Este paso se encuentra en el centro e incide en todo el proceso.
2. Identificar y evaluar los efectos negativos en las operaciones, las cadenas de suministro y las relaciones comerciales.
3. Detener, prevenir o mitigar los efectos negativos.
4. Realizar un seguimiento de la aplicación y los resultados.
5. Comunicar cómo se abordan los efectos.
6. Ofrecer o cooperar con medidas correctivas cuando proceda.

Todos estos pasos forman parte de un ciclo del proceso de debida diligencia, pero en especial el paso 3 y 6 mantienen una estrecha relación. (Romero, 2021).

En cuanto a Universidades, en este estudio se entienden como Universidades a las así denominadas en el Ranking de Times Higher Education. Según Times Higher Education (2020) el puntaje final de cada "universidad en la tabla general se calcula combinando su puntaje en el ODS 17 con sus tres puntajes principales de los 16 ODS restantes." Las diferentes Universidades se puntuán en función de un conjunto diferente de ODS, y depende de su enfoque. Hay tres (3) categorías de métricas dentro de cada ODS y las métricas utilizadas para los 17 ODS se incluyen en sus páginas de metodología individuales.

Sobre el Ranking de Times Higher Education (2021) se interpreta que Times Higher Education ha elaborado los Rankings de Impacto para conocer sobre instituciones que trabajan para abordar problemas globales como la desigualdad de género, la educación de calidad para todos, el cambio climático y el logro de sociedades pacíficas y el crecimiento económico. Para las clasificaciones, mapean "cómo las universidades de todo el mundo se están comprometiendo con los 17 Objetivos de Desarrollo Sostenible (ODS) de las Naciones Unidas." Consideran que el "ranking es un recurso crucial para los estudiantes que eligen una universidad"… En la página web de Impact Rankings 2021, Times Higher Education (THE), se encuentra información de las Universidades por país, por región y por temas, entre otros.

Como carrera de Contador Público, Contador Público Nacional, Contador o equivalente, se considera a la "carrera de grado que permite obtener el título habilitante para ejercer dicha profesión" (Geba, Catani y Longhi, 2020, p. 894) y se encuentran incluidas en las páginas web de las Universidades, o sus Facultades, Centros, Departamentos o afines. A los fines de este trabajo se entienden como carreras equivalentes a licenciado en contaduría pública, licenciado/a en

contabilidad y auditoría, contador/auditor, auditoría orientada a la disciplina contable o contabilidad, y similares. Se interpreta por perfil de la carrera, perfil del egresado, perfil profesional, o en su caso descripción de la carrera, a lo así denominado en las respectivas páginas web.

En cuanto a la contabilidad, existen diversas definiciones o conceptualizaciones de la misma, dependiendo, entre otros aspectos, del status, del alcance y del enfoque utilizado. Tua Pereda (2001) brinda las principales características que, a su entender, concurren al concepto de contabilidad y sus antecedentes, intentando poner de manifiesto la evolución conceptual de la contabilidad que "evidencia su vinculación y capacidad de servicio en relación con un entorno cambiante".... (Tua Pereda, 2001, p. 37). Expresa:

Sin olvidar otras cuestiones... tales como el posible carácter predictivo de la Contabilidad, el dilema entre Contabilidad monetaria y no monetaria, la discusión sobre la viabilidad de la Contabilidad ene-dimensional frente a la tradicional partida doble o la entidad a la que se aplica y refiere la información, hemos centrado nuestro planteamiento en cuatro elementos que habitualmente concurren... su vinculación con la realidad económica, su utilidad al servicio de la toma de decisiones por sus usuarios, su condición de deber de la entidad económica, consecuencia de la responsabilidad social, de esta última, y su carácter de disciplina científica formalizada. (Tua Pereda, 2001, p. 37).

Biondi (2005) recrea la "definición ensayada" en la XI Conferencia Interamericana de Contabilidad (CIC) de 1974, que, referida la contabilidad patrimonial destinada a terceros, la contabilidad es:

"Una disciplina técnica consistente en un sistema de operaciones que registra, analiza, interpreta, decide y controla cierta materia dada por la información relativa al valor (cuantificación) de los patrimonios, con vistas a un fin (constituir una base importante para la toma de decisiones y el control de la gestión)." (Biondi, 2005, p. 4).

Interpreta que la teoría contable reconoce dos orígenes: la *teoría contable doctrinaria* y la *teoría contable normativa*. La *teoría contable normativa* incluye lo denominado como "marco conceptual" preparado por las instituciones que emiten las normas contables y diversos organismos, como la Federación Internacional de Contadores (IFAC), realizan esfuerzos para que las normas contables sean armonizadas entre los países. (Bondi, 2005, pp. 5, 6).



Si bien tradicionalmente los marcos contables se han centrado en un enfoque financiero de la amplia realidad contable, Geba (2005) analiza la disciplina contable desde una óptica sistémica, análisis que también puede ser considerado para la contabilidad para la sostenibilidad. Interpreta a la disciplina contable como “un sistema artificial o cultural, creado por el hombre... abierto y... compuesto por subsistemas: un subsistema abstracto o teórico que permite caracterizarla y determinar sus límites y un subsistema físico: El Proceso Contable, que opera en aras de cumplir un objetivo, que interactúan entre sí y con el medio.” (p. 11).

Con respecto a la disciplina contable, en un principio la realidad aporta al sistema teórico, el que debería organizarse en teorías y modelos. Luego, el subsistema teórico, contiene los aspectos doctrinarios y normativos que brindan descripciones, explicaciones y reglas de conducta que hacen al campo de actuación contable y permiten determinar y seleccionar los aspectos, variables y dimensiones de la realidad, y las interrelaciones. Es decir contiene el qué, cómo, cuándo y para qué de la disciplina contable.

En forma paralela, ambos subsistemas pueden ser analizados independientemente, pero el proceso contable sin su marco teórico específico no sería contable y el marco teórico sin un adecuado proceso físico actuaría en abstracto, sin retroalimentar o alimentarse para conocer la realidad. Cabe destacar que tales aspectos configuran algunas de las características de la contabilidad como disciplina factual, que brinda conocimientos de la realidad utilizando una tecnología y una técnica contable. (Geba, 2005, p. 10).

Geba y Bifaretti (2014), de analizar desarrollos sobre ciencia y tecnología desde diferentes perspectivas, diferencian la disciplina contable, “que abarca aspectos socio-ambientales no necesariamente limitados a lo económico-financiero” (p. 6), de la tecnología contable. Infieren que:

Mientras que el objetivo de la disciplina científica contable es el conocimiento científico (para conocer y comprender racionalmente parte de la realidad) y permite producir bienes culturales que son bienes públicos, para la tecnología contable el conocimiento orientado a la praxis para solucionar problemas complejos estaría constituido por las normas contables (como reglas o patrones de conducta social y sus conceptualizaciones) orientadas a producir un estado ordenado y regulado de acontecimientos, así como por el consagrado al diseño y puesta a prueba de sistemas

contables y procesos contables (y sus relaciones) para la satisfacción de deseos y necesidades que, dinamizados en las organizaciones económicas, son de dominio privado. (Geba y Bifaretti, 204, p. 16).

Geba, Bifaretti, Rovelli y Pascuzzi Rey (2020) consideran para la contabilidad social y ambiental que la misma debería partir “de una teoría contable amplia o más abarcadora de la realidad social, que impregnada de sostenibilidad, propicie conocer y gestionar el cumplimiento de los ODS” (p. 915), entendiendo que lo económico-financiero es una creación cultural y variados impactos naturales son producto de la acción humana.

VI. RESULTADOS

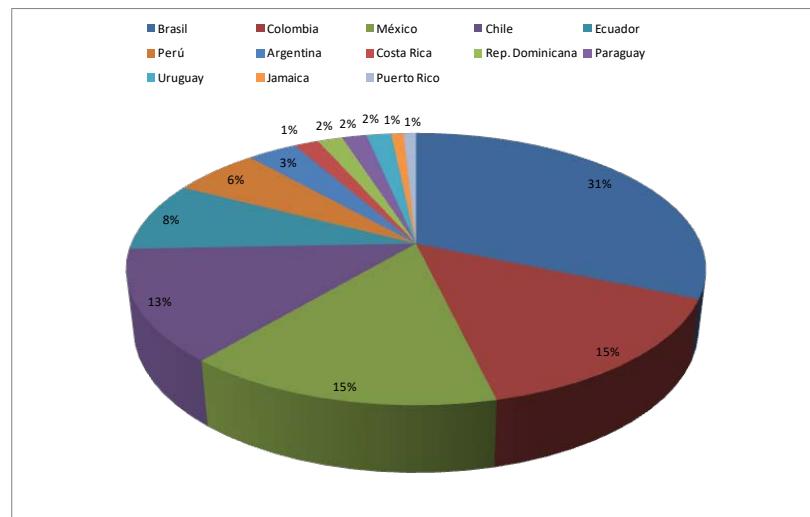
De las búsquedas y estudio realizado se detecta un total de ciento veintiuna (121) Universidades de trece (13 países de América Latina y el Caribe que incluyen la sostenibilidad, según el *Impact Rankings 2021*.

Tabla N° 1: Universidades de países de América Latina y el Caribe que incluyen la sostenibilidad, según el Impact Rankings 2021

País	Cantidad de universidades
1 Argentina	4
2 Brasil	38
3 Chile	16
4 Colombia	18
5 Costa Rica	2
6 Rep. Dominicana	2
7 Ecuador	10
8 Jamaica	1
9 México	18
10 Paraguay	2
11 Perú	7
12 Puerto Rico	1
13 Uruguay	2
Total de universidades	121

Fuente: elaboración propia a partir de *The World University Rankings* (s.f.).

La relación porcentual, que permite considerar el grado de presencia, de cada país respecto al total de dicho conjunto se muestra en el Gráfico N° 1.

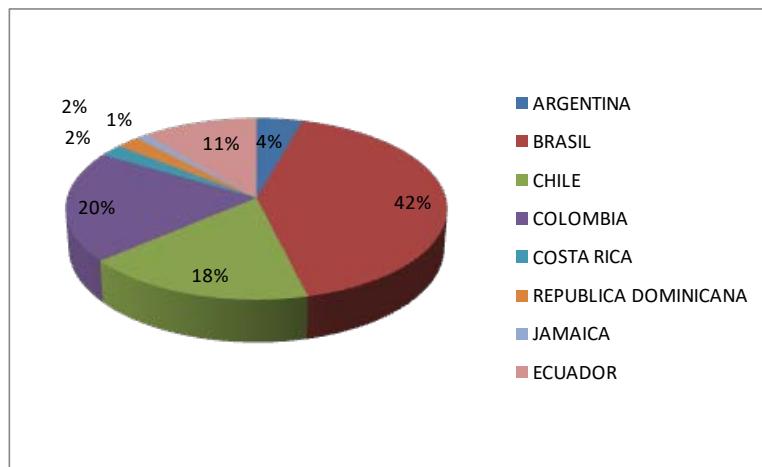


Fuente: elaboración propia a partir de *The World University Rankings* (s.f.).

Gráfico N° 1: Grado de inclusión de la sostenibilidad en las Universidades de cada país de América Latina y el Caribe según the World University Rankings

Las universidades que componen la muestra representan el 75,21% de las Universidades de países de América Latina y el Caribe incluidas en el *Impact Rankings 2021* y se localizan en ocho (8) de dichos

países, el 61,54% de los mismos. La relación porcentual de cada país sobre el total de la muestra se muestra en el Gráfico N° 2.



Fuente: elaboración propia a partir de *The World University Rankings* (s.f.).

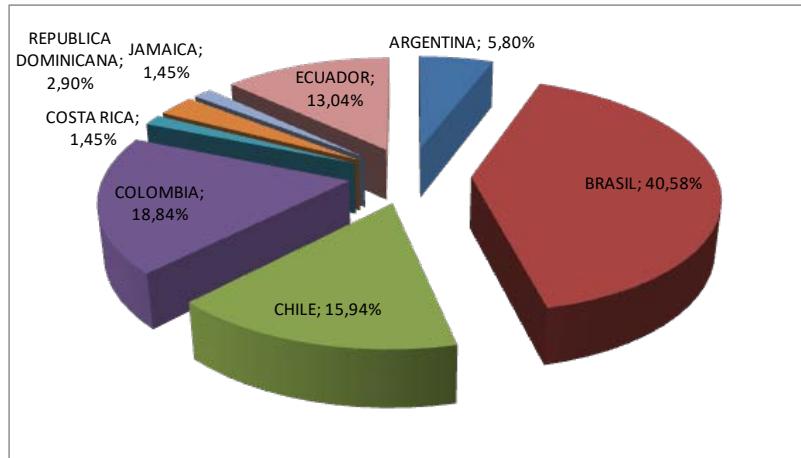
Gráfico N° 2: Proporción de Universidades en los países incluidos en the World University Rankings componentes de la muestra

En el gráfico N° 2 puede observarse que Brasil con grado Medio posee mayor presencia de Universidades en la muestra seleccionada de países de América Latina y el Caribe incluidos en el *Impact Rankings 2021*, seguido por Colombia, Chile y Ecuador con grado Bajo, y Argentina, República Dominicana, Costa Rica y Jamaica con grado Muy bajo.

El grado de presencia de la carrera de contador público (C. P.), o equivalente, detectado en la muestra de Universidades públicas o privadas de América Latina y el Caribe incluidas en el *Impact Rankings 2021* es Alto, alcanza el 75,82%.

En sesenta y nueve (69) Universidades, de una muestra de noventa y una (91), se imparte la carrera de C.P., o equivalente, ya sea en sus facultades; centros; departamentos o similares. Amerita considerar que en una Universidad se observa la carrera de C.P., o equivalente, pero su página se encuentra en construcción y en otro caso no se puede acceder a la información.

Para cada país el grado de presencia de la carrera de contador público (C. P.), o equivalente, detectado a la fecha se muestra en el gráfico N° 3.



Fuente: elaboración propia.

Gráfico N° 3: Carrera de C. P. o equivalente en las Universidades incluidas en the World University Rankings 2021 en el de los países componentes de la muestra

En el Gráfico N° 3 puede verse que en los países seleccionados que se encuentran incluidos en el *Impact Rankings 2021* la relación porcentual entre las Universidades que imparten la carrera de C.P., o equivalente, varía entre el 40,58% y el 1,45%.

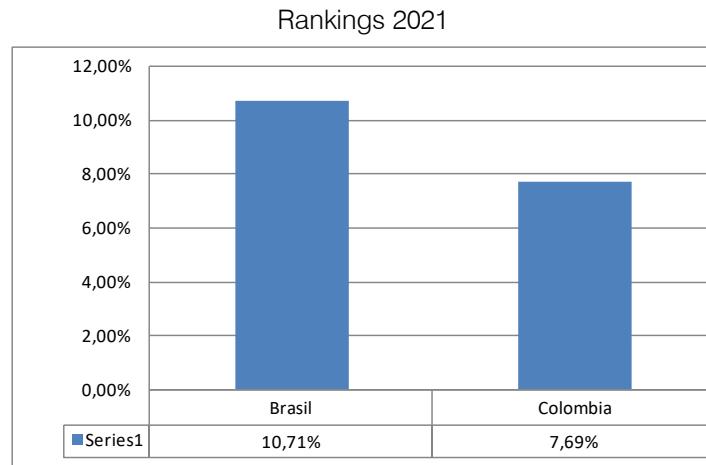
La presencia de la sostenibilidad en el perfil del egresado o perfil profesional, o en su caso en el objetivo, visión o misión de la carrera de C. P., o equivalente, impartida en las Universidades de la muestra en países de América Latina y el Caribe incluidas en el *Impact Rankings 2021* se observa en: cuatro (4) carreras de un total de sesenta y nueve (69) Universidades cuyas facultades, centros o departamentos imparten la carrera, representando el 5,80% o un poco más del grado Muy bajo.

En cuanto a la relación porcentual, o proporción, de cada país de América Latina y el Caribe que incluye la sostenibilidad en el perfil del egresado o perfil profesional, o en su caso en el objetivo, visión o

misión, de la carrera de contador, contador público o equivalente, respecto al conjunto seleccionado, se detecta hasta el presente la presencia de la sostenibilidad en dos países de la muestra.

En Brasil alcanza el 10,71%, pues se incluye la sostenibilidad en tres (3) Universidades de un total de veintiocho (28) que imparten la carrera, y en Colombia representa el 7,69%, se incluye en una (1) Universidad de un total de trece (13) Universidades que imparten la carrera, representando cada país un grado Bajo.

De ello resulta que, excepto por Colombia, la relación porcentual de inclusión de la sostenibilidad en el perfil del egresado o perfil profesional, o en su caso en el objetivo, visión o misión, de la carrera de C. P., o equivalente, entre Brasil y los otros países componentes de la muestra es superior al 10%. En el Gráfico N° 4 pueden apreciarse tales proporciones.



Fuente: elaboración propia.

Gráfico N° 4: Inclusión de la Sostenibilidad en el Perfil o descripción de la carrera de C. P. en Universidades de la muestra de países de ALC incluidos en the World University

En el Gráfico N° 4 se representa la detección de los términos de búsqueda considerados para el presente para la presencia de la sostenibilidad y según el marco conceptual, si bien del estudio se observan casos con expresiones tales como: Responsabilidad social, temas socio-ambientales, información contable sin limitación a lo financiero, responsabilidad de las organizaciones ante sus grupos de interés, innovaciones tecnológicas, agentes de cambio, contexto globalizado, sostenibilidad pero limitada a las decisiones económico-financieras, valores cristianos, interdisciplinariedad, actitud proactiva, contribución social, cuidado ambiental y vida sana, profesional socialmente responsable, formación humanística, respeto a las normativas ambientales, actor en procesos de gestión, valorar la riqueza social, ambiental, cultural y étnica, entre otras.

VII. DISCUSIÓN Y CONCLUSIÓN

El estudio y los análisis realizados permiten confirmar parcialmente las hipótesis del trabajo. Si bien los ODS se han adoptado como una “llamado universal”, la educación es considerada como uno de los “motores más poderosos y probados para garantizar el desarrollo sostenible” para PNUD 2021, el registro en los Times Higher Education es voluntario y 2021 es la tercera edición, según los parámetros utilizados, el grado de presencia o inclusión de la sostenibilidad según el *Impact Rankings 2021* en las Universidades de cada país respecto al conjunto de países de ALC es: Medio para 1. Brasil; Bajo para 2. Colombia, 3. México, 4. Chile, 5. Ecuador y 6. Perú; mientras que es Muy bajo para 7. Argentina, 8. Costa Rica, 9. República Dominicana, 10. Paraguay, 11. Uruguay, 12. Jamaica y 13. Puerto Rico.

En cuanto a la muestra seleccionada de países de ALC cuyas Universidades se encuentran en el *Impact Rankings 2021*, el grado de presencia de la carrera de C. P., o equivalente, es Alto. Quizá ello esté motivado por las respuestas de las empresas y los mercados de capital a la crisis climática que desafía a los contadores a desempeñar un papel más activo para determinar la forma en que se brinda información sobre el cambio climático y respecto a informes más abarcadores de aspectos sociales, ambientales, económicos y financieros relacionados a la sostenibilidad, monetarios y no monetarios.

El grado de presencia de la sostenibilidad en la descripción o en el perfil del egresado o perfil profesional para la carrera de C.P, o equivalente, es Bajo, se observa en cuatro (4) carreras de un total de sesenta y nueve (69) carreras detectadas en la muestra de Universidades de once (11) países de ALC analizados. Si bien puede inferirse que se observa cierto cambio cultural hacia la sostenibilidad ante las expresiones detectadas en algunos casos

(responsabilidad social, temas socio-ambientales, información contable sin limitación a lo financiero, responsabilidad de las organizaciones ante sus grupos de interés, innovaciones tecnológicas, agentes de cambio, contexto globalizado, valores cristianos, interdisciplinariedad, actitud proactiva, contribución social, cuidado ambiental y vida sana, otras), la descripción, el perfil del egresado o para la carrera de C. P., o equivalente, se centra mayormente en la perspectiva económica-financiera tradicional.

De la proporción de cada país de la muestra de ALC que incluyen la carrera de C. P., o equivalente, surge que es Medio para Brasil (40,58%); Bajo para Argentina (5,8%); Chile (15,94%), Colombia (18,84%) y Ecuador (13,04%); y Muy bajo para Costa Rica (1,45%), República Dominicana (2,90%) y Jamaica (1,45%) según el registro en el *Impact Rankings 2021*, difiriendo entre sí en más del 10% en varios casos. Mientras que las proporciones que surgen entre dichos países que incluyen la sostenibilidad en la descripción y en el perfil de la carrera de C. P., o equivalente, se ha detectado una variación mayor al 10% entre Brasil, con 10,71%, y el resto de los países, excepto por Colombia que alcanza el 7,69%, quizás en parte motivado por el grado de presencia de la carrera de C.P., o equivalente, mencionado.

Con dichos resultados, también puede inferirse que para contribuir mejor a desarrollar las habilidades y competencias futuras de la profesión contable, así como las habilidades técnicas adicionales, incluyendo la comprensión de información no financiera, la descripción, el perfil del egresado o para la carrera de C. P., o equivalente, debería incluir un enfoque más holístico abarcador de los ODS. Con ello, el profesional contable podría posicionarse más adecuadamente para apoyar el logro del desarrollo sostenible, aprovechando la tecnología para aumentar el valor agregado y captar, clasificar, medir, registrar, informar contablemente, analizar y asegurar tanto la información financiera como la no financiera, tan necesarios para la sostenibilidad.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Biondi, M. (2005). Contabilidad Financiera. 1^a ed. Buenos Aires: Errepar.
2. Blood, B. y Hong, E. (2021). La profesión contable: este camino a seguir. <https://www.ifac.org/knowledge-gateway/developing-accountancy-profession/discussion/accountancy-profession-way-forward>
3. Cogna Educação (s. f.). Sobre nosotros. <https://www.cogna.com.br/>
4. Escuela Superior Politécnica del Litoral (ESPOL). (2020). Educación, Grado. <https://www.espol.edu.ec/es/educacion#grado>
5. Federación Internacional de Contadores (IFAC). (2021). Informes corporativos: información sobre el

- cambio climático y el ciclo de informes de 2021. https://www.ifac.org/knowledge-gateway/contributing-global-economy/discussion/corporate-reporting-climate-change-information-and-2021-reporting-cycle?utm_source=Main+List+New&utm_campaign=55623dd9ae-EMAIL_CAMPAIGN_2021_09_21_01_09&utm_medium=email&utm_term=0_c325307f2b-55623dd9ae-80686420
6. Geba, N. (2005). El Proceso Contable en la Contabilidad como Disciplina. 11mo. Encuentro Nacional de Investigadores Universitarios del Área Contable, Universidad Nacional de Misiones, Facultad de Ciencias Económicas, Instituto de Investigaciones y Estudios Contables. Ciudad de Posadas, Argentina.
7. Geba, N. y Bifaretti, M. (2014). Diferencias y similitudes entre disciplina contable y tecnología contable. 20º Encuentro Nacional de Investigadores Universitarios del área Contable y 10º Simposio Regional de Investigación Contable. Universidad Nacional de La Plata, Facultad de Ciencias Económicas, Instituto de Investigaciones y Estudios Contables. Ciudad de La Plata, Argentina.
8. Geba, N., Bifaretti, M., Rovelli, P. y Pascuzzi Rey, A. (2020). La carrera de contador público en universidades privadas de Argentina: la contabilidad social y ambiental como asignatura. En XL JORNADAS UNIVERSITARIAS DE CONTABILIDAD. 1a ed ampliada. Ciudad Autónoma de Buenos Aires: Fundación Científica Felipe Fiorellino, Universidad Maimónides https://drive.google.com/file/d/1x3yJDME-5y1gbrOtbgqhyQzlkzJrU_XE/view
9. Geba, N., Catani, M. y Longhi, P. (2020). La Carrera de Contador Público en Universidades Nacionales: Contabilidad Social y Ambiental como Asignatura y el Acompañamiento para el Egreso de los Educandos. En XL JORNADAS UNIVERSITARIAS DE CONTABILIDAD. 1a ed ampliada. Ciudad Autónoma de Buenos Aires: Fundación Científica Felipe Fiorellino, Universidad Maimónides. https://drive.google.com/file/d/1x3yJDME-5y1gbrOtbgqhyQzlkzJrU_XE/view
10. Geba, N., Bifaretti, M. y Pascuzzi Rey, A. (2021). Contabilidad social y ambiental y el desarrollo sostenible en un ranking global de universidades. 27º Encuentro Nacional y 1er Encuentro Internacional de Investigadores Universitarios del Área Contable. Universidad de Buenos Aires, Facultad de Ciencias Económicas. Ciudad Autónoma de Buenos Aires, Argentina.
11. Geba, N., Pascuzzi Rey, A. y Rovelli, P. (2021). Desarrollo Sostenible y la Carrera de Contador Público en Universidades Públicas Nacionales de Argentina. VI SIMPOSIO INTERNACIONAL DE RESPONSABILIDAD SOCIAL DE LAS ORGANIZACIONES (SIRSO). Universidad Nacional de La Plata, Facultad de Ciencias Económicas, La Plata, Argentina.
12. Global Reporting Initiative (GRI). (2021). GRI agradece el apoyo de Caisse des Dépôts por su contribución al trabajo técnico del EFRAG. https://www.globalreporting.org/about-gri/news-center/towards-new-eu-sustainability-reporting-standards/?utm_campaign=12686208_Newsletter-September-2021&utm_medium=Engagement%20Cloud&utm_source=Global%20Reporting%20Initiative&dm_i=4J5,7JWQO,G3U1MQ,UQM8X,1
13. Instituto Tecnológico Metropolitano (s. f.). Facultad de Ciencias Económicas y Administrativas, Contaduría Pública, Acerca del programa. <https://www.itm.edu.co/facultades/facultad-de-ciencias-economicas-y-administrativas-2/formacion-3/contaduria-publica/>
14. Jesuitas Brasil, UNISINOS (s. f.). Escuela de Administración y Negocios de Unisinos, GRADUACIÓN PRO CONTABILIDAD <https://www.unisinos.br/graduacao/ciencias-contabeis/sao-leopoldo>
15. La Universidad de las Indias Occidentales Mona (s. f.). Facultad de Ciencias Sociales, Licenciatura en Contabilidad. <https://www.mona.uwi.edu/socsci/programmes/bsc-accounting>
16. Organización para la Cooperación y el Desarrollo Económicos (OCDE). (2021). Resultados de la Encuesta de la OCDE a Empresas sobre la Conducta Empresarial Responsable en América Latina y el Caribe. <https://mneguidelines.oecd.org/resultados-de-la-encuesta-de-la-ocde-a-empresas-sobre-la-conducta-empresarial-responsable-en-america-latina-y-el-caribe.pdf>
17. Pontificia Universidad Católica de Chile (s. f.). Facultad de Economía y Administración, pregrado. <http://economia.yadministracion.uc.cl/pregrado/>
18. Pontificia Universidad Católica de Minas Gerais, PUC Minas (2021). Graduación, Fosa de arcilla, Contabilidad. <https://www.pucminas.br/unidade/bairro/ensino/graduacao/Paginas/Ci%C3%A3ncias-Contabeis-%C3%8Anfase-em-Controladoria.aspx?moda=2 &curso=187&local=2c4aefe1-fa8d-4a68-8379-4fb8298266d6>
19. Pontificia Universidad Católica de Rio Grande do Sul (PUCRS). (2021). CIENCIAS CONTABLES: CONTRALORIA E IMPUESTOS, Bachillerato <https://www.pucrs.br/estudenapucrs/cursos/ciencias-contabeis-controlatoria-e-tributos/>
20. Pontificia Universidad Católica de Valparaíso (2021). Facultad de Ciencias Económicas y Administrativas, Contador Auditor. <https://www.pucv.cl/pucv/pregrado/contador-auditor>
21. Pontificia Universidad Católica do Paraná (PUCPR) Grupo Marista (s. f.). Contabilidad Bachillerato. <https://www.pucpr.br/cursos-graduacao/ciencias-contabeis/>

22. Pontificia Universidad Javeriana (s. f.). Pregrados, Contaduría Pública. <https://www.javeriana.edu.co/carrera-contaduria-publica>
23. Programa de las Naciones Unidas para el Desarrollo (PNUD). (2021 a). *¿QUÉ SON LOS OBJETIVOS DE DESARROLLO SOSTENIBLE?* <https://www.undp.org/content/undp/es/home/sustainable-development-goals.html>
24. Programa de las Naciones Unidas para el Desarrollo (PNUD). (2021 b). *Objetivo 4: Educación de calidad.* <https://www1.undp.org/content/undp/es/home/sustainable-development-goals/goal-4-quality-education.html>
25. Romero, M. (2021). Conducta Empresarial Responsable en Latam: Estudio de la OCDE. <https://www.expoknews.com/conducta-empresarial-responsable-en-latam-estudio-de-la-ocde/>
26. SISIB - Universidad de Chile (1994-2021). FACULTAD DE ECONOMÍA Y NEGOCIOS, Contador Auditor. <https://www.uchile.cl/carreras/86759/contador-auditor>
27. Tecnológico de Costa Rica (2021). Oferta Académica, Carreras. <https://www.tec.ac.cr/carreras>
28. The World University Rankings (s.f.). *Rankings de Impacto 2021. Times Higher Education Impact Rankings.* Griffith University. https://www.timeshighereducation.com/rankings/impact/2021/overall#!/page/0/length/-1/sort_by/rank/sort_order/asc/cols/undefined
29. Times Higher Education (2020). *THE Impact Rankings 2020: metodología.* <https://www.timeshighereducation.com/university-impact-rankings-2020-methodology>
30. Times Higher Education (2021). *Las mejores universidades del mundo por su impacto global.* <https://www.timeshighereducation.com/student/best-universities/top-universities-world-global-impact>
31. Tua Pereda, J. (2001). Teoría y normalización contable: investigación y enseñanza de la contabilidad. La Plata: edulp.
32. Universidad Adolfo Ibáñez (s. f.). Escuela de Negocios. <https://negocios.uai.cl/>
33. Universidad Andrés Bello (UNAB). (s. f.). Facultad de Economía y Negocios, CARRERAS, Contador Auditor https://facultades.unab.cl/economia-y-negocios/carreras/contador-auditor/?_gl=1*toism0*_ga*NzY0MzUyMDI3LjE2MzE2NDQyODA.*_ga_V90QKPQMC0*MTYzMzk2MjYxNC4yLjEuMTYzMzk2MzE2Mi4w
34. Universidad Autónoma de Chile (s. f.). Facultad Administración y Negocios. <https://www.uautonomia.cl/facultades/administracion-y-negocios/>
35. Universidad Católica de Cuenca (2021). Carrera de Contabilidad y Auditoría, Unidad Académica de Administración, Información de la carrera. <https://www.ucacue.edu.ec/pregrado/unidad-academica-de-administracion/carrera-de-contabilidad-y-auditoria/#perfil-egreso>
36. Universidad Católica de la Santísima Concepción (UCSC). (2021). Facultad de Ciencias Económicas y Administrativas – UCSC, Contador Auditor. <https://www.facea.ucsc.cl/carreras/contador-auditor/>
37. Universidad Católica de Manizales (s. f.) Programas. https://www.ucm.edu.co/programas/?prog=&nivel_formacion=carreras-profesionales#seccion_listado_oferta
38. Universidad Católica del Cibao (UCATECI). (s. f.). Facultad de Negocios, Contabilidad, Sección en construcción. <https://www.ucateci.edu.do/oferta-academica/grado/negocios/contabilidad>
39. Universidad CES (s. f.). CARRERAS. <https://www.ces.edu.co/programas/carreras/>
40. Universidad del Azuay, Cuenca (2019). Facultad de Ciencias de la Administración, Contabilidad y Auditoría. <https://www.uazuay.edu.ec/estudios-de-grado/carreras/contabilidad-y-auditoria>
41. Universidad de Concepción (s. f.). Facultad de Ciencias Económicas y Administrativas, Auditoría. <https://admision.udec.cl/auditoria/>
42. Universidad de Costa Rica (2018). Escuela de Administración de Negocios Universidad de Costa Rica, Carrera de Contaduría Pública. <http://www.ean.ucr.ac.cr/carrera-de-contaduria-publica>
43. Universidad de Franca, ACEF S.A. (2021). Cursos y Programas. <https://www.unifran.edu.br/#>
44. Universidad de la Costa (2021). Departamento Ciencias Empresariales, Carrera de Contaduría, Programa de contaduría Pública. https://s3.amazonaws.com/staticcuc/images/archivos/Plan_de_Estadio-Contaduria_Publica.pdf
45. Universidad de La Serena (s. f.). Facultad de Ciencias Sociales, Empresariales y Jurídicas, Auditoría. <http://facsej.userena.cl/carreras/auditor%C3%ADA.html>
46. Universidad de las Fuerzas Armadas (ESPE). (2019). Departamento de Ciencias Administrativas, Económicas y de Comercio, Contabilidad y Auditoría. <https://www.espe.edu.ec/contabilidad-y-auditoria/>
47. Universidad de Medellín (2012). Facultad Ciencias Económicas y Administrativas, Contaduría Pública - Perfil de egreso. <https://www.udem.edu.co/index.php/2012-10-12-13-47-21/contaduria-publica/informacion-general?start=6>
48. Universidad de Santiago de Chile (USACH). (s. f.). Facultad de Administración y Economía, Contador Público y Auditor. https://fae.usach.cl/fae/index.php?option=com_content&view=article&id=200&Itemid=26
49. Universidad de Santo Tomás (2017). Facultad de Contaduría Pública, Pregrado en Contaduría Pública. Presentación / Información del Programa.

- <https://facultadcontaduriapublica.usta.edu.co/index.php/presentacion-del-programa-pregrado1>
50. Universidad de São Paulo (USP). (s. f.). Facultad de Economía, Administración y Contabilidad, Contabilidad y Actos / Perfil, misión y valores. <http://www.fea.usp.br/contabilidade/perfil-missao-valores>
51. Universidad de Talca (2021). Administración y Comercio, Contador Público y Auditor. <https://admision.utalca.cl/?portfolio=contador-publico-y-auditor>
52. Universidad de Valparaíso (s. f.). Facultad de Ciencias Económicas y Administrativas, Auditoría. <https://2022.uv.cl/images/carreras/f19062-2022.pdf>
53. Universidad del Desarrollo (s. f.). NUESTRAS CARRERAS. <https://www.udd.cl/admision-pregrado/carreras/>
54. Universidad del Sur de Santa Catarina (UniSul). (2021). Curso Contabilidad. https://estude.unisul.br/cursos/ciencias-contabeis/?place_id=103&shift=Noite&ingress=vestibular#
55. Universidad Diego Portales (s. f.). Carreras, Contador Auditor https://www_udp.cl/carrera-udp/contador-auditor/
56. Universidad EAFIT (s. f.). Pregrados de la Escuela de Administración. <https://www.eafit.edu.co/programas-academicos/pregrados/contaduria-publica/Paginas/inicio.aspx>
57. Universidad EAN (s. f.). CARRERA DE CONTADURÍA PÚBLICA <https://universidadean.edu.co/programas/carreras-profesionales/carrera-de-contaduria-publica>
58. Universidad ECOTEC (2020). Facultad Ciencias Económicas y Empresariales, Contabilidad y Auditoría, Descripción. <https://www.ecotec.edu.ec/grado/grado-presencial/ciencias-economicas-empresariales/contabilidad-y-auditoria/>
59. Universidad EIA (2021). Escuela de Ciencias Económicas y Administrativas, Pregrado. <https://www.eia.edu.co/pregrado-escuela-de-ciencias-economicas/>
60. Universidad El Bosque (s. f.). Facultad de Ciencias Económicas y Administrativas, Contaduría Pública - Modalidad Virtual. <https://www.unbosque.edu.co/ciencias-economicas-y-administrativas/carrera/virtual/contaduria-publica>
61. Universidad Espíritu Santo (UEES). (2021). Facultad de Emprendimiento, Negocios y Economía, Contabilidad y Auditoría. <https://www.uees.edu.ec/grado/economia/contabilidad-auditoria.php?carrera=Contabilidad%20y%20Auditor%C3%ADA>
62. Universidade Estadual de Maringá (UME), Prorrectoría de Educación. (2021). Contabilidad, Graduación , Sede del campus. https://www-pen-uem-br.translate.goog/site/public/curso/e609c318d959a8099b8bfd33bfb0904cf64ce0a1?_x_tr_sl=pt&_x_tr_tl=es&_x_tr_hl=es&_x_tr_pto=nui,sc&_x_tr_sc=h=http
63. Universidade Estadual do Oeste do Paraná (UNIOESTE), Campus de Foz do Iguaçu (2021). Centro de Ciencias Sociales Aplicadas, Contabilidad. <https://www.unioeste.br/portal/prograd-outros/cursos-campus-todos/fozcampus?campi=0&curso=FOZ0036>
64. Universidade Estadual Paulista (Unesp) (s. f.). Todos los cursos de la Unesp, Cursos de pregrado ofrecidos por la universidad. <https://www2.unesp.br/portal#/prograd/cursos/todos-os-cursos/>
65. Universidad Estatal de Ceará (2021). Cursos presenciales, Fortaleza. <http://www.uece.br/cursos/graduacao/>
66. Universidad Estatal de Londrina (s. f.). CENTRO DE ESTUDIOS SOCIALES APLICADOS CESA, CURSO DE CIENCIAS CONTABLES, PERFIL DEL PROFESIONAL QUE EL CURSO PRETENDE FORMAR. <http://www.uel.br/cesa/dcon/pages/perfil-profissional.php>
67. Universidad Externado de Colombia (s. f.). Unidad Académica, Contaduría Pública. <https://www.uxternado.edu.co/programa/contaduria-publica/contaduria-publica/>
68. Universidade Federal de Ciências da Saúde de Porto Alegre (UFCSPA). (2009-2021). Conoce los cursos. <https://www.ufcspa.edu.br/estude-na-ufcspa/graduacao/conheca-os-cursos>
69. Universidad Federal de Itajubá (UNIFEI), DTI y SECOM (2021). Cursos presenciales. <https://unifei.edu.br/prg/cursos-presenciais/>
70. Universidad Federal de Juiz de Fora (UFJF). (2021). Contabilidad. <https://www2.ufjf.br/ufjf/ensino/graduacao/ciencias-contabeis/>
71. Universidad Federal de Lavras (UFLA). (s.f.). Unidades Académicas. <https://ufla.br/unidades-academicas>
72. Universidad Federal de Mato Grosso do Sul (2021). Contabilidad. <https://cpna.ufms.br/cursos/ciencias-contabeis/>
73. Universidade Federal de Ouro Preto (UFOP). (s. f.). Ciencias Económicas. <https://escolha.ufop.br/cursos/ciencias-economicas>
74. Universidad Federal de Pará (UFPA), Instituto de Ciencias Sociales Aplicadas (ICSA). (2019). Ciencias Contables, Contabilidad. <http://www.icsa.ufpa.br/index.php/ciencias-contabeis>
75. Universidad Federal de Paraíba (UFPB), SIGAA - Sistema Integrado de Gestión de la Actividad Académica (2021). CIENCIAS CONTABLES (LICENCIATURA)/CCAE - Mamanguape (Mamanguape), CURSO DE NIVEL DE GRADUACIÓN CENTRO DE CIENCIAS APLICADAS Y EDUCACIÓN (CCAE) - CCAE https://sigaa.ufpb.br/sigaa/public/curso/portal.jsf?id=1626789&lc=pt_BR

76. Universidad Federal de Pernambuco (UFPE). (2021). Campus / Centros Académicos/ Campus de Recife / Centro de Ciencias Sociales Aplicadas (CCSA)/ Departamento de Contabilidad y Ciencias Actuariales/ Curso de Ciencias Contables, Presencial, Licenciatura (CCSA). https://www.ufpe-br.translate.goog/ciencias-contabeis-bacharelado-ccsa?_x_tr_sl=pt&_x_tr_tl=es&_x_tr_hl=es&_x_tr_pto=nui,sc
77. Universidad Federal de Santa Catarina (UFSC). (2021). Contabilidad. <https://processoseletivo20212.ufsc.br/ciencias-contabeis>
78. Universidad Federal de Santa María (UFSM/CPD). (2021). Ciencias Contables, Contabilidad, Proyecto Pedagógico (PPC). <https://www.ufsm.br/cursos/graduacao/santa-maria/ciencias-contabeis/projeto-pedagogico>
79. Universidad Federal de São Paulo (UNIFESP). (2013-2021). Campus Osasco, Escuela Paulista De Política, Economía y Negocios. Graduación/Cursos de Pregrado/Contabilidad. <https://www.unifesp.br/campus/osa2/graduacao/cursos-de-graduacao/ciencias-contabeis>
80. Universidad Federal de Sergipe (UFS), SIGAA - Sistema Integrado de Gestión de la Actividad Académica (2021). CIENCIAS CONTABLES/DCC - São Cristóvão, CURSO DE NIVEL DE GRADUACIÓN, DEPARTAMENTO DE CONTABILIDAD – DCC. https://www.sigaa.ufs.br/sigaa/public/curso/portal.jsf?id=320168&lc=pt_BR
81. Universidad Federal de Tocantins (UFT). (s. f.). CATÁLOGO DAS CONDIÇÕES DE OFERTA DOS CURSOS DE GRADUAÇÃO DA UFT, 2018. <https://docs.uft.edu.br/share/proxy/alfresco-noauth/api/internal/shared/node/JEgmM2KqTcixBR1wdm7zUA/content/Cat%C3%A1logo%20de%20Cursos%20de%20Gradua%C3%A7%C3%A3o%20-%20Prograd%20-%20outubro%20de%202018.pdf>
82. Universidad Federal de Uberlândia (s. f.). Curso de Pregrado en Ciencias Contables, Facultad de Contabilidad. <http://www.facic.ufu.br/graduacao/ciencias-contabeis>
83. Universidade Federal do ABC (UFABC). (s. f.). Cursos de Pregrado. <https://prograd.ufabc.edu.br/cursos>
84. Universidade Federal do Ceará (UFC), Superintendencia de Tecnología de la Información / CSI / DIMD (2021). Ciencias Contables - Diurna - Fortaleza Coordinación. <https://prograd.ufc.br/pt/cursos-de-graduacao/ciencias-contabeis-diurno-fortaleza/>
85. Universidad Federal do Espírito Santo (UFES). (2013). Contabilidad, Planes de Enseñanza. Centro de Ciencias Jurídicas y Económicas (CCJE) <https://cienciascontabeis.ufes.br/pt-br/planos-de-ensino>
86. Universidade Federal do Paraná (UFPR), Departamento de Contables (2021). Departamento de Ciencia Contables, El curso de contabilidad. https://www-sociaisaplicadas-ufpr-br.translate.goog/portal/contabeis/o-curso-de-ciencias-contabeis/?_x_tr_sl=pt&_x_tr_tl=es&_x_tr_hl=es&_x_tr_pto=nui,sc&_x_tr_sch=http
87. Universidade Federal do Piauí (UFPI). (2021). CMRV - CONTABILIDAD - Presencial – Parnaíba CURSO DE NIVEL DE PREGRADO, MINISTRO DEL CAMPUS REIS VELLOSO/UFPI – CMRV. https://sigaa.ufpi.br/sigaa/public/curso/portal.jsf?id=74227&lc=pt_BR
88. Universidad Federal Fluminense (UFF). (2015). Ciencias Contables, Contabilidad. <https://www.uff.br/?q=curso/ciencias-contabeis/12711/bacharelado/niteroi>
89. Universidade Federal Rural do Semi-Arido (UFERSA), Quiero (2011-2021). CIENCIAS CONTABLES en UFERSA - UNIVERSIDAD FEDERAL RURAL DE SEMI-ARIDO. <https://querobolsa.com.br/ufersa-universidade-federal-rural-do-semi-arido/cursos/ciencias-contabeis?fa=1954255>
90. Universidad La Salle (s. f.). Facultad de Ciencias Administrativas y Contables, Contaduría publica. <https://www.lasalle.edu.co/wcm/connect/a6ff0ad1-e1ff-42e1-92b9-d715f405ecfb/contaduria-publica.pdf?MOD=AJPERES&CACHEID=ROOTWORKEKSPACE-a6ff0ad1-e1ff-42e1-92b9-d715f405ecfb-nsl4do8>
91. Universidad Mayor (s. f.). Facultad Humanidades, Contador Público y Auditor Plan Continuidad. <https://www.umayor.cl/um/educacion-online/contador -publico-y-auditor-plan-continuidad>
92. Universidad Militar Nueva Granada (2021). Facultad de Ciencias Económicas, Sede Bogotá, Contaduría Pública. <https://www.umng.edu.co/programas/pregrados/contaduria-publica>
93. Universidad Nacional de Córdoba (2021). Facultad de Ciencias Económicas, Contador Público, Adecuaciones al Plan de Estudios, Ordenanza Nº 560. https://www.eco.unc.edu.ar/files/comunicacion/archivos/secretaria_asuntos_academicos/plan2009/plan-contador-adecuaciones-OHCD_560_2018.pdf
94. Universidad Nacional de Quilmes (s. f.). Contador Público Nacional, Departamento: Economía y Administración. <http://www.unq.edu.ar/carreras/43-contador-p%C3%BAblico-nacional.php#e>
95. Universidad Nacional de Río Negro (2021). CIENCIAS ECONÓMICAS, CONTADOR PÚBLICO, SEDE ATLÁNTICA. <https://www.unrn.edu.ar/carreras/Contador-Publico-32>
96. Universidad Nacional del Litoral (2019). Facultad de Ciencias Económicas, Contador Público Nacional, Res. C.S. 502/2018. Modificación del plan de estudios de Contador Público. https://www.fce.unl.edu.ar/media/plan_nuevo/Res.%20C.S.%20Nordm%

- 20502%20del%202025-10-18%20Expte.NordmFCE-
0941917-18%20Modificacion%20Plan%20de%20E
studios %20Contador%20Publico.pdf
97. Universidade Nove de Julho (Uninove). (s. f.).
Graduação.<https://www.uninove.br/cursos/graduacao/presencial>
98. Universidad Pedagógica y Tecnológica de Colombia (2021). Facultad Ciencias Económicas y Administrativas, Contaduría Pública. http://www.uptc.edu.co/facultades/f_economicas/pregrado/contaduria/inf_general/
99. Universidad Politécnica Salesiana (s.f.). Carrera de: Contabilidad y Auditoría, Quito. <https://contabilidadyauditoria.ups.edu.ec/>
100. Universidad Pontificia Bolivariana (UPB). (s. f.). Pregrados. <https://www.upb.edu.co/es/pregrados>
101. Universidad Simón Bolívar (s. f.). Facultad Administración y Negocios, Contaduría Pública <https://www.unisimon.edu.co/aspirantes/ofertaacademica/administracion-y-negocios/64>
102. Universidad Técnica Federico Santa María (s. f.). Carreras. <https://www.usm.cl/admision/carreras/>
103. Universidad Técnica Particular de Loja (2020). Facultad de Ciencias Económicas y Empresariales, Carrera de Contabilidad y Auditoría. <https://www.utpl.edu.ec/carreras/contabilidad>
104. Universidad Tecnológica de Pereira (2014). Facultad de Ciencias Empresariales. <https://industrial.utp.edu.co/>
105. Universidad Tecnológica de Santiago, Recinto Dajabón (s. f.). Facultad de Ciencias Económicas y Sociales, Contaduría Pública. <https://www.utesa.edu/dajabon/economicas-sociales.php?v=3>
106. Universidade Tecnológica Federal do Paraná (UTFPR). (2019). Contabilidad <http://www.utfpr.edu.br/cursos/graduacao/bacharelado/ciencias-contabeis>
107. Universidad Tecnológica Israel (2021). Carreras, Contabilidad y Auditoría. <https://uisrael.edu.ec/inicio/oferta-academica/contabilidad-y-auditoria/>
108. Universidad UTE (s.f.). Facultad de Ciencias Administrativas, contabilidad y auditoría. <https://admissionesute.ec/grado/contabilidad/>
109. Vila Velha University (2021). Ciencias Contables, Contabilidad. <https://uvv.br/ensino-presencial/graduacao/ciencias-contabeis/>



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: D
ACCOUNTING AND AUDITING
Volume 21 Issue 2 Version 1.0 Year 2021
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Stratégies De Gestion Du Résultat Par Les Dirigeants En Période De Crise Sanitaire COVID - 19

By Par Thérèse Mai Django Wambe & Houly Menga Biroue

Université de Ngaoundéré

Abstract- Amid a global health crisis, several countries have announced the start of containment and a state of health emergency, in order to mitigate the spread of the virus. A series of measures have been recommended in order to spare populations from serious health dangers. This is how COVID-19 created an economic, financial and social crisis. This article identifies the effects of the crisis linked to the coronavirus pandemic on earnings management. It sheds light on the practices of income management that have also been affected following this pandemic. The article also lists a series of accounting manipulation techniques adopted by executives in today's environment. It turns out, therefore, that the management of accounting data is quite important in these circumstances. An in-depth risk analysis and adaptation of governance mechanisms will enable companies to face the uncertainties associated with the crisis.

Keywords: *earning management; COVID-19; crisis; earning management technique.*

GJMBR-D Classification: *JEL Code: M40*



Strictly as per the compliance and regulations of:



RESEARCH | DIVERSITY | ETHICS

Stratégies De Gestion Du Résultat Par Les Dirigeants En Période De Crise Sanitaire COVID -19

Par Thérèse Mai Django Wambe ^a & Houly Menga Biroue ^a

Résumé- Dans un contexte de crise sanitaire mondiale, plusieurs pays ont annoncé le début du confinement et de l'état d'urgence sanitaire, afin d'atténuer la propagation du virus. Une série de mesures ont été recommandées afin d'épargner les populations des graves dangers sanitaires. C'est ainsi que la COVID-19 a engendré une crise économique, financière et sociale. Le présent article identifie les effets de la crise liée à la pandémie du coronavirus sur la gestion du résultat. Il met la lumière sur les pratiques des gestions du résultat qui ont aussi été touchée à la suite de cette pandémie. L'article liste également une série de techniques de manipulation comptable adopté par les dirigeants dans le contexte actuel. Il s'en sort, dès lors, que la gestion des données comptables est assez importante dans ces circonstances. Une analyse approfondie des risques et une adaptation des mécanismes de gouvernance permettront aux entreprises de faire face aux incertitudes liées à la crise.

Motsclés: *gestion du résultat comptable; COVID-19; crise; technique de gestion du résultat.*

Abstract- Amid a global health crisis, several countries have announced the start of containment and a state of health emergency, in order to mitigate the spread of the virus. A series of measures have been recommended in order to spare populations from serious health dangers. This is how COVID-19 created an economic, financial and social crisis. This article identifies the effects of the crisis linked to the coronavirus pandemic on earnings management. It sheds light on the practices of income management that have also been affected following this pandemic. The article also lists a series of accounting manipulation techniques adopted by executives in today's environment. It turns out, therefore, that the management of accounting data is quite important in these circumstances. An in depth risk analysis and adaptation of governance mechanisms will enable companies to face the uncertainties associated with the crisis.

Keywords: *earning management; COVID-19; crisis; earning management technique.*

I. INTRODUCTION

La maladie à coronavirus 2019 ou COVID-19 (acronyme anglais de *Corona Virus Infectious Disease 2019*) est une maladie infectieuse émergente de type zoonose virale causée par la souche de coronavirus SARS- COV-2. Déclenchée en Chine en décembre 2019. L'Organisation Mondiale de la Santé a

été par la suite alertée sur le virus et a fini par déclarer le 30 janvier 2020 que cette nouvelle épidémie, et qui s'est étendue à plusieurs régions du monde, constitue « une urgence de santé publique de portée internationale ».

La pandémie du COVID -19 est un défi sanitaire exceptionnel avec des conséquences économiques et sociales significatives. Elle bouleverse à la fois les formes de travail, la production de biens et services ainsi que les modes de direction et de contrôle des organisations. La survie de celles-ci dépendra de leur capacité de résilience dans ces périodes de turbulence et d'anticipation des opportunités nouvelles qui pourraient en découler. En effet, son apparition soudaine et brusque a eu un impact significatif sur la performance des entreprises, sur la continuité de leurs activités et sur leurs disponibilités financières. Elle a surtout soulevé l'immense fragilité des économies même pour les pays les plus riches et disposant de ressources sanitaires durables (Assaad Idrissi et al., 2020).

Au Cameroun, le premier cas détecté du coronavirus a été enregistré en mars 2020, ainsi et en vue de limiter la propagation du virus sur le territoire camerounais, le gouvernement a adopté une série de mesures préventives, de précautions, ainsi que l'appui aux entreprises sous la forme concrète des exonérations et du report du paiement de certaines taxes. Ces mesures concernent les entreprises formelles (grandes, moyennes et petites) et une partie infime d'entreprises informelles ce d'autant que le dispositif formel de cotisations des entreprises informelles datent de deux ans. Toutefois, on ne peut pas nier que malgré toutes ces mesures combinées prises par les autorités gouvernementales, la crise du coronavirus menace toujours d'une aggravation de la situation économique du pays.

Par ailleurs, dans le contexte de crise sanitaire actuel, plusieurs sujets comptables reviennent sur le devant de la scène... Parmi eux, la communication financière (information permanente et périodique des sociétés cotées, rapport de gestion, la gestion des résultats...), mais également des sujets purement comptables comme le chômage partiel, le report des échéances fiscales et sociales, la mise en jeu des garanties, les aides de l'Etat, les indemnités d'assurance, la rupture des covenants bancaires et la renégociation de dette, la remise en cause de la

Author a: Enseignante-Chercheur, Université de Ngaoundéré.
e-mail: mengahouly@yahoo.fr

Author a: Doctorante en sciences de gestion, Université de Ngaoundéré.

continuité d'exploitation ou encore, le règlement des difficultés des entreprises...

En effet, dans ce contexte de crise les dirigeants sont incités à agir sur les résultats comptables en vue d'améliorer la situation de l'entreprise, car le financement devient très restreint pour certaines entreprises, qui doivent faire face à un manque de liquidités. Les taux de change et les prix des matières premières sont très volatils, et le risque de crédit augmente, tant pour les clients que pour les banques. Il est également évident que la crise actuelle affecte le contrôle interne et agrave le risque de fraude. Durant cette période tumultueuse, l'environnement decontrôle peut être impacté, notamment en raison de la réduction du nombre de collaborateurs ce qui peut potentiellement affaiblir les mesures de contrôle ou les rendre inefficaces. En période de crise sanitaire, l'auditeur se trouve ainsi confronté à des contraintes qui peuvent nuire à sa capacité d'obtenir les éléments probants. De même, la séparation des fonctions, principe clé pour tout système de contrôle interne, peut être rompu. Les procédures d'autorisation peuvent aussi être affaiblies et surtout les informations nécessaires à la gestion opérationnelle ou quotidienne peuvent faire défaut. Toutes ces faiblesses de contrôle interne sont susceptibles d'accroître la gestion des résultats à travers une présentation frauduleuse des comptes, surtout dans un contexte de détérioration de la rentabilité de plusieurs entreprises.

De plus, le contexte de difficulté est susceptible d'exacerber les conflits d'intérêts entre les différentes parties prenantes et est particulièrement propice à la remise en cause des dirigeants ainsi qu'à la crédibilité de leur gestion. La communication sur la performance apparaît dès lors cruciale car elle révèle les choix de répartition des richesses créées et souligne la complexité pour une organisation de marier les attentes parfois antinomiques des différentes parties prenantes en matière de performance. Elle peut ainsi constituer un outil mobilisé par les dirigeants des sociétés en difficulté (Ben Amar et Zéghal, 2006; Holder-Webb, 2003) pour influencer la perception des destinataires de l'information transmise (Saboly, 2001) et ce particulièrement durant la période qui précède l'annonce des résultats. En effet, la littérature académique révèle que les stratégies en matière de communication sont susceptibles d'être accentuées durant cette période afin d'influer sur la réaction des marchés à l'annonce des résultats annuels et de minimiser la survenance de coûts légaux.

Au Cameroun, il ressort d'une enquête de l'impact de la pandémie sur les entreprises publiée le 22 avril 2020 par le Groupement inter patronal du Cameroun (Gicam), que plus de 90% d'entreprises sont négativement impactées par la COVID19. 87% d'entre elles ont été contraintes d'opter pour le chômage technique ou aux réductions d'effectifs. Une option

choisie par 50% des Petites et moyennes entreprises (PME), la tranche d'entreprises la plus impactée par la pandémie. Côté production, 69% des entreprises industrielles se disent affectées. Difficile dans ces conditions d'exporter le produit fini ou encore d'importer la matière première. Toutes ces stratégies choisies par les dirigeants des entreprises ont une influence sur les résultats comptables publiés en fin d'exercice et relèvent de la discréption managériale, dans le respect des règles et principes comptables. En effet, les normes comptables en vigueur laissent un espace discréptionnaire aux dirigeants sous forme d'un ensemble de choix ou d'évaluation, cet espace discréptionnaire peut être utilisé par les dirigeants pour influencer les résultats comptables.

Au Cameroun, la comptabilité générale s'arrimant aux normes internationales poursuit un objectif ultime contenu dans ses principes de base. C'est dans ce sens que le système comptable OHADA stipule que les chiffres doivent traduire une image conforme à la réalité, tant pour le patrimoine que pour la situation financière de l'entreprise. Cette visée met en exergue les exigences de transparence financière, d'image fidèle (Ngongang et Kadouamai, 2008).

Selon Sangue et Bionomo (2018) ainsi que les partisans des théories descriptives et normatives de la comptabilité, tels que respectivement Littleton (1983) et Chambers (1955), les dirigeants des entreprises profitent de la liberté que leurs donnent certaines normes comptables avec l'environnement institutionnel pour adopter leurs propres pratiques comptables. Ainsi, certains principes comptables, la tolérance administrative et l'absence de contrôle comptable favorisent les mauvaises pratiques comptables comme l'absence d'établissement des états financiers. Cependant, ces théories ne font pas consensus au sein des comptables. En l'occurrence, la théorie positive de Watt et Zimmerman (1979 et 1990) rejette l'ancre théorique construit par Littleton (1983) et Chambers (1955).

D'après les tenants de la théorie positive, les dirigeants des firmes jouent un rôle considérable dans l'élaboration des règles comptables, par conséquent, il est nécessaire de comprendre leurs motivations et de déterminer les facteurs qui impactent leurs choix comptables.

Dans cette perspective, l'objectif de ce travail est d'étudier si les dirigeants des sociétés en difficulté dans cette période de la pandémie de COVID-19 adoptent une technique de manipulation des informations comptables et financières différente de celles de la période avant cette crise sanitaire. En particulier, la question principale de recherche est de savoir : *comment la crise sanitaire COVID 19 influence la gestion du résultat comptable dans les entreprises ?*

Pour ce faire, nous avons recours à une démarche qualitative permettant d'explorer ce courant

de recherche. Nous interrogeons d'une manière semi-directive 05 professionnels du chiffre à savoir, les auditeurs, les contrôleurs de gestion, les comptables et les responsables d'entreprise. Au terme de ce travail de recherche, les résultats de l'analyse qualitative doivent nous permettre de dresser un inventaire des pratiques de gestion du résultat comptable en contexte camerounais dans le contexte marqué par la pandémie du COVID 19.

Cet article est organisé en quatre (04) sections. La première section donne un aperçu au niveau de la notion de crise et de la définition de la gestion du résultat. La deuxième vise à présenter un cadre théorique autour de la gestion du résultat. La troisième expose la méthodologie déployée et enfin la dernière section est dédiée à faire une discussion des résultats et une conclusion.

II. LES CONCEPTS DE CRISE ET DE GESTION DES RESULTATS: EN QUÊTE D'UNE DÉFINITION

a) La Notion De Crise: Une Approche De Definitions

i. Définition du concept de crise

Il existe une certaine difficulté à trouver une définition de crise (Morin, 1976; Roux-Dufort, 2000) en raison du grand nombre d'éléments qui caractérisent un tel concept (Bowonder et Linstone, 1987; Pearson et Clair, 1998). Parce qu'il s'agit d'une notion fortement liée à la perception (Dutton, 1986) qui peuvent en avoir les acteurs concernés, une même situation peut être perçue (et définie) de différentes manières.

Sur le plan étymologique, le mot crise est issu du mot grec « *Krisis* » et définit comme étant la « *faculté à décider, être en capacité de distinguer une décision entre deux choix possibles* » (Darsa, 2010). Certains auteurs ont une approche plutôt négative concernant la crise, l'analysant comme une occasion extrêmement nocive à l'entreprise dont laquelle les incidents, la surprise et la panique sont les éléments les plus importants (Lehu, 1998; Bland, 1998; Westphalen, 1998). D'autres optent pour une approche qui prend en compte la caractéristique déstabilisatrice et ambiguë des crises et son fort climat d'incertitude, ce qui peut créer des problèmes pour la mise en œuvre des actions (Turner, 1976). Pour eux, les crises sont des situations où les causes et les effets sont inconnus (Dutton, 1986; Lagadec, 2000). Dans une vision plus optimiste, la crise peut être définie comme une opportunité avec un fort pouvoir d'évolution de l'organisation, un « déclencheur » de changements, un processus de transformation (Ogrizek et Guillery, 1997; Roux-Dufort, 2000).

ii. Caractéristique des crises

Les crises se caractérisent, entre autres, par leur effet de surprise, l'altération de la réputation de l'entreprise, la forte présence dans les médias et, souvent, par une réévaluation culturelle (Bowonder et Linstone, 1987 ; Pearson et Clair, 1998). L'angoisse, l'incertitude et, souvent, l'absence de préparation

peuvent également être associés à ces aspects. De façon générale, une crise présente trois caractéristiques qui la distinguent d'une situation normale de gestion, à savoir : sa condition de « processus de déstabilisation », le nombre de conséquences qu'elle peut induire et la façon avec laquelle elle peut affecter le cadre référentiel de l'organisation (Roux-Dufort, 2000).

iii. Typologie des crises

La typologie des crises selon Gundel (2005), va être déterminée à partir de deux critères comme la prédictibilité de la crise et les possibilités d'influence de la part de l'organisation. À partir de ces critères, on détermine quatre types de crises: la crise conventionnelle, la crise inattendue, la crise insurmontable et la crise fondamentale.

- ❖ *Les crises conventionnelles:* ces situations sont prédictibles et le degré d'influence de la part de l'organisation sur la crise est élevé. Les organisations disposent d'une certaine connaissance (probabilité d'occurrence élevée, analyse de risque conduite) de ce type de crise. L'événement déclencheur est isolable. Exemple.: Accident industriel ou usine.
- ❖ *Les crises inattendues:* ces types de crise sont perçus comme rares et non prédictibles. Les organisations peuvent les contrôler, mais du fait d'un manque de préparation et de planification, leur influence est donc restreinte. L'événement déclencheur est isolable. Exemple: Naufrage du TITANIC.
- ❖ *Les crises insurmontables:* ces crises peuvent être anticipées, mais du fait d'un défaut de préparation, de conflit interne aux organisations, les possibilités d'influence sont faibles. L'événement déclencheur est connu, isolable temporellement et spatialement. Exemple: conflits et affrontements armés.
- ❖ *Les crises fondamentales:* ce sont les plus dangereuses pour les organisations. Elles sont non prévisibles et non contrôlables du fait d'une absence de connaissance sur la réponse à apporter. L'événement déclencheur a des causes floues. Exemple: Attentats du 11 septembre 2001 aux USA.

iv. Modèle de gestion de crise

Nous avons identifié 3 modèles de gestion de crise, répartis en fonction de leur type de contribution (normative, processuelle et pratique).

a. Modèles normatifs

L'approche normative s'intéresse aux règles mises en place pour définir des objectifs communs et aux actions nécessaires pour arriver à ces fins (Corner et Hahn, 2013). Lorsque ces règles sont reconnues et acceptées au sein d'un groupe, elles représentent des gages d'appartenance à celui-ci. Elles permettent aux individus de juger ce qui est bon ou mauvais pour l'intérêt commun en indiquant les comportements



appropriés pour prendre des décisions les plus adéquates et efficaces possible (Elqayam et Evans, 2011).

Ainsi, l'approche normative de la gestion de crise propose une série de règles et standards à appliquer pour être en mesure de mettre en place des processus d'actions efficaces avant, pendant et après une crise. Les contributions de la recherche normative en gestion de crise s'étendent sur deux niveaux : tout d'abord il y a les études qui s'inspirent directement des OHF (Ontario Hockey Federation) pour définir des ensembles de mesures à répliquer dans toute organisation qui désire prévenir et anticiper les crises (Bigley et Roberts, 2001). Dans d'autres cas, on observe un lien plus implicite avec les OHF dans la mesure où celles-ci ne sont pas mentionnées directement, mais où on retrouve une vision globale de la gestion de crise au-delà de la prise en charge de l'élément perturbateur (Heiderich, 2010).

b. Modèles processuels

L'approche processuelle de la gestion de crise s'intéresse plutôt aux dynamiques internes et externes qui entourent les événements menant à la crise et sa résolution. Elle cherche à mettre en évidence les liens entre le contexte et le moment où se déroulent les événements avec les types d'actions choisis et les résultats (Chia et Mackay, 2007). L'évolution vers une perspective processuelle « forte », en particulier, insiste sur les changements constants dans notre rapport au monde, en mettant l'accent sur le fait que ce sont nos expériences qui façonnent notre environnement, et non l'inverse (Langley et Tsoukas, 2017). On ne peut pas analyser une situation, sans prendre en compte le processus ayant permis son aboutissement (Langley et Tsoukas, 2017): « Comment les événements ont-ils évolué de cette manière ? Que s'est-il passé, qui a fait quoi et quand ? » (Langley, 1999).

Les modèles processuels mettent en évidence la continuité et l'évolution des crises dans le temps, pour montrer l'importance de former et équiper les membres d'une organisation à détecter et appréhender les signes avant-coureurs. Cela nécessite une acceptation de la complexité et une reconnaissance de la probabilité des erreurs humaines. De cette façon, il est possible de s'adapter aux besoins spécifiques de la situation en fonction des personnes et ressources disponibles. Néanmoins, ceci ne prend pas en compte la réalité des interactions entre les individus au sein d'une équipe, en fonction de leur expérience et de leur comportement (Barton et Sutcliffe, 2009).

c. Modèles de la pratique

L'approche de la pratique porte une attention particulière aux actions et interactions humaines au sein des organisations, en étudiant l'importance des décisions prises et des actions faites par les personnes impliquées dans un processus de gestion (Johnson et

al., 2010). En réponse aux perspectives normatives et processuelles, les modèles de la pratique remettent l'humain au centre de la prise de décision en montrant leur rôle et influence dans l'évolution de la stratégie d'une organisation (Feldman et Orlowski, 2011).

La performance d'une organisation ne dépend pas seulement de son environnement et de sa structure: l'approche de la pratique recommande de porter plus d'attention aux personnes à l'intérieur des organisations et aux outils qu'elles utilisent pour prendre des décisions et orienter leurs actions (Johnson *et al.*, 2010). Ceci confère des responsabilités particulières aux gestionnaires et aux acteurs qui sont en mesure d'observer directement les effets de phénomènes globaux dans leur environnement (Sandberg et Tsoukas, 2011).

Une fois analyser la notion de crise, nous allons à présent examiner le concept de gestion du résultat comptable.

b) La Notion De « Gestion Du Résultat Comptable » Et Les Concepts Voisins

i. Définition de la gestion du résultat comptable

La gestion du résultat a fait l'objet de plusieurs investigations dans la littérature financière et comptable, c'est pour cette raison que plusieurs définitions ont été attribuées à la gestion du résultat, en outre, les motivations liées à la gestion du résultat sont multiples.

Il existe une multitude de définitions de la gestion du résultat comptable. Par exemple, la gestion du résultat peut avoir plusieurs définitions :

L'intervention délibérée (du dirigeant) dans le processus de reporting financier externe pour obtenir des gains personnels (Schipper 1989) ;

L'utilisation stratégique de la discréption managériale pour influencer le résultat diffusé auprès des parties prenantes (Degeorge *et al.*, 1999).

Par ailleurs, Dye (1988) souligne que la gestion du résultat est la conséquence logique d'une situation où les dirigeants profitent d'une asymétrie d'informations vis-à-vis des actionnaires; selon ce chercheur, les dirigeants manipulent les résultats dans le but de maximiser leurs rémunérations.

Beneish (2001) fait remarquer que seules les décisions prises peu de temps avant la clôture de l'exercice peuvent être qualifiées de « gestions du résultat », sinon il serait impossible de faire la part entre une volonté de gérer le flux d'informations avec les tiers et un comportement d'investisseur rationnel.

Masmoudi-Ayadi et Boujelbene (2015) affirment que la gestion du résultat est une intervention intentionnelle de la part des dirigeants pour ramener le résultat de la firme à un niveau requis qui répond à un objectif précis. Ces définitions font ressortir deux caractéristiques de la gestion du résultat. Premièrement, deux types d'éléments permettent de gérer les résultats (i) les choix comptables effectués lors de

l'établissement des états financiers (Beneish, 2001; Schipper, 1989) et (ii) la structuration des transactions (Healy et Wahlen, 1999).

Le second élément caractérisant la gestion du résultat est le motif de cette gestion. Dans ces définitions plusieurs motivations sont évoquées: maximiser les gains privés du dirigeant (Schipper, 1989), modifier les conséquences des contrats d'agence (Healy et Whalen, 1999) ou encore modifier la perception de la performance de l'entreprise par les parties prenantes (Healy et Wahlen, 1999).

Dans le cadre de ce travail, la gestion du résultat est définie comme l'utilisation de la discréption managériale faite par les dirigeants dans l'optique de tromper les utilisateurs des comptes publiés et dans un souci d'optimisation ou de minimisation, ou la présentation des états financiers, sans que ces objectifs s'excluent mutuellement. Pour ce qui est de la manipulation comptable, c'est la vision de Breton et Stolowy (2003) qui est retenue, c'est-à-dire la manipulation comptable est l'interprétation comptable faite par le dirigeant dans le cadre légal.

En dépit de cette distinction, la gestion du résultat est souvent assimilée à celle de «manipulation comptables». En toute bonne foi, le dirigeant d'une entreprise est confronté à des choix concernant l'enregistrement de certaines opérations (durée d'un amortissement, montant d'une provision). Cependant, même en absence de fraude, l'interprétation de la réalité dans un sens qui avantage l'entreprise ou ses dirigeants pourrait être assimilée à une manipulation.

ii. Les types de gestion du résultat comptable

Avant de présenter les différents moyens utilisés par les dirigeants pour gérer les résultats, il est nécessaire de préciser les types de gestion du résultat comptable et les modèles de mesure de la gestion du résultat.

Les études récentes opposent deux types de gestion du résultat (Cohen *et al.*, 2004): la gestion des résultats par les choix comptables (GRC) et la gestion des résultats par les activités réelles aussi appelée gestion réelle des résultats (GRA).

a. La gestion des résultats par les activités réelles (GRA)

La GRA est définie de plusieurs manières dans la littérature. Selon Cohen et Zarowin (2010), les actions du dirigeant qui devient des pratiques normales liées à l'activité. Pour Gunny (2010), les actions (des dirigeants) qui changent le timing ou la structuration des opérations, des investissements et/ou du financement des transactions dans le but d'influencer les chiffres comptables publiés. Ces deux définitions montrent que la GRA correspond à un choix du dirigeant qui vise à modifier les chiffres comptables publiés. Parallèlement, pour Graham *et al.*, (2005), la GRA correspond à la destruction de flux détrosorerie "réelle" par les

dirigeants, ce qui leur permet de publier le chiffre comptable désiré. Cette définition montre que le choix du dirigeant a un impact sur les flux de trésorerie. Enfin, Zang (2012) définit la GRA comme une action délibérée qui modifie le résultat publié dans une direction particulière; cette action porte sur le timing ou la structuration des opérations, des investissements ou du financement; cette action a des conséquences sous-optimales pour l'activité. Cette dernière définition fait ressortir que le choix réalisé par le dirigeant n'est pas optimal pour l'activité de l'entreprise.

En résumé, la GRA est un choix du dirigeant qui a des conséquences sur les flux de trésorerie. Cette décision est prise pour modifier les chiffres comptables publiés et notamment le résultat. Enfin, cette décision n'est pas optimale pour l'activité de l'entreprise. De tout ce qui précède, il résulte de la GRA correspond à un choix du dirigeant qui vise à modifier les chiffres comptables publiés. Ces choix ont un impact sur les flux de trésorerie. Elle s'opère selon plusieurs modalités (la réduction des dépenses discrétionnaires, la manipulation temporaire des ventes, la surproduction...). Pour finir, il convient de présenter d'autres techniques utilisées par les dirigeants pour manipuler les informations comptables à savoir la gestion du résultat par les choix comptables.

b. La gestion du résultat par les choix comptables (GRC)

La GRC est obtenue en changeant les méthodes comptables ou les estimations utilisées lors de la présentation des états financiers (Zang, 2012). La GRC correspond donc aux choix comptables effectués par les dirigeants lors de l'établissement des états financiers. Ce type de GR n'a pas de conséquence sur les flux de trésorerie. C'est ce que note Roychowdhury (2006) qui définit la GRC comme une gestion des résultats n'entrant pas de modification des flux de trésorerie.

La GRC correspond donc à un choix comptable réalisé par le dirigeant qui n'a pas de conséquence sur les flux de trésorerie. Ce choix peut être conforme ou non aux normes comptables. En effet, comme l'indiquent Dechow et Skinner (2000), la GRC est constituée à la fois des choix comptables permis par les normes, mais aussi par des enregistrements comptables dits frauduleux, c'est-à-dire non conformes à la réglementation comptable.

L'étude de la GRC est un champ de recherche investigué depuis plus longtemps que la GRA comme l'attestent les différentes revues de la littérature sur le sujet (Healy et Whalen, 1999; Schipper, 1989). Différents choix comptables peuvent être effectués pour gérer les résultats.

Nous devons signaler que les techniques déjà citées ne forment pas une liste exhaustive. Il y a donc plusieurs autres voies à travers lesquelles les directeurs



sont capables d'influencer la production d'informations comptables par des activités opérationnelles. En effet, Graham et al., (2003) avancent d'autres techniques telles que la vente des placements obligataires, la vente et l'achat des parts sociales, le management des placements et d'autres.

De tout ce qui suit, nous avons choisi d'étudier dans le cadre de ce travail les deux types de gestion du résultat comptable (par activités réelles et par choix comptables).

III. UN CADRE THÉORIQUE AUTOUR DE LA GESTION DU RÉSULTAT COMPTABLE

Cette section est l'occasion de présenter dans un premier temps la théorie mobilisée pour expliquer la gestion du résultat. Dans un second temps, nous présentons les principaux travaux portant sur les éléments explicatifs.

a) *La théorie politico-contractuelle (TPC) et la gestion du résultat comptable*

En termes académiques, un des principaux courants théoriques visant à expliquer la gestion du résultat est la théorie positive de la comptabilité introduite pour la première fois par Ball et Brown (1968) et repris par Watts et Zimmerman (1978). Dans ce cadre, la théorie positive tend à expliquer et à prédire le comportement des producteurs et des utilisateurs de l'information comptable, dans le but ultime d'éclairer la genèse des états financiers (Casta, 2000). Raffournier (1990) quant à lui, note que ce courant a pour but d'expliquer les décisions comptables à partir des relations d'agence et des coûts politiques auxquels les entreprises sont soumises. Ainsi, la théorie positive emprunte ses modèles à la théorie de l'agence (Jensen et Meckling, 1976) et à la théorie économique de réglementation. La théorie positive identifie principalement trois objectifs de la gestion du résultat: la maximisation de la rémunération des dirigeants, l'échappement aux clauses restrictives d'endettement et la minimisation des coûts politiques.

En effet, Raffournier (1990) affirme que les dirigeants sont par nature rationnels et opportunistes dans la poursuite de leurs intérêts personnels. En effet, ils sont prêts à manipuler les outils d'évaluation de leur performance afin de maximiser leur richesse. Ceci nous amène à formuler la première hypothèse de la théorie positive à savoir l'hypothèse de rémunération selon laquelle: « les entreprises dans lesquelles la rémunération des dirigeants est liée au résultat préfèrent les méthodes ayant un effet positif sur celui-ci. » L'existence des conflits d'intérêts au niveau des relations d'agence qui caractérisent le financement externe des firmes est susceptible d'influer sur les incitations et les opportunités de manipulation des données comptables ou des activités réelles par les cadres dirigeants (Piot et Janin, 2004). Alors, il est probable que les dirigeants

choisissent les méthodes de manipulation des activités réelles qui maximisent les résultats afin de limiter les probabilités de violation des conventions de dettes (Pozza et al., 2008). Par conséquent, ils cherchent à minimiser les coûts de financement. En effet, ils seront incités à gérer les résultats afin de montrer que leurs entreprises sont performantes et qu'elles sont en mesure de réaliser des gains et de faire face à leurs engagements. L'objectif est d'échapper aux clauses restrictives des contrats de prêts et aux taux prohibitifs d'intérêts exigés par les créanciers. Ceci nous amène à constater que, l'une des motivations fondamentales de la gestion du résultat est la minimisation des coûts de financement (Seboui, 2003). Nous remarquons ainsi que cette théorie constitue, dans la plupart des cas, un point à partir duquel les entreprises peuvent expliquer les motivations liées aux manipulations des résultats.

La TPC a marqué une rupture avec l'approche normative dont l'objectif se réduit en la formulation de grands principes permettant d'évaluer la pratique comptable actuelle. A la suite de la théorie positive de la comptabilité, nous allons présenter un autre cadre d'analyse spécifique de la gestion du résultat comptable.

b) *Les facteurs explicatifs de la gestion du résultat*

La revue de la littérature regroupe les motivations à la gestion des résultats comptables en deux classes: celles liées aux contraintes politico contractuelles évoquées par la théorie positive de la comptabilité et celles liées à la pression du marché financier (Watts et Zimmerman, 1990; Healy et Wahlen, 1999).

Le premier courant a traité les motivations des dirigeants à gérer les résultats dans le but de maximiser leur bien être en s'inspirant de la théorie d'agence. Ainsi, les études ont montré que le régime de rémunération influence le niveau des résultats (Healy, 1985). Les dirigeants ne sont pas motivés uniquement par leur rémunération, mais aussi par leur réputation, notamment si celle-ci est liée au dépassement de certains seuils de publication. Eviter les pertes, les tendances baissières des résultats et l'écart entre les prévisions et les réalisations est une source qui motive les dirigeants à gérer leurs résultats (Degeorge et al, 1999). D'ailleurs, (Defond et Jiambalvo, 1991) ont réussi à montrer que la sécurité de l'emploi pousse les dirigeants à lisser les résultats actuels et futurs. Le deuxième courant traite les pressions exercées sur les dirigeants pour atteindre les attentes du marché financier en profitant de l'asymétrie d'information entre les dirigeants et les actionnaires. Les dirigeants sont devenus plus sensibles à l'évaluation du marché financier et à la fluctuation des cours. Ils sont incités à publier des résultats attrayants et susceptibles d'influencer le cours à la hausse.

Par ailleurs, nous avons également l'influence des facteurs de contingences comportementale du dirigeant sur la manipulation des données comptables. La théorie de l'enracinement expose le fait que les différents acteurs internes d'une entreprise (dirigeants, salariés) ont tendance à développer des stratégies en vue de préserver leur statut dans l'organisation de l'entreprise.

Dans un contexte de faible performance, les dirigeants pourraient être davantage incités à recourir à des pratiques comptables visant à augmenter leurs résultats afin de masquer les difficultés et améliorer la performance globale de l'entreprise (Janin et Piot, 2008). Par ailleurs, lorsque les résultats comptables avant gestion sont inférieurs aux objectifs que l'on souhaite atteindre, la faible performance peut motiver la gestion des résultats. C'est en particulier le cas de la gestion par les seuils (Burgstahler et Dichev, 1997). Dès lors, la gestion du résultat peut constituer un moyen pour atténuer la visibilité d'une performance médiocre (Mard, 2004). En absence du marché financier, nous pensons que la performance de l'entreprise a sa place dans la mesure où le dirigeant veut montrer une image positive de l'entreprise aux actionnaires (Ndjanyou, 2001). La réduction des impôts est aussi une motivation forte pour manipuler les comptes. En effet, les managers peuvent souhaiter réduire le montant d'impôts sur les bénéfices en enregistrant des charges plus élevées que la normale (Sholes et al., 1992).

Selon (Breton et Schatt, 2003) dans de nombreuses entreprises, les salaires et avantages sociaux accordés aux salariés constituent le principal

Nous pouvons présenter notre échantillon dans ce tableau 1.

Tableau 1: Présentation de l'échantillon

No°	Fonction	Secteur d'activités	Expérience	Durée de l'entretien
1	Auditeur interne	Industrie	8 ans	45 min
2	Auditeur interne	Industrie	6 ans	55 min
3	Contrôleur de gestion	Industrie	4 ans	1 heure
4	Responsable comptable	Service	10 ans	47 min
5	Responsable comptable	Service	7 ans	50 min

b) Méthodes d'analyse et de traitement des données

Nous procéderons par une méthode qualitative afin d'appréhender les pratiques de gestion du résultat utilisées par les dirigeants des entreprises camerounaises dans le contexte de la pandémie du COVID 19. Pour ce faire, nous ferons une approche inductive qui nous permettra d'abord de présenter les problèmes résultant de nos entretiens. En effet, à l'aide d'un guide entretien semi-directif l'enquête a été réalisée dans cinq entreprises, compte tenu du fait qu'ensuite il y aurait redondance des données donc saturation. Le guide utilisé est structuré en thèmes et contient un ensemble de questions relatives au sujet abordé.

Compte tenu du contexte marqué par la pandémie du COVID 19, le maximum d'informations a

coût supporté au cours d'un exercice comptable. Ainsi, un accroissement de ces salaires ou avantages se traduit par un bénéfice plus faible et par un risque économique (augmentation du point mort) plus important. Les dirigeants peuvent donc être tentés de réduire les bénéfices afin d'éviter des négociations difficiles avec les salariés ou les syndicats (Waterhouse et al., 1993).

IV. METHODOLOGIE DE LA RECHERCHE

a) Echantillon de l'étude

L'échantillon de notre étude représente ce sur quoi porte l'étude. Cette dernière est axée sur les entreprises dont le siège social se trouve dans la ville de Douala. Etant donné que nous cherchons à appréhender les pratiques de gestion du résultat utilisées par les dirigeants des entreprises camerounaises dans le contexte de la pandémie du COVID 19. Selon Stolowy et Bréton (2003), la personne capable de nous donner les explications liées à la pratique de gestion du résultat serait un responsable d'entreprise, car c'est une activité qui lui est destinée. De plus, ce choix tient au fait que les occupants desdites fonctions font fréquemment partie de ceux qui décident ou sont au courant de la politique comptable leur entreprise. Toutefois, compte tenu de l'indisponibilité de ceux-ci, notre choix s'est porté vers les auditeurs, les contrôleurs de gestion et les responsables comptables, car ils sont des acteurs ou intermédiaires dans le jeu de la gestion des données comptables (Stolowy et Breton, 2003).

été collecté par vidéo conférence (03) et d'autres sur place. Une retranscription a été réalisée pour chaque entretien. Notre base de travail a été un échantillon de convenance. La collecte d'informations s'est arrêtée quand il nous a semblé que la multiplication d'entretiens ne changerait pas la vision qui ressortait des échanges avec les autres responsables (principe de saturation théorique). Il est important de préciser que les entretiens en face à face (02) ont été faits dans l'enceinte des différentes entreprises. Ces entretiens sont réalisés le week-end ou pendant les jours fériés ou à des heures creuses.

La durée moyenne de l'entretien est de 51 minutes et varie entre 45 minutes et 1 heure. La période de réalisation s'est étalée sur un mois. Un seul entretien

n'a pas été enregistré, ceci dû au refus de l'interviewé. Donc nous avons pris des notes de ce que disait l'interviewé. Ces interviews constituent le socle de notre travail. Compte tenu fait que notre travail utilisera une méthode qualitative. Cette approche qualitative, nous permet d'avoir une idée des pratiques utilisées par les entreprises camerounaises pour gérer leur résultat en période de crise sanitaire COVID 19. La démarche par les interviews donne la possibilité au répondant de s'exprimer tout en recadrant l'entretien lorsque celui-ci s'en éloigne. Elle s'est ensuite poursuivie par une analyse du contenu des entretiens. L'analyse du contenu est une méthode adaptée pour analyser objectivement et systématiquement le contenu d'un champ de littérature. Son but est d'éclairer et de tester la vérité et la tendance fondamentale des écrits pour révéler leurs informations potentielles et prévoir leur développement. Le résultat de l'analyse de contenu est souvent présenté sous forme de tableaux de donnée, de chiffres et de commentaires.

V. LES RESULTATS OBTENUS ET DISCUSSION

Rappelons l'objectif de notre étude: mettre en évidence les pratiques de gestion du résultat utilisées par dirigeants en période de crise sanitaire du COVID 19.

a) *La réalité des pratiques de gestion du résultat en période de crise sanitaire du COVID 19*

La crise sanitaire a causé un bouleversement total qui s'est manifesté, différemment, d'un secteur d'activité à un autre. En effet, certains domaines, les plus touchés, ont vu leur activité s'arrêter tandis que d'autres ont pu, malgré les restrictions, les mesures de précaution, et la perturbation des chaînes logistiques, poursuivre leurs activités. Compte tenu des incertitudes qui entourent cette période de crise, il est important pour les organisations d'adapter leur charge à la situation résultante de l'épidémie. Et c'est dans ce contexte qu'apparaît l'importance de diminuer les charges du personnel avec la mise en chômage technique des certains employés et la diminution de la masse salariale. C'est ainsi qu'un répondant affirme: « *La pandémie du COVID 19 a engendré des conséquences économiques et financières très graves, auxquelles aucune entreprise n'a échappé. Plusieurs activités ont été touchées. Une situation qui a mis les dirigeants face à deux défis majeurs : affronter une crise en agissant en urgence et prendre des mesures pour diminuer les charges de l'entreprise à court et moyen terme, euh compte tenue la baisse des certaines activités on était obligé de procéder à la réduction des effectifs de la main d'œuvre au niveau des sites industriels, mais également de façon indirecte à travers l'arrêt des donneurs d'ordre ou le ralentissement des chaînes de logistique et d'approvisionnement ou diminuer la masse salariale.* » En effet, lorsque les entreprises ont connu des baisses

des activités, bon nombre ont opté pour la réduction des effectifs du personnel, impactant ainsi la masse salariale et le résultat de l'entreprise en vue de présenter une bonne image. Surtout, les salaires et avantages sociaux accordés aux salariés constituent le principal coût supporté au cours d'un exercice comptable. Les responsables des entreprises profitent de la crise sanitaire pour ajuster les charges à leur avantage.

Par ailleurs, la pandémie que traverse le monde actuel représente une menace pour la santé des populations de tous les pays du monde. La forte propagation du virus, et les mesures de prévention recommandées par les autorités sanitaires ont, bien évidemment, un impact sur la vie quotidienne. Pour faire face à cette situation, des décisions drastiques ont été prises, surtout au début de la pandémie: le confinement, la limitation des déplacements, le couvre-feu, la fermeture des commerces en fin de journée...Et ce, afin d'atténuer les effets de la crise et préserver la santé des citoyens. Cependant, cette situation a eu des répercussions considérables sur les économies, impactant de façon directe les entreprises en engendrant une incertitude énorme sur les créances des entreprises. Une autre technique identifiée pour gérer les résultats dans ce contexte est l'estimation comptable (3 répondants), aussi un interlocuteur nous répond «*les difficultés financières résultantes de l'apparition du coronavirus aura des répercussions plus difficiles, c'est surtout au niveau des estimations comptables. Les provisions non constituées ou bien suffisamment constituées, ou un peu trop constituées selon le sens que les dirigeant veulent donner au résultat.*

L'estimation peut se faire au niveau des provisions ou au niveau des charges en fonction des propos tenus par les interviewés. Dans un premier temps, les entreprises camerounaises estiment les provisions. Certaines entreprises, par exemple au niveau des provisions sur les créances, elles ne provisionnent pas au taux qu'elles-mêmes admettent dans des situations bien déterminées. Ainsi, elles biaissent le résultat dans la mesure où elles utilisent des taux inférieurs à ceux qui sont normalement pratiqués. De plus, il y a également le fait qu'elles ne constatent pas certaines provisions car ceux-ci ne sont pas classées comme des clients douteux. Les abonnements semblent être des postes sur lesquels les entreprises camerounaises (03 interviewés) s'appuient également pour pratiquer la gestion du résultat. La technique utilisée consiste à surestimer le montant des charges par exemple les factures d'électricité, téléphone, internet, tout en les provisionnant. Les responsables des entreprises profitent des brèches laissées pour estimer les charges ou les provisions à leur avantage.

Dans le même ordre d'idées, la pandémie du COVID 19 a entraîné la baisse brutale de la productivité et de la consommation du fait du confinement des

individus. Cette baisse généralisée peut également s'observer au niveau de la performance et du résultat de l'entreprise. Le dirigeant qui désirent gonfler leur résultat peuvent donc agir sur la variation des stocks. C'est ainsi qu'un interlocuteur s'exprime « *L'utilisation de la variation des stocks est aussi un procédé stratégique pour gérer son stock afin d'obtenir un résultat souhaité en vue de minimiser le montant des impôts dans ce contexte de pandémie sanitaire. Les entreprises sonten difficulté financière et par conséquent elles sont à la recherche des meilleures formules pour baisser le résultat et payer moins impôt.* ». En effet, sur les cinq (5) entretiens menés, la majeure partie des répondants soulignent que l'évaluation des stocks permet à l'entreprise d'améliorer son résultat. Seulement un seul interviewé précise qu'elle n'est pas tellement utilisée. Les six (04) autres avis répondent par une affirmation. Ils expliquent cela par le fait que si les dirigeants cherchent à optimiser le résultat, ils peuvent mettre l'attention sur les comptes de variation de stock. Il s'agit soit de minimiser la valeur des stocks ou de l'augmenter. Le compte de résultat devient donc impacté d'une manière indéniable. En outre, un autre répondant donne son avis: « *Le compte de résultat est influencé par le montant de variation de stock. On peut agir sur la variation du stock pour pouvoir améliorer le produit, en minimisant, la charge de stock dans le résultat on améliore le résultat surtout avec la période marquée par la COVID 19 où les entreprises enregistrent les graves pertes. Ces pertes peuvent contribuer à diminuer les gains des dirigeants .* ». Ces différentes réponses nous montrent que la crise sanitaire COVID 19 a une influence sur la stratégie des dirigeants en matière de manipulation de données comptables.

b) Discussion Des Resultats

Le but de notre article est de répondre à la problématique suivante: « comment la crise sanitaire COVID 19 influence la gestion du résultat comptable dans les entreprises». Pour parvenir à cette fin, nous avons opté pour une étude qualitative dans le cadre du paradigme interprétatif. Après plusieurs entretiens avec les dirigeants d'entreprises et les professionnels comptables, nous avons procédé à une analyse approfondie des résultats que nous allons discuter dans cette section.

Les différents entretiens nous dévoilent le niveau d'importance de l'impact de la COVID19 sur la pratique de gestion du résultat comptable. En effet, la crise sanitaire a engendré des pertes énormes pour tout le secteur d'activités. Pour compenser ces pertes, les dirigeants utilisent souvent les techniques de gestion des données comptables pour optimiser leur résultat.

Toutefois, cette crise sanitaire n'est pas la première qu'a connu les entreprises. Le 20^{ème} siècle a connu une flambée de pandémies mortelles qui ont marqués l'histoire, notamment «la grippe Espagnole»

apparue en 1918. Ainsi, durant le 21^{ème} siècle, l'humanité a attesté des crises pandémiques qui sont: «le coronavirus du syndrome respiratoire aigu sévère (SRAS)» en 2002, «le N1H1 ou la grippe aviaire» en 2009 et «Ebola» qui a culminé durant la période 2013-2014. En réalité, l'impact économique et commercial de la COVID-19 diffère de ces pandémies.

Les entretiens nous ont révélé à l'unanimité que les dirigeants des entreprises camerounaises en cas des difficultés font recours la variation des stocks, ce qui les aide à mieux influencer les résultats comptables et par conséquent à payer moins d'impôt.

Au-delà de toutes les variables suscités et présentes dans la littérature, les entretiens nous ont révélé un nouvel aspect souvent négligé, mais autant important que les précédents. En effet, certaines entreprises nous ont révélés que la diminution des effectifs de la main d'œuvre est également une technique utilisée pour influencer le résultat de l'entreprises, à travers la baissede la masse salariale, il faut aussi préciser d'autres entreprises utilisent les frais d'abonnement comme technique de manipulation.

VI. CONCLUSION

Nous avons essayé dans cet article d'identifier l'impact de la crise liée à la pandémie de COVID-19 sur les entreprises et plus particulièrement sur la gestion du résultat comptable. Pour mener à bien notre recherche, nous avons recouru à une approche qualitative focalisée sur l'analyse d'interviews. De cette approche qualitative, nous avons pu déduire que les entreprises camerounaises gèrent leurs résultats pour faire face à cette crise sanitaire. La contribution de cet article est double. D'une part il contribue à l'avancée de la science matière de gestion du résultat comptable et d'autre part d'optimiser la gouvernance de l'entreprise en matière de contrôle des dirigeants et d'appréhender la gestion de la crise sanitaire du COVID 19.

Il serait intéressant pour des recherches futures de recueillir par exemple l'avis gestion des dirigeants d'entreprise et de l'administration fiscale pour mieux affiner la recherche sur les techniques de gestion du résultat dans le contexte Cameroun. Enfin, la crise liée à la COVID-19 que traverse le monde actuellement, nécessite une étroite collaboration entre l'ensemble des métiers et des organisations, afin de pouvoir faire face aux risques actuels liées à cette période et même à ceux qui vont survenir dans le futur proche.

BIBLIOGRAPHIE

1. Assaad Idrissi M, Oudda Y. et Taouab O. (2020)« Quel modèle de développement pour le Maroc dans l'ère post coronavirus», *Revue Internationale du chercheur*, Vol 1, n°2, pp:24-43.
2. Ball R. et Brown P. (1968), "An empirical evaluation of accounting income numbers" *Journal of Accounting Research* 6 (2): 159-178.



3. Barton M. A. et Sutcliffe K. M. (2009), «Overcoming Dysfunctional Momentum: Organizational Safety as a Social Achievement», *Human Relations* 62(9): 1327-1356.
4. Ben Amar W. et Zéghal D. (2006), «La communication volontaire d'information par les entreprises en difficulté financière» "Comptabilité, Contrôle, Audit et Institution(S)", Tunisie (2006).
5. Beneish M.D. (2001), "Earnings management: A perspective", *Working paper*, www.ssrn.com. Bigley G. A. et Roberts K. H. (2001), «The incident command system: High-reliability organizing for complex and volatile task environments». *Academy of Management Journal*, 44(6), 1281-1299. Bland, M. (1998), *Communicating out of a crisis*, Londres: Macmillan Business.
6. Bowonder B. et Linstone H. (1987), «Notes on the Bhopal accident: Risk analysis and multiple perspectives», *Technological Forecasting and Social Change*, vol. 32, 183 – 202.
7. Breton G. et Schatt A. (2003), «Manipulation comptable: les dirigeants et les autres parties prenantes », *La Revue du Financier*, 139, p. 18-25.
8. Breton G. et Stolowy H. (2003), «Accounts Manipulation: A Literature Review and Proposed Conceptual Framework" *Review of Accounting and Finance*, vol 3, n°1, p5-92.
9. Burgstahler D. et Dichev I. (1997), "Earnings management to avoid decreases and losses", *Journal of Accounting and Economics*, vol. 24, pp. 99-126.
10. Casta J.F. (2000), «Théorie positive de la comptabilité. In Encyclopédie de comptabilité, de contrôle de gestion et audit (Ed, Colasse B.). Paris: Economica, 1223- 1232.
11. Chambers, R. J., 1955. Blueprint for a Theory of Accounting. *Accounting Research*, 6:1, 17–25. Chia R. et MacKay B. (2007), «Post- Processual Challenges for the Emerging Strategy-as-Practice Perspective: Discovering Strategy in the Logic of Practice ». *Human Relations*, 60, 217-242.
12. Cohen D.A. et Zarowin P. (2010), «Accrual-Based and Real earnings management activities around seasoned equity offering », *Journal of Accounting and Economics*, Vol 50, n°1 p2-19.
13. Cohen J., Krishnamoorthy G. et Wright A. (2004), «The Corporate Governance Mosaic and Financial Reporting Quality», *Journal of Accounting Literature*, vol. 23, p. 87-152. Corner A. et Hahn U. (2013), «Normative theories of argumentation: Are some norms better than others? » ? *Synthese* 190(16).
14. Darsa J.D. (2010) « *La gestion de crise en entreprise* », Gereso Editions.
15. Dechow P. et Skinner D. (2000), «Earnings management: Reconciling the views of accounting academics, practitioners and regulators.», *Accounting Horizons*, vol 14, n°2, pp. 235-250.
16. Defond M. et Jiambalvo J. (1991), « Incidences and circonstances of accounting errors.», *The Accounting Review*, vol. 66, pp. 643-655.
17. Degeorge F. Patel J. et Zeckhauser R. (1999), «Earnings Management to Exceed Thresholds », *The Journal of Business*, vol.72, N°1.
18. Dutton, J. E. (1986), The processing of crisis and non-crisis strategic issues, *Journal of Management Studies*, vol. 23, p. 501 – 517.
19. Dye R.A. (1988), "Earnings mangement in an overlapping generations model", *Journal of Accounting Research*, p101-116.
20. Elqayam S. et Evans O. St B. T. (2011), «Subtracting "ought" from "is": Descriptivism versus normativism in the study of human thinking», *Behavioral and Brain Sciences* 34(5):233-48; Feldman M.S. et Orlikowski W. J. (2011), «Theorizing Practice and Practicing Theory» October 2011 *Organization Science* 22(5): 1240-1253
21. Graham J. R., Harvey C. R. et Rajgopal S. (2005), "The economic implications of corporate financial reporting" *Journal of Accounting and Economics* Vol 40 n°1-3, p3-73.
22. Gundel, S., (2005), Toward a new typology of crises, *Journal of Contingencies and Crisis Management*, Vol. 13, N° 3, pp. 106-115.
23. Gunny K. A. (2010), « The relation between earnings management using real activities manipulation and future performance : evidence from meeting earning bench marks», *Contemporary accounting research*, vol 27 issue, pp 855-888.
24. Healy P. et Wahlen J. (1999), «A review of the earnings management literature and its implications for standard setting», *Accounting Horizons*, Vol 13, n°4, pp. 365-383.
25. Heiderich, Didier (2010). *Plan de gestion de crise : Organiser, gérer et communiquer en situation de crise* Paris, Dunod, 240 p.
26. Holder-Webb L. (2003), «Strategic Use of Disclosure Policy in Distressed Firms», Working Paper. University of Wisconsin- Madison
27. James, Erika H. et Lynn Perry Wooten (2010). *Leading under pressure : From surviving to thriving before, during, and after a crisis*, New York, NY, Routledge, 282 p.
28. Janin R. et Piot C. (2008), «L'influence des auditeurs externes et des comités d'audit sur le contenu informatif des manipulations comptables», *La Revue des Sciences de Gestion, Direction et Gestion*, n° 233, pp. 23-34
29. Jensen, M.C. et Meckling, W. (1976), "Theory of the firm: Managerial behavior, agency costs, and ownership structure", *Journal of Financial Economics*, vol.3, n°4, p. 305-360.

30. Johnson G., Langley A., Melin, L., et Whittington R. (2007), «Strategy as Practice: Research Directions and Resources». Cambridge, UK: Cambridge University Press.
31. Lagadec, P. (2000), *Ruptures créatrices*, Paris: Editions d'organisation.
32. Langley A. (1999), «Strategies for theorizing from process data». *Academy of Management Review*, 24(4), 691–710
33. Langley, Ann et Haridimos Tsoukas (2017). «Introduction: Process thinking, process theorizing and process researching», dans Ann & Haridimos Langley, Tsoukas (dir.), *The sage handbook of process organization studies*, Sage, p. 651.
34. Lehu, J. M. (1998), *Alerte Produit !*, Paris: Editions d'organisation.
35. Mard Y. (2004), « Gestion des résultats comptables: l'influence de la politique financière, de la performance et du contrôle», *XXVeme congress de l'AFC-Orléans*, pp 1-26.
36. Masmoudi A. W. et Boujelbène Y. (2015), « Internal governance mechanisms and value relevance of accounting earnings: An empirical study in the French context» *International Journal of Managerial and Financial Accounting*, Vol 7.
37. Morin, E. (1976), Pour une crisologie, *Communications*, n° 25, p. 149 – 163.
38. Ndjanyou L. (2001), «Risque, l'incertitude, et financement bancaire de la PME camerounaise: l'exigence d'une analyse spécifique du risque», *CERAf*, p. 26.
39. Ngongang, D. et Souleymanou K. (2008). « Mutation comptable OCAM/OHADA et facteurs déterminants du changement dans les en-treprises camerounaises», *Euro - Mediterranean Economics and Finance Review*, vol 3, n°1, first quarter, pp.190-207.
40. Ogrizek, M. & J. M. Guillery (1997), *La communication de crise*, Paris: Presses Universitaires de France.
41. Pearson, C. M., & Clair, J. A. (1998). Reframing crisis management. *The Academy of Management Review*, 23(1), 59–76. <https://doi.org/10.2307/259099>.
42. Piot C. et Janin R. (2004), «Qualité de l'audit, gouvernance et gestion du résultat comptable en France» 25ème congrès de l'Association Francophone de Comptabilité, Orléans, Mai, 147-175.
43. Pozza L., Markarian G. et Prencipe A. (2008), «Capitalization of R&D costs and earnings management: evidence from Italian listed companies», *The International Journal of Accounting* Vol 43, pp 246-267.
44. Raffournier B. (1990), « La théorie positive de la comptabilité: une revue de la littérature», *Economies et sociétés*, série sciences de gestion, n° 16, p.137-166.
45. Roux-Dufort C. (2000), *La gestion de crise : Un enjeu stratégique pour les organisations*, Paris: De Boeck & Larcier.
46. Roychowdhury S. (2006), "Earnings management through real activities manipulation" *Journal of Accounting and Economics*, Vol 42, n°3, p335-370.
47. Saboly M., 2001 «Information comptable et défaillance des entreprises: le cas français», *Comptabilité Contrôle Audit* 001/2 Tome 7 | pages 67 à 86.
48. Sandberg J. et Tsoukas H. (2011), «Grasping the Logic of Practice: Theorizing Through Practical Rationality », *Academy of Management Review*, Vol. 36, No. 2.
49. Schipper, K. (1989), "Commentary on Earnings Management", *Accounting Horizons*, p. 91-102 Scholes M.S, Wilson G.P. et Wolfson M.A. (1992), "Firms Responses to Anticipated reductions in Taxes Rates: The Tax reform act of 1986", *Journal of Accounting Research* (supplement), pp 161-185.
50. Seboui S. (2003), «Stratégies d'innovation, diversification et gestion des résultats», *La Revue Française des sciences de gestion, Direction et Gestion*, n°224, pp 84-97.
51. Stolowy H. et Breton G. (2003), «La gestion des données comptables : une revue de la littérature », *Comptabilité - Contrôle – Audit* 2003/1 Tome 9, pages 125 à 151.
52. Turner, B. A. (1976), "The organizational and interorganizational development of disasters", *Administrative Science Quarterly*, vol. 21, p. 378-397.
53. WATERHOUSE J., GIBBINS M. et RICHARDSON A. J. (1993) « L'information financière stratégique: le cas des négociations collectives», *Contemporary accounting research*
54. Watts R. et Zimmerman J. (1978), "Toward a positive theory of the determination of accounting Standards" *The Accounting Review*, Vol 53, p. 112-134.
55. Westphalen M. H. (1998), *Communicator – Le guide de la communication d'entreprise*, Paris: Dunod.
56. Zang A. Y. (2012), "Evidence on the trade-off between real activities manipulation and accrual-based earnings management" *The Accounting Review* Vol 87, n°2, p675-703.
57. Sangue Fotso R. et Bionomo H. R. (2018), La pratique de la Comptabilité dans les TPE camerounaises, 18p.,<http://www.jeacc.org/wp-content/uploads/2018/12/A2-Sangue-etBionomo.pdf>.



This page is intentionally left blank



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: D
ACCOUNTING AND AUDITING
Volume 21 Issue 2 Version 1.0 Year 2021
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Accounting Expertise: A Bibliometric Study from 2010 to 2019 in the Main Magazines of Brazil

By Marcos Gonçalves Ferreira & Clébia Ciupak Bocardi

Abstract- The study aims to identify bibliometric characteristics of articles published between 2010 and 2019 on accounting expertise using the Scientific Periodicals Electronic Library (SPELL) database. The methodology used in the research is characterized as a bibliometric, descriptive and qualitative research. The data were collected from that database, where 17 articles were found that contained the keyword "PeríciaContábil", which were produced by 49 authors, most of whom were co-authored by two authors from the Midwest region of the city of Brasília-DF and of the teaching institution UniversidadeCatólica de Brasília (UCB). The articles are distributed in 12 magazines and there is practically no publication in those considered to be of high impact, having as the most discussed subject: general aspects of accounting expertise, despite the importance of this area of practice of the accounting professional, there are few publications on the subject. It is suggested, therefore, that future research will be developed on the theme "accounting expertise".

Keywords: *bibliometric. data base.accounting expertise.*

GJMBR-D Classification: *JEL Code: M41*



Strictly as per the compliance and regulations of:



Accounting Expertise: A Bibliometric Study from 2010 to 2019 in the Main Magazines of Brazil

Perícia Contábil: Um Estudo Bibliométrico de 2010 A 2019 nas Principais Revistas Do Brasil

Experiencia Contable: UN Estudio Bibliométrico De 2010 A 2019 En Las Principales Revistas De Brasil

Marcos Gonçalves Ferreira ^a & Clebia Ciupak Bocardi ^a

Resumo- O estudo tem como objetivo identificar características bibliométricas dos artigos publicados no período entre 2010 a 2019 sobre perícia contábil utilizando a base de dados *Scientific Periodicals Is Electronic Library* (SPELL). A metodologia empregada na pesquisa se caracteriza como uma pesquisa bibliométrica, descritiva e qualitativa. Os dados foram coletados da referida base de dados onde foram encontrados 17 artigos que continham a palavra chave "Perícia Contábil", os quais foram produzidos por 49 autores, a maioria com coautoria envolvendo dois autores advindos da região Centro Oeste da cidade de Brasília-DF e da instituição de ensino Universidade Católica de Brasília (UCB). Os artigos estão distribuídos em 12 revistas e praticamente não há publicação naquelas consideradas de alto impacto, tendo como o assunto mais abordado: aspectos gerais da perícia contábil, apesar da importância desta área de atuação do profissional de contabilidade existem poucas publicações sobre a temática. Sugere-se, dessa forma, que futuras pesquisas venham a ser desenvolvidas sobre a temática "perícia contábil".

Palavras-chave: bibliométrica. base de dados. perícia contábil

Abstract- The study aims to identify bibliometric characteristics of articles published between 2010 and 2019 on accounting expertise using the *Scientific Periodicals Electronic Library* (SPELL) database. The methodology used in the research is characterized as a bibliometric, descriptive and qualitative research. The data were collected from that database, where 17 articles were found that contained the keyword "Perícia Contábil", which were produced by 49 authors, most of whom were co-authored by two authors from the Midwest region of the city of Brasília-DF and of the teaching institution Universidade Católica de Brasília (UCB). The articles are distributed in 12 magazines and there is practically no publication in those considered to be of high impact, having as the most discussed subject: general aspects of accounting expertise, despite the importance of this area of practice of the accounting professional, there are few publications on the subject. It is suggested, therefore, that future research will be developed on the theme "accounting expertise".

Keywords: bibliometric. data base. accounting expertise.

Author & e-mail: e-mails: clebia.ciupak@gmail.com,
contador.marcosferreira@gmail.com

Resumen- El estudio tiene como objetivo identificar las características bibliométricas de los artículos publicados entre 2010 y 2019 sobre experiencia contable utilizando la base de datos de la Biblioteca electrónica de publicaciones científicas (SPELL). La metodología utilizada en la investigación se caracteriza por ser una investigación bibliométrica, descriptiva y cualitativa. Los datos fueron recolectados de esa base de datos, donde se encontraron 17 artículos que contenían la palabra clave "Pericia Contábil", los cuales fueron producidos por 49 autores, la mayoría de los cuales fueron coautores de dos autores de la región Centro Oeste de la ciudad de Brasilia-DF y de la institución docente Universidad Católica de Brasilia (UCB). Los artículos están distribuidos en 12 revistas y prácticamente no hay publicación en las consideradas de alto impacto, teniendo como tema más discutido: aspectos generales de la pericia contable, a pesar de la importancia de esta área de práctica del profesional contable, existen pocas publicaciones sobre el tema. Por lo tanto, se sugiere que se desarrollen investigaciones futuras sobre el tema "conocimientos contables".

Palabras-clave: bibliométrica. base de datos. experiencia contable.

I. INTRODUÇÃO

A perícia contábil é o conjunto de procedimentos técnico e científicos destinados a levar à instância decisória elementos de prova necessários a subsidiar a justa solução do litígio ou constatação de fato, observa-se uma grande demanda pela atuação do perito contador na esfera judicial brasileira, com destaque aos casos relacionados aos direitos patrimoniais. Sendo o patrimônio o objeto de estudo da contabilidade ela tem relação direta com a perícia servindo de subsídios para a exposição confiável dos fatos em discussão, dada à importância do tema perícia contábil e sua relevância nas decisões dos magistrados, para o trabalho dos peritos, advogados aliados a poucas pesquisas relacionadas ao tema, formulou-se o seguinte problema: Quais as características dos artigos publicados no Brasil no período de 2009 a 2019 que trataram do tema perícia contábil?



Como resposta a questão estudo propôs-se identificar características bibliométricas dos artigos sobre perícia contábil utilizando a base de dados *Scientific Periodicals Electronic Library* (SPELL), contribuindo para conhecimento do perfil dos estudos acadêmicos publicados sobre a temática nos últimos 10 anos, entendendo suas particularidades, perfil dos pesquisadores e autor(es) com maior número de artigos na área, tendo como objetivo principal a abordagem do tema através da bibliometria que permite analisar e construir indicadores sobre a dinâmica e evolução da informação científica e tecnológica de um determinado assunto, permitindo detectar seus pontos fortes e principalmente suas fragilidades proporcionando observar o que já foi publicado em relação ao contexto e o que ainda permite-se avançar. Para Guedes e Borschiver (2005) caracterizam a bibliometria como sendo uma pesquisa ao longo de publicações de bases científicas e tecnológicas para um período de tempo determinado, numa área específica do conhecimento.

O estudo justifica-se pela sua contribuição teórica, principalmente para quem está iniciando pesquisas nessa área e necessita saber quais são os autores clássicos a serem consultados e citados. Tornase relevante devido à pequena quantidade de publicações sobre perícia contábil. Segundo Sá (2008) a escassez de literatura sobre perícia vai além das fronteiras do Brasil; o mesmo enfatiza que se escreve pouco sobre o tema no mundo.

O artigo está estruturado em cinco tópicos primeiramente a introdução que descreve uma visão abrangente sobre a pesquisa, em seguida o referencial teórico que trás de forma sucinta os conceitos existentes em literatura sobre o tema perícia contábil, depois se apresenta a metodologia adotada com relação à abordagem do problema, objetivos, procedimentos técnicos, procedimentos de coleta de dados e análise dos dados. Na sequência, apresentação e análise dos resultados demonstrados por tabelas, por último tem-se as considerações finais e as referências utilizadas.

II. REVISÃO DA LITERATURA

a) Conceito

Perícia (do termo latim *peritia*, derivado por sua vez de *peritus*, "experto") é a análise técnica de uma situação, fato ou estado redigido por um especialista numa determinada disciplina, o perito conforme conceitua Zanluca (apud Wikipédia, 2011) significa, portanto, a pesquisa, o exame, a verificação, acerca da verdade ou da realidade de certos fatos, por profissionais que tenham reconhecida habilidade na matéria de que se trata.

b) Perícia Contábil

A perícia contábil é a verificação de fatos ligados ao patrimônio individualizado visando oferecer opinião mediante questão proposta. Para tal opinião realizam-se exames, vistorias, indagações, investigações, avaliações, arbitramentos, em suma todo e qualquer procedimento necessário à opinião.

O Conselho Federal de Contabilidade, por sua vez, define perícia contábil pela NBC TP 01 (2020) da seguinte forma:

A perícia contábil é o conjunto de procedimentos técnico-científicos destinados a levar à instância decisória elementos de prova necessários a subsidiar a justa solução do litígio ou constatação de fato, mediante laudo pericial contábil e/ou parecer pericial contábil, em conformidade com as normas jurídicas e profissionais e com a legislação específica no que for pertinente.

Entende-se a perícia contábil como sendo um instrumento que visa criar os elementos comprobatórios necessários para auxiliar à justa solução do litígio.

c) Perito Contador

O perito é um profissional qualificado que tem grande domínio sobre um assunto ou disciplina, trata-se de um especialista no qual seus conhecimentos lhe permitem avaliar uma situação com rigor e objetividade. O Conselho Federal de Contabilidade, por sua vez, conceitua o perito pela NBC PP 01 (2020) da seguinte forma:

Perito é o contador detentor de conhecimento técnico e científico, regularmente registrado em Conselho Regional de Contabilidade e no Cadastro Nacional dos Peritos Contábeis, que exerce a atividade pericial de forma pessoal ou por meio de órgão técnico ou científico.

Diversas são as áreas de atuação do profissional de contabilidade entre elas a perícia contábil, o Conselho Federal de Contabilidade através da norma Brasileira de Contabilidade NBC TP 01 (2020), dispõe que a perícia contábil é de competência exclusiva de contador em situação regular em Conselho Regional de Contabilidade.

d) Nomeação

O perito contador profissional hábil, destro, prático conhecedor profundo, sabedor e especialista na área contábil. Nomeado judicialmente para fazer vistorias ou perícias.

Em seu art. 465 do novo Código Processo Civil determina que:

Art. 465. O juiz nomeará perito especializado no objeto da perícia e fixará de imediato o prazo para a entrega do laudo.

§1º Incumbe às partes, dentro de 15 (quinze) dias contados da intimação do despacho de nomeação do perito:

- I. arguir o impedimento ou a suspeição do perito, se for o caso;
- II. indicar assistente técnico;
- III. apresentar quesitos.

§2º Ciente da nomeação, o perito apresentará em 5 (cinco) dias:

- I. proposta de honorários;
- II. currículo, com comprovação de especialização;
- III. contatos profissionais, em especial o endereço eletrônico, para onde serão dirigidas as intimações pessoais.

e) *Assistentes Técnicos*

O Conselho Federal de Contabilidade na NBC PP 01 (2020) conceitua os assistentes técnicos como sendo o “contador ou órgão técnico ou científico indicado e contratado pela parte em perícias contábeis”. E ainda dispõe sobre os assistentes técnicos na NBC TP 01 (2020) da seguinte forma:

22 (d) os assistentes técnicos têm o dever inalienável de colaborar para a revelação da verdade e comportar-se de acordo com a boa-fé e com a equidade, além de cooperar entre si e com o perito nomeado, para que se obtenha um resultado da perícia em tempo razoável;

22 (e) os assistentes técnicos podem entregar ao perito nomeado cópia do seu parecer prévio, planilhas ou memórias de cálculo, informações e demonstrações que possam esclarecer ou auxiliar o trabalho a ser desenvolvido pelo perito nomeado, assegurado o acesso ao outro assistente.

O assistente técnico auxiliará na fiscalização durante as diligências enviadas pelo perito nomeado, acompanhando seus passos, a fim de detectar lhe equívocos técnicos, omissões, erros na apreciação dos fatos ou documentos.

f) *Classificações Das Perícias*

Dentro da Perícia Contábil, o perito contador tem um vasto campo de atuação e ele pode ser necessário em muitos casos de disputa e litígios. Tecnicamente, o profissional é requisitado quando o tomador de decisão em questão necessita de um parecer técnico sobre o caso.

ParaAlberto (2007) a perícia contábil será classificada de acordo com o ambiente em que ela se fará necessária. São três os tipos de perícia, a saber: perícia judicial, extrajudicial e arbitral.

i. *Perícia Judicial*

Perícias judiciais são aquelas que ocorrem no âmbito da justiça, quando na tentativa de resolução de impasses recorre-se a via legal, precisa ser nomeado pelo juiz e podem ocorrer sob três aspectos:

- Sem requerimentos das partes;
- Com requerimentos das partes;
- Por imposição da lei (falecias);

Segundo Lopes de Sá (1994, p. 78), “perícia contábil judicial é a que visa servir de prova, esclarecendo o juiz sobre assuntos em litígio que merecem seu julgamento, objetivando fatos relativos ao patrimônio aziendal ou de pessoas”. Já o Conselho Federal de Contabilidade através da norma Brasileira de Contabilidade NBC TP 01 (2020), conceitua a perícia judicial como aquela exercida sob a tutela do Poder Judiciário.

ii. *Perícia Extrajudicial*

A perícia extrajudicial é aquela realizada fora da tutela do poder judiciário, geralmente é contratada por necessidade e escolhida pelo interessado ou de forma consensual entre as partes. O Conselho Federal de Contabilidade através da norma Brasileira de Contabilidade NBC TP 01 (2020), conceitua a perícia extrajudicial como sendo aquela exercida no âmbito arbitral, estatal ou voluntária.

iii. *Perícia Arbitral*

Tem natureza extrajudicial, mas com valor judicial, já que as partes litigantes escolhem os árbitros e as regras que serão aplicadas na arbitragem. O Conselho Federal de Contabilidade através da norma Brasileira de Contabilidade NBC TP 01 (2020), conceitua a perícia arbitral como sendo aquela exercida sob o controle da lei de arbitragem e pelos regulamentos das Câmaras de Arbitragem.

iv. *Laudos Periciais*

Conforme Sá (2005), “o laudo é a manifestação do perito, é o seu julgamento ou pronunciamento, devidamente fundamentados e baseados em seus conhecimentos, em face de eventos ou fatos patrimoniais submetidos a sua apreciação”. O conselho Federal de Contabilidade dispõe sobre laudo pericial contábil através da NBC TP 01(2020):

36. O laudo pericial contábil e o parecer pericial contábil devem ser elaborados somente por contador ou pessoa jurídica, se a lei assim permitir que estejam devidamente registrados e habilitados. A habilitação é comprovada por intermédio da Certidão de Regularidade Profissional emitida por Conselho Regional de Contabilidade ou do Cadastro Nacional de Peritos Contábeis do Conselho Federal de Contabilidade.

37. O laudo pericial contábil e o parecer pericial contábil são documentos escritos, que devem registrar, de forma abrangente, o conteúdo da perícia e particularizar os aspectos e as minudências que envolvam o seu objeto e as buscas de elementos de prova necessários para a conclusão do seu trabalho.

38. Os peritos devem consignar, no final do laudo pericial contábil ou do parecer pericial contábil, de forma clara e precisa, as suas conclusões.

Observa-se que o campo perícia contábil abrange diversas possibilidades de realização de trabalhos, com um único objetivo, tornar às claras uma situação incoerente, conflituosa, duvidosa.

IV. METODOLOGIA

Apresenta-se a seguir os aspectos metodológicos deste estudo.

Em relação à abordagem do problema utilizou-se o método de pesquisa qualitativa, visto que se preocupou com os aspectos que não podem ser quantificáveis e sim em explicar o porquê das coisas, Richardson (1999, p. 80) menciona que "os estudos que empregam uma metodologia qualitativa podem descrever a complexidade de determinado problema, analisar a interação de certas variáveis, compreender e classificar processos dinâmicos vividos por grupos sociais".

Já quanto aos objetivos configura-se como descritiva, onde foram descritos aspectos importantes do assunto, analisando as produções científicas com o tema "perícia contábil" nas principais revistas de contabilidade no período de 2010 a 2019. A pesquisa descritiva tem por objetivo descrever as características de uma população, de um fenômeno ou de uma experiência. Esse tipo de pesquisa estabelece relação entre as variáveis no objeto de estudo analisado, variáveis relacionadas à classificação, medida e/ou quantidade que podem se alterar mediante o processo realizado.

A pesquisa descritiva exige do investigador uma série de informações sobre o que deseja pesquisar. Esse tipo de estudo pretende descrever os fatos e fenômenos de determinada realidade (TRIVIÑOS, 1987).

Em relação aos procedimentos técnicos utilizados classifica-se como pesquisa bibliográfica, pois com base em publicações sobre o tema em revistas, em livros e na internet é que serão conseguidos os objetivos da mesma. Para Fonceca (2002, p.32):

Quadro 1: Resultado da pesquisa na base da SPELL – ScientificPeriodicalsElectronic Library

Ano	Titulo	Autores
2019	Perícia Contábil-Financeira e os Sistemas de Amortização: Sistema Francês Versus Sistema de Equivalência a Juros Simples	André Sekunda
2017	Contabilidade Forense e Perícia Contábil: Um Estudo Fenomenográfico	Joshua Onomelmoniana
		Aline Aparecida Aquino
	A Percepção dos Discentes do Curso de Ciências Contábeis Quanto às Habilidades e Competências Desenvolvidas na Disciplina de Perícia Contábil	Joana Darc Medeiros Martins
	Habilidades Relevantes para a Perícia Contábil Criminal: a percepção dos Peritos e Delegados da Polícia Federal	Amanda Medeiros Martins
		Aneide Oliveira Araújo
		Carlos Roberto dos Santos Filho
		Flávio Alves Carlos

A pesquisa bibliográfica é feita a partir do levantamento de referências teóricas já analisadas, e publicadas por meios escritos e eletrônicos, como livros, artigos científicos, páginas de web sites. Qualquer trabalho científico inicia-se com uma pesquisa bibliográfica, que permite ao pesquisador conhecer o que já se estudou sobre o assunto. Existem, porém, pesquisas científicas que se baseiam unicamente na pesquisa bibliográfica, procurando referências teóricas publicadas com o objetivo de recolher informações ou conhecimentos prévios sobre o problema a respeito do qual se procura a resposta.

Outro procedimento técnico utilizado foi estudo biométrico que pode ser caracterizado pela aplicação de métodos estatísticos e matemáticos para avaliar a dinâmica e evolução da informação científica e tecnológica. Guedes e Borschiver (2005) caracterizam a bibliometria como sendo uma pesquisa ao longo de publicações de bases científicas e tecnológicas para um período de tempo determinado, numa área específica do conhecimento. Tal metodologia foi utilizada para atender o objetivo deste artigo.

Quanto aos procedimentos de coleta de dados para a construção desta pesquisa utilizou-se a base de dados da SPELL – ScientificPeriodicalsElectronic Library, onde foram considerados apenas artigos que continham a palavra-chave "Perícia Contábil", a busca retornou 17 artigos os quais foram produzidos por 49 autores e distribuídos em 12 revistas para o período compreendido entre 2010 a 2019. Em relação à análise dos dados os artigos foram examinados, os dados obtidos e alocados em planilhas de Excel (Microsoft)..

V. RESULTADOS

Apresenta-se a seguir as características biométricas dos artigos publicados sobre o tema Perícia Contábil.

a) Das Características Biométricas

O Quadro 1 apresenta uma abordagem geral da pesquisa realizada na base de dados da SPELL – Scientific Periodicals Electronic Library, com destaque para o ano da publicação, autores e título dos artigos.

		Fábio Moraes da Costa
	Redes de atores na perícia contábil judicial: uma análise à luz da Teoria Ator-Rede	Eduardo Vinícius Bassi Murro
		Ilse Maria Beuren
2016	A participação do contador em processo de falências e de recuperação de empresas na visão dos magistrados: administração judicial e perícia contábil	Wagner Ferreira da Silva
	Perícia Contábil Sobre a Desoneração da Folha de Pagamento: Caso em Empresa de Construção de Obras de Infraestrutura	Idalberto José das Neves Júnior
	A Percepção dos Alunos do Curso de Ciências Contábeis acerca do Ensino e do Mercado de Trabalho em Perícia Contábil	Idalberto José das Neves Júnior
		Claudiomar Macêdo Fernandes
		Marcelo Daia Barreto
		Arthur Cascudo Rodrigues
		Felipe Silva Moreira
		José Emerson Firmino
		Maurício Correa Silva
	Perícia Contábil: Análise Bibliométrica em Periódicos Brasileiros	Geovanna Lopes Salles
2015	O Ensino da Perícia Contábil em Brasília: percepções dos estudantes do curso de Ciências Contábeis	Michele Rilany Rodrigues Machado
		Ercílio Zanolla
		Lúcio de Souza Machado
2014	Perícia Contábil Judicial: a relevância e a qualidade do laudo pericial contábil na visão dos magistrados do Estado do Rio de Janeiro	José Antônio de França
		Aline Borges Barbosa
		Idalberto José das Neves Júnior
		João Guilherme Moreira de Cerqueira
2013	Perícia contábil: análise bibliométrica e sociométrica em periódicos e congressos nacionais no período de 2007 a 2011	Michelle dos Santos PovoasGottardo
		Marcelo Daia Barreto
		Tatiane Schmitz
		Vanderlei dos Santos
		Leomar Truppel
		Lara Fabiana Dallabona
2011	Uma análise bibliométrica dos artigos científicos em perícia contábil publicados entre os anos de 1999 a 2012	Elaine KammersTruppel
		Lis Daiana Bessa Taveira
		Ayron Wanderley Medeiros
		Renata Paes de Barros Camara
		Joana Darc Medeiros Martins
2010	Perícia Contábil: estudo da percepção de juízes de Primeira Instância na Justiça do Trabalho sobre a qualidade e a relevância do trabalho do perito	Idalberto José das Neves Júnior
		Simone Alves Moreira
		Elisangela Batista Ribeiro
		Moacenira Cardoso da Silva
2011	Perícia Contábil: uma ferramenta de combate ao crime organizado	Idalberto José das Neves Júnior
	Perícia Contábil: a visão dos contadores mineiros sobre os requisitos necessários, as atribuições e o campo de atuação da área	Evandro Marcos de Souza Moreira
2010	O impacto da atividade lúdica no desempenho de alunos que cursam a disciplina "Perícia Contábil" em cursos de graduação em Contabilidade oferecidos por IES da Grande Florianópolis - SC	Glaydson Carvalho Silva
		Márcia Athayde Matias
		Bernadete Limongi
		Marco Antônio Bisca Miguel

Fonte: Dados da Pesquisa, 2020

No Quadro 2 demonstra-se o nome das revistas com seus respectivos Qualis além dos números total de artigos encontrados e a distribuição de publicações por revista, extraí-se desse quadro que das 17 publicações

no período proposto as revistas (Pensar Contábil, RBGN, RCCC, REPeC e RMC), possuem duas publicações nas demais.

Quadro 2: Quantidade e percentual de publicações por revista

Revistas	Qualis	Números de Artigos	Percentual(%)
Pensar Contábil	B2	2	11,8%
RBGN - Revista Brasileira de Gestão de Negócios	A2	2	11,8%
RCCC - Revista Catarinense da Ciência Contábil	B2	2	11,8%
REPeC - Revista de Educação e Pesquisa em Contabilidade	B1	2	11,8%
RMC - Revista Mineira de Contabilidade	B3	2	11,8%
RGO - Revista Gestão Organizacional	B4	1	5,9%

CVT - Contabilidade Vista & Revista	A2	1	5,9%
RCCe - Revista Capital Científico - Eletrônica	B3	1	5,9%
Reunir: Revista de Administração, Contabilidade e Sustentabilidade	B2	1	5,9%
Revista de Contabilidade do Mestrado em Ciências Contábeis da UERJ	B1	1	5,9%
ROC - Revista Organizações em Contexto	B1	1	5,9%
Sociedade, Contabilidade e Gestão	B2	1	5,9%
TOTAL		17	100,0%

Fonte: Dados da Pesquisa

No Quadro 3 tem-se as classificações Qualis de todas as revistas onde há publicações no período pesquisado, extraí-se aqui que mais da metade das revistas possuem classificação B1 e B2 sendo 33,3% e 25% respectivamente, através dessa classificação pode-

se reconhecer qual é o periódico ideal para fazer consultas e desenvolver pesquisas relacionados ao tema de pericia contábil que contribuirão para a comunidade acadêmica.

Quadro 3: Classificação Qualis das revistas onde possui publicação

Qualis	Quantidade Revistas	(%)
A2	2	16,7%
B1	3	25,0%
B2	4	33,3%
B3	2	16,7%
B4	1	8,3%
TOTAL	12	100%

Fonte: Dados da Pesquisa

Dentre os resultados obtidos no quadro 4 tem-se a distribuição dos artigos ao longo do período pesquisado, pode-se observar que nos anos 2012 e 2018 não há nenhuma publicação referente à temática,

já nos anos de 2016 e 2017 tivemos o auge das publicações com quatro, observa-se também que há um aumento de quase 43%.

Quadro 4: Publicações por revistas ao longo do período pesquisado

Revistas	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pensar Contábil	-	-	-	-	1	-	1	-	-	-
RBGN - Revista Brasileira de Gestão de Negócios	-	-	-	1	-	-	-	1	-	-
RCCC - Revista Catarinense da Ciência Contábil	-	-	-	1	-	1	-	-	-	-
REPeC - Revista de Educação e Pesquisa em Contabilidade	-	1	-	-	-	-	-	1	-	-
RMC - Revista Mineira de Contabilidade	-	1	-	-	-	-	1	-	-	-
RGO - Revista Gestão Organizacional	-	-	-	-	-	-	-	-	-	1
CVT - Contabilidade Vista & Revista	1	-	-	-	-	-	-	-	-	-
RCCe - Revista Capital Científico - Eletrônica	-	-	-	-	-	-	1	-	-	-
Reunir: Revista de Administração, Contabilidade e Sustentabilidade	-	-	-	-	-	-	-	1	-	-
Revista de Contabilidade do Mestrado em Ciências Contábeis da UERJ	-	-	-	1	-	-	-	-	-	-
ROC - Revista Organizações em Contexto	-	-	-	-	-	-	-	1	-	-
Sociedade, Contabilidade e Gestão	-	-	-	-	-	-	1	-	-	-
TOTAL	1	2	0	3	1	1	4	4	0	1

Fonte: Dados da Pesquisa

No Quadro 5 é apresentado a quantidade autores por publicação observa-se que dos 17 artigos a maioria possui coautoria sendo que 41,2% das publicações envolve dois autores o que provavelmente são provenientes de trabalhos de conclusão de curso ou iniciação científica, as publicações com três e quatro

autores representam respectivamente 17,6% e 29,4%, apenas um artigo foi produzido de forma individual.

Quadro 5: Quantidade de autores por artigo

Quantidade de autores	Frequência	Percentual (%)
1 Autor	1	5,9%
2 Autores	7	41,2%
3 Autores	3	17,6%
4 Autores	5	29,4%
5 Autores	1	5,9%
Total	17	100%

Fonte: Dados da Pesquisa

O gênero dos autores é demonstrado no quadro 6 observa-se que do total de 17 artigos para o período pesquisado temos 49 autores e que cerca de 59,2% ou seja 29 são autores masculino e 40,8% ou seja 20 são femininos.

Quadro 6: Distribuição de autores quanto ao gênero

Gênero	Quantidade de Autores	Percentual (%)
Masculino	29	59,2%
Feminino	20	40,8%
Total	49	100,0%

Fonte: Dados da Pesquisa

Dos 17 artigos da pesquisa temos um total de 49 autores o quadro 7 mostra o ranking dos pesquisadores que mais publicaram no período com destaque a Idalberto José das Neves Júnior com 5 publicações e Joana Darc Medeiros Martins e Marcelo Daia com 2 publicações cada.

Quadro 7: Ranking dos autores com maior número de publicações

Posição	Autor	Números de Artigos
1 ^a	Idalberto José das Neves Júnior	5
2 ^a	Joana Darc Medeiros Martins	2
2 ^a	Marcelo Daia Barreto	2

Fonte: Dados da Pesquisa

O quadro 8 demonstra a instituição de ensino que os autores são vinculados com destaque a duas ambas localizadas em Brasília-DF a Universidade Católica de Brasília representado principalmente pelo pesquisador Idalberto José das Neves Júnior que possui 5 publicações do total de nossa amostra e Faculdade Mauá representando por Marcelo Daia Barreto o qual possui 2 publicações da nossa amostra.

Quadro 8: Relação da Instituição de Ensino e Quantidade de Autores

Instituições de Ensino	Quantidade de Autores
Centro Universitário de Brasília	1
Centro Universitário Dinâmica das Cataratas	1
Centro Universitário Tiradentes	1
Faculdade Mauá	5
Faculdades Integradas Ipiranga	1
Fundação Educacional de Oliveira	1
Universidade Católica de Brasília	9

Universidade de Brasília	2
Universidade de São Paulo	3
Universidade do Estado de Santa Catarina	5
Universidade Federal da Paraíba	1
Universidade Federal de Goiás	4
Universidade Federal de Minas Gerais	2
Universidade Federal de Santa Catarina	3
Universidade Federal do Paraná	1
Universidade Federal do Rio de Janeiro	1
Universidade Federal do Rio Grande do Norte	8
TOTAL	49

Fonte: Dados da Pesquisa

O Quadro 9 demonstra a distribuição dos autores e suas instituições de ensino por região geográfica no Brasil.

Quadro 9: Regiões das Instituições dos autores

Instituições de Ensino dos Autores por Região	Quantidade	(%)
Norte	2	4,1%
Nordeste	9	18,4%
Centro Oeste	21	42,9%
Sul	10	20,4%
Sudeste	7	14,3%
TOTAL	49	100,0%

Fonte: Dados da Pesquisa

Evidencia-se no quadro 10 a localização geográfica dos autores que mais produziram artigos sobre o tema perícia contábil o Distrito Federal (34,7%) seguidos das cidades do Paraná-PR (20,4%) e Rio Grande do Norte-RN(16,3%).

Quadro 10: Cidades das Instituições dos autores

Instituições de Ensino dos Autores por Cidade	Quantidade	(%)
Paraná	10	20,4%
São Paulo	3	6,1%
Rio Grande do Norte	8	16,3%
Rio de Janeiro	1	2,0%
Alagoas	1	2,0%
Distrito Federal	17	34,7%
Minas Gerais	3	6,1%
Pará	1	2,0%
Goiás	4	8,2%
Paraíba	1	2,0%
TOTAL	49	100,0%

Fonte: Dados da Pesquisa

Através das análises bibliométricas constatou-se a existência de poucas publicações sobre o tema, mas com perspectivas de crescimento visto o aumento nos últimos cinco anos, observou que apenas uma publicação fora escrita de forma individual o que pode ser explicado pelo fato dos trabalhos científicos serem executados com participação de orientadores, provavelmente oriundos de trabalhos de conclusão de curso ou iniciação científica.



Notou-se que o tema está difundido em doze periódicos e praticamente não há publicação naqueles considerados de grande relevância, das autorias há uma predominância dos autores do gênero masculino com destaque ao Ms. Idalberto José das Neves Júnior da Universidade Católica de Brasília com coautoria em cinco publicações tendo a região Centro Oeste e a cidade de Brasília como o local com maior produtividade relacionado ao tema pesquisado.

b) Das Características Qualitativas

Demonstra-se, no quadro 11, os assuntos com maior abrangência relacionados ao tema perícia contábil dentre eles, aspectos gerais da perícia contábil com 5 artigos, trabalho do perito contador e estudo bibliométrico em perícia contábil com 3 artigos, perícia contábil no ensino e o mercado de trabalho e habilidades e competências da perícia contábil com 2 artigos e 2 temas mais específicos como por exemplo, sistema de amortização e capitalização de juros e laudo pericial.

Quadro 11: Temática e Resumos dos Artigos

Temática	Ano	Autores	Resumo Comentado dos Artigos
Sistema de Amortização e Capitalização de Juros	2019	André Sekunda	Estudo de caso de um processo real que analisa um contrato de financiamento de veículo amortizado pelo sistema francês (Tabela Price) e o sistema de equivalência a juros simples (SEJS)
Aspectos gerais da Perícia Contábil	2017	Eduardo Vinícius Bassi Murro Ilse Maria Beuren	Investigou a configuração das redes de atores humanos e não humanos que se formam no processo da perícia contábil judicial sob a perspectiva da Teoria Ator-Rede
	2017	Joshua Onomelmoniana Aline Aparecida Aquino	Pesquisou as similaridades entre a Contabilidade Forense e a Perícia Contábil utilizando o método de estudo fenomenográfico
	2016	Idalberto José das Neves Júnior Claudiomar Macêdo Fernandes Marcelo Daia Barreto	Estudo de caso através da Perícia Contábil da Lei n.º 12.546, de 14 de dezembro de 2011
	2011	Idalberto José das Neves Júnior Evandro Marcos de Souza Moreira	Pesquisou a relevância da Perícia Contábil como meio de prova para a solução de controvérsias relativas ao crime organizado
	2010	Bernadete Limongi Marco Antônio Bisca Miguel	Avaliou o impacto da atividade lúdica “baralho de perícia contábil” (bp) no desempenho de alunos que cursam a disciplina Perícia Contábil
	2017	Joana Darc Medeiros Martins Amanda Medeiros Martins Aneide Oliveira Araujo	Verificou a percepção dos estudantes de graduação a respeito das habilidades e competências desenvolvidas na disciplina de Perícia Contábil
Habilidades e Competências da Perícia Contábil	2017	Carlos Roberto dos Santos Filho Flávio Alves Carlos Fábio Moraes da Costa	Buscou as habilidades mais relevantes para o exercício da Perícia Contábil
Trabalho do Perito Contábil	2016	Wagner Ferreira da Silva Idalberto José das Neves Júnior	Evidenciou a opinião de magistrados do estado de Minas Gerais sobre a participação do contador como auxiliar do juiz em processos de falência ou de recuperação judicial nas funções de administrador judicial ou de perito-contador
	2013	Idalberto José das Neves Júnior Simone Alves Moreira Elisangela Batista Ribeiro Moacenira Cardoso da Silva	Evidenciou a opinião dos juízes da Justiça do Trabalho acerca da qualidade e relevância do trabalho desenvolvido pelo perito contábil
	2011	Glaydson Carvalho Silva Márcia Athayde Matias	Abordou os requisitos necessários sob o ponto de vista dos profissionais contábeis a respeito do trabalho de perito contador
Laudo Pericial	2014	Idalberto José das Neves Júnior João Guilherme Moreira de Cerqueira	Evidenciou a relevância do laudo pericial contábil na visão dos magistrados que atuam

		Michelle dos Santos Povoas Gottardo Marcelo Daia Barreto	no estado do Rio de Janeiro
Perícia Contábil no Ensino e o Mercado de Trabalho	2016	Arthur Cascudo Rodrigues Felipe Silva Moreira José Emerson Firmo Maurício Correa Silva	Pesquisou a percepção dos graduados referente à qualidade do ensino da Perícia Contábil e sua preparação para inserção no mercado de trabalho
	2015	José Antonio de França Aline Borges Barbosa	Pesquisou a percepção dos graduados referente ao ensino e mercado de trabalho da perícia contábil
Estudo bibliométrico em perícia contábil	2016	Geovanna Lopes Salles Michele Rilany Rodrigues Machado Ercílio Zanolla Lúcio de Souza Machado	Pesquisa bibliométrica nos periódicos brasileiros na área de perícia contábil, no período entre 2005 e 2014
	2013	Tatiane Schmitz Vanderlei dos Santos Leomar Truppel Lara Fabiana Dallabona Elaine KammersTruppel	Pesquisa bibliométrica da produção científica em perícia contábil no Brasil, no período entre 2007 e 2011
	2013	Lis Daiana Bessa Taveira Ayron Wanderley Medeiros Renata Paes de Barros Camara Joana Darc Medeiros Martins	Pesquisa bibliométrica da produção científica em perícia contábil no Brasil, no período entre 1999 e 2012

Fonte: Dados da Pesquisa, 2020

Através de um estudo de caso Sekunda (2019), verificou as diferenças fluxos de caixa contrato de financiamento de veículos, amortizado pelo sistema francês de amortização (Tabela Price) e o sistema de equivalência a juros simples (SEJS), utilizando-se de uma abordagem de natureza quali-quantitativa conduzida por um estudo de caso, verificou-se que a taxa de juros informada em contrato pela Financeira, não correspondia à taxa efetivamente praticada para cálculo da prestação, podendo ser oriundo de mero erro de procedimento, por parte da financeira ou de má-fé. Concluiu que no Brasil, a discussão envolvendo sistemas de amortização e taxas de juros praticadas, está longe de uma solução final, gerando certa insegurança jurídica, tanto para as instituições financeiras quanto para os mutuários.

O objetivo de Aquino e Imoniana (2017) foi identificar as similaridades entre a Contabilidade Forense e a Perícia Contábil, utilizando o método de estudo fenomenográfico e realizando entrevistas com profissionais dessas áreas, com base nos resultados concluiu que o grau de expertise é maior para o perito.

A pesquisa de Martins J. D. M., Martins A. M. e Araújo (2017) buscou verificar a percepção dos estudantes de graduação a respeito das habilidades e competências desenvolvidas na disciplina de Perícia Contábil, por meio de questionários e de uma abordagem quantitativa de caráter descritivo, concluiu que discentes adquiriram conhecimentos, mas não se sentem aptos para exercer tal função.

O estudo de Filho, Carlos e Costa (2017), identificou as habilidades consideradas mais relevantes para o exercício da perícia contábil criminal no País. Dividiu o estudo em três partes: a primeira, sobre a percepção de relevância das habilidades, a segunda

sobre a percepção da aplicação prática das habilidades e a terceira parte permitiu que os respondentes contribuíssem com sugestões de habilidades consideradas relevantes e que não constassem entre as investigadas. Concluiu que as habilidades com maior relevância são: comunicação escrita, a análise dedutiva e o pensamento crítico, e que as habilidades investigadas e sugeridas têm o potencial de contribuir para todas as áreas da perícia contábil.

Murro e Beuren (2017) pesquisou a configuração das redes de atores humanos e não humanos que se formam no processo da perícia contábil judicial sob a perspectiva da Teoria Ator-Rede. Utilizando a metodologia de modelagem de equações estruturais e questionários conclui-se que para os indicadores de desempenho, foi apontada a qualidade do laudo pericial e do parecer técnico e a competência dos peritos e para os fatores propulsores, foram indicados à experiência do perito e do perito assistente e o tempo de atuação e de relacionamento com juízes.

O Estudo de Silva e Neves Júnior (2016) pesquisou a opinião de magistrados do estado de Minas Gerais sobre a participação do contador como auxiliar do juiz em processos de falência ou de recuperação judicial nas funções de administrador judicial ou de perito-contador. Realizou pesquisa de campo mediante aplicação de questionário e os resultados revelaram a importância da participação dos contadores para o bom andamento de tais processos e da boa qualidade dos trabalhos desenvolvidos pelos profissionais.

A pesquisa de Neves Júnior e Fernandes (2016) objetivou mensurar e analisar, através da perícia contábil, os impactos causados pela implantação da “desoneração da folha de pagamento”, Lei n.º 12.546,



de 14 de dezembro de 2011, utilizando abordagem quantitativa e descritiva do problema, demonstrando os encargos previdenciários antes e após a exigência legal, comparando-os em períodos iguais consecutivos, os resultados apresentam à efetiva desoneração, no período, portanto o benefício legal foi real para a empresa avaliada.

Rodrigues, Moreira, Firmino e Silva (2016) analisou a percepção dos alunos concludentes do curso de Ciências Contábeis referente à qualidade do ensino da Perícia Contábil e sua preparação para inserção no mercado de trabalho, aplicou-se questionário e como resultado apontou que as Universidades apresentam uma qualidade de ensino razoável e que há pouca relação dos alunos com profissionais já atuantes no mercado e que os docentes da disciplina de perícia contábil não conseguem fazer essa integração do meio acadêmico com o ambiente profissional.

Salles, Machado M. R. R., Zanolla e Machado L. S. (2016), através da metodologia de pesquisa bibliométrica para desenhar o panorama das produções científicas na área de perícia contábil, publicadas em periódicos brasileiros, no período entre 2005 e 2014 utilizando a estatística descritiva para analisar os dados. Como resultado verificou-se que os principais temas tratados são relacionados ao "trabalho do perito contador", "laudo pericial" e a perícia dentro do contexto de processos judiciais. Conclui-se que as pesquisas científicas na área de perícia contábil ainda são relativamente embrionárias, faltando certo amadurecimento relacionado aos temas, quantidade de publicações e qualidade da produção intelectual.

O estudo de França e Barbosa (2015) evidenciou os resultados obtidos em pesquisa relativos ao ensino e mercado de trabalho da perícia contábil. Os resultados finais mostram que os alunos que cursaram o conteúdo curricular se interessam pela perícia, e que há um alto grau de desinformação sobre desafios e oportunidades do mercado de perito-contador.

Neves Júnior, Cerqueira, Gottardo, Barreto e (2014) analisaram a qualidade e a relevância do laudo pericial contábil na visão dos magistrados que atuam no estado do Rio de Janeiro. Com a aplicação de questionários os resultados obtidos confirmaram que em geral os magistrados estão satisfeitos com os laudos periciais e que os levam em consideração em suas tomadas de decisão.

O estudo de Schmitz, Santos, Truppel, Dallabona e Truppel E. K. (2013), objetivou identificar as características bibliométricas e sociométricas da produção científica em perícia contábil no Brasil entre os anos de 2007 e 2011. A amostra contemplou 25 artigos que continham as expressões: "perito" ou "perícia" nas palavras-chave, título ou resumo. Os temas mais abordados foram estrutura e qualidade do laudo pericial e as condições de ensino de perícia nos cursos de graduação, restringindo-se a determinadas

regiões. Concluiu-se que o tema é pouco explorado, tanto no meio acadêmico quanto no profissional.

Taveira, Medeiros, Camara e Martins J. D. M. (2013) realizou uma análise bibliométrica dos artigos publicados no período entre 1999 a 2012 sobre perícia contábil, utilizando a metodologia descritiva e bibliométrica. Os resultados mostraram que houve predominância de docentes com doutorado e mestrado, destaque para os temas: Avaliação do Laudo Pericial, educação em perícia contábil, Desempenho e Responsabilidades do Perito e prática da perícia e constatou a existência de poucas publicações na área de pericia contábil.

O estudo de Neves Júnior, Moreira, Ribeiro e Silva (2013), objetivou conhecer a opinião dos juízes que atuam na Primeira Instância da Justiça do Trabalho acerca da qualidade e relevância do trabalho desenvolvido pelo perito contábil, realizou-se uma pesquisa de campo e técnica estatística multivariada de análise de clusters para melhor estudo dos casos. Os resultados revelaram que 58% dos magistrados consideram como bons e indispensáveis o trabalho desenvolvido pelo perito-contador e que 71% consideram o trabalho do perito relevante para subsidiar sua decisão.

A pesquisa de Neves Júnior e Moreira (2011), procurou identificar a relevância da Perícia Contábil como meio de prova para a solução de controvérsias relativas ao crime organizado. Utilizou-se de pesquisa de campo por meio de questionário aplicado aos Delegados, Escrivães e Agentes de Polícia das divisões da Diretoria de Combate ao Crime organizado – DCOR do Departamento de Polícia Federal. Também, houve o uso de técnicas de estatística multivariada de análise de cluster. Concluiu-se que a Perícia Contábil, no limite de suas atribuições, é um relevante meio de prova para a solução de controvérsias relativas ao crime organizado.

Silva e Matias (2011) pesquisou entendimento dos profissionais contábeis acerca dos requisitos necessários, das atribuições e do campo de atuação do perito-contador, fazendo uma análise, na visão dos próprios contadores, do quanto estão preparados para atuar em perícia contábil. Os resultados encontrados levam à observação de que os contadores mineiros não estão plenamente preparados para promover perícias judiciais, e que, de fato, não se sentem aptos a atuar nessa área, e consideram a importância de estar capacitado tecnicamente para tratar da matéria a ser periciada bem como da necessidade de possuir grande experiência profissional para aceitar o encargo de atuar como perito judicial.

O estudo de Limongi e Miguel (2010) objetivo avaliar o impacto da atividade lúdica "baralho de perícia contábil" (bp) no desempenho de alunos que cursam a disciplina Perícia Contábil em cursos de graduação em Contabilidade oferecidos por Instituições de Ensino Superior da Grande Florianópolis (IES). A pesquisa de

caráter descritivo com abordagem predominantemente quantitativa e com auxílio da abordagem qualitativa para análise dos dados. Os resultados probabilísticos indicam que, em média, o desempenho dos alunos IES aumentou após terem jogado com o bp.

Fica evidente a importância da Perícia Contábil nas publicações analisadas com destaque as publicações dos autores Sekunda(2019) "Perícia Contábil-Financeira e os Sistemas de Amortização: Sistema Francês Versus Sistema de Equivalência a Juros Simples" e Fernandes e Neves Júnior (2016) "Perícia Contábil Sobre a Desoneração da Folha de Pagamento: Caso em Empresa de Construção de Obras de Infraestrutura", que através de estudos de caso reais utilizaram a pericia contábil para obtenção de resultados objetivos.

VI. DISCUSSÃO E CONCLUSÕES

A pesquisa procurou identificar as características da produção científica nas principais revistas do Brasil entre os anos de 2010 e 2019 utilizando a base de dados da *Scientific Periodicals Electronic Library (SPELL)*, a amostra contemplou 17 artigos que continha a palavra chave "Perícia Contábil".

Através das análises bibliométricas foi possível a sistematização e condensação dos resultados do estudo, demonstrando que apesar da importância desta área de atuação do profissional de contabilidade existem poucas publicações sobre a temática. Com relação aos resultados obtidos para o período pesquisado houve a participação de 49 autores com predominância do gênero masculino, sendo a 1ª posição ocupada por Idalberto José das Neves Júnior responsável por 5 publicações a região Centro Oeste apresentou vínculo de 21 autores nas publicações sendo 17 só no Distrito Federal e 9 pertencendo a Universidade Católica de Brasília (UCB). A quantidade de autores por publicação, os dados obtidos apontam uma maior frequência de artigos realizados por 2 pesquisadores, onde representou 41,2% do total, seguido dos artigos que tiveram 4 autores. Em relação ao volume de artigos publicados, constatou-se um aumento de quase 43% nas publicações sobre o tema nos últimos 5 anos onde foram mais intensas em 2016 e 2017, com 4 publicações em cada ano, notou-se que o tema está difundido apenas em dez revistas e praticamente não há publicação naquelas consideradas de alto impacto sendo a classificação Qualis B1 e B2 na maioria das revistas e a temática mais contemplada do agrupamento sendo: aspectos gerais da perícia contábil.

As publicações dos autores Sekunda(2019) "Perícia Contábil-Financeira e os Sistemas de Amortização: Sistema Francês Versus Sistema de Equivalência a Juros Simples" e Fernandes e Neves Júnior (2016) "Perícia Contábil Sobre a Desoneração da

Folha de Pagamento: Caso em Empresa de Construção de Obras de Infraestrutura", que através de estudos de caso reais utilizaram a pericia contábil para obtenção de resultados objetivos merecem destaque.

Considerando a metodologia utilizada nesta pesquisa, recomenda-se verificar outras amostras (teses, dissertações, anais de congressos), aplicando esta mesma metodologia bibliométrica, fica evidente o quanto a área da Perícia Contábil necessita de mais estudos para fundamentar e aprofundar estas abordagens, levando em consideração também trabalhos com alto poder explanatório para embasamento de futuras pesquisas. Sugere-se, dessa forma, que futuras pesquisas venham a ser desenvolvidas sobre a temática "perícia contábil".

REFERENCES RÉFÉRENCES REFERENCIAS

1. ALBERTO, V. L. P. *Perícia Contábil*. 4 ed. São Paulo: Atlas, 2007.
2. AQUINO, Aline Aparecida de; IMONIANA, Joshua Onome. *Contabilidade Forense e Perícia Contábil: Um Estudo Fenomenográfico*.ROC - Revista Organizações em Contexto, São Paulo, v. 13, n. 26, p. 101-126, jul./dez.2017.
3. BRASIL. Lei nº 13.105 de 16 de Março de 2015. *Código de Processo Civil*. Brasília, DF, mar 2015. Disponível em: http://www.planalto.gov.br/ccivil_03/_Ato2015-2018/2015/Lei/L13105.htm. Acesso em: 11 abr 2020.
4. FILHO, Carlos Roberto dos Santos; CARLOS, Flávio Alves; COSTA, Fábio Moraes da. *Habilidades Relevantes para a Perícia Contábil Criminal: a percepção dos Peritos e Delegados da Polícia Federal*. REPeC - Revista de Educação e Pesquisa em Contabilidade, Brasília, v. 11 n. 1, p. 69-89, jan./mar. 2017.
5. FONSECA, J. J. S. *Metodologia da pesquisa científica*. Fortaleza: UEC, 2002. Apostila.
6. EISENHARDT, Kathleen M. *Agency Theory: An Assessment and Review*. The Academy of Management Review, Vol. 14, No. 1 (Jan., 1989), pp. 57-74 .
7. FRANÇA, José Antônio de; BARBOSA, Aline Borges. *O Ensino da Perícia Contábil em Brasília: percepções dos estudantes do curso de Ciências Contábeis*. RCCC - Revista Catarinense da Ciência Contábil, Florianópolis, v. 14, n. 43, p.63-73, set./dez. 2015.
8. GUEDES, V. L. S., BORSCHIVER, S. *Bibliometria: uma ferramenta estatística para a gestão da informação e do conhecimento, em sistemas de informação, de comunicação e de avaliação científica e tecnológica*. In: *Anais... VI CINFORM*, VI. UFBA, Salvador, 2005.
9. LIMONGI, Bernadete; MIGUEL, Marco Antônio Bisca. *O impacto da atividade lúdica no*



- desempenho de alunos que cursam a disciplina "Perícia Contábil" em cursos de graduação em Contabilidade oferecidos por IES da Grande Florianópolis – SC. CVT - Contabilidade Vista & Revista, Belo Horizonte, v. 21, n. 3, p. 73-110, jul./set. 2010.
9. MARTINS, Joana Darc Medeiros; MARTINS, Amanda Medeiros; ARAÚJO, Aneide Oliveira. *A Percepção dos Discentes do Curso de Ciências Contábeis Quanto às Habilidades e Competências Desenvolvidas na Disciplina de Perícia Contábil*. REUNIR: Revista de Administração, Contabilidade e Sustentabilidade, Paraíba, v. 7, n. 2, p. 67-84, mai./ago. 2017.
10. MURRO, Eduardo Vinícius Bassi; BEUREN, Ilse Maria. *Redes de atores na perícia contábil judicial: uma análise à luz da Teoria Ator-Rede*. RBGN - Revista Brasileira de Gestão de Negócios, São Paulo, v. 18, n. 62, p. 633-657, out./dez. 2016.
11. NEVES JÚNIOR, Idalberto José das; CERQUEIRA, João Guilherme Moreira de; GOTTAIRO, Michelle dos Santos Povoas; BARRETO, Marcelo Daia. *Perícia Contábil Judicial: a relevância e a qualidade do laudo pericial contábil na visão dos magistrados do Estado do Rio de Janeiro*. Pensar Contábil, Rio de Janeiro, v. 16, n. 59, p. 49-57, jan./abr. 2014.
12. NEVES JÚNIOR, Idalberto José das; FERNANDES, Claudiomar Macêdo; BARRETO, Marcelo Daia. *Perícia Contábil Sobre a Desoneração da Folha de Pagamento: Caso em Empresa de Construção de Obras de Infraestrutura*. Pensar Contábil, Rio de Janeiro, v. 18, n. 66, p. 36-49, mai./ago. 2016.
13. NEVESJÚNIOR, Idalberto José das; MOREIRA, Evandro Marcos de Souza. *Perícia Contábil: uma ferramenta de combate ao crime organizado*. REPeC - Revista de Educação e Pesquisa em Contabilidade, Brasília, v. 5, Edição Especial, art. 6, p. 126-153, set./dez. 2011.
14. NEVES JÚNIOR, Idalberto José das; MOREIRA, Simone Alves; RIBEIRO, Elisangela Batista; SILVA, Moacenira Cardoso da. *Perícia Contábil: estudo da percepção de juízes de Primeira Instância na Justiça do Trabalho sobre a qualidade e a relevância do trabalho do perito*. RBGN - Revista Brasileira de Gestão de Negócios, São Paulo, v. 15, n. 47, p. 300-320, abr./jun. 2013.
15. NORMAS BRASILEIRAS DE CONTABILIDADE, NBC PP 01 (R01): informação e documentação: citação em documentos, CFC, 2020.
16. NORMAS BRASILEIRAS DE CONTABILIDADE, NBC TP 01 (R01): informação e documentação: citação em documentos, CFC, 2020.
17. RICHARDSON, Roberto Jary et al. *Pesquisa social: métodos e técnicas*. São Paulo: Atlas, 1999.
18. RODRIGUES, Arthur Cascudo; MOREIRA, Felipe Silva; FIRMINO, José Emerson; SILVA, Maurício Correa. *A Percepção dos Alunos do Curso de Ciências Contábeis acerca do Ensino e do Mercado de Trabalho em Perícia Contábil*. RCCe - Revista Capital Científico – Eletrônica, v. 14, n. 2, p. 93-108, abr./jun. 2016.
19. SÁ, A. L. de. *Perícia Contábil*. 6 ed. São Paulo: Atlas, 2005.
20. SÁ, A. L. de. *Perícia Contábil*. 8 ed. São Paulo: Atlas, 2008.
21. SÁ, Lopes de. *Perícia Contábil*. São Paulo: Atlas, 1994.
22. SALLES, Geovanna Lopes; MACHADO, Michele Rilany Rodrigues; ZANOLLA, Ercílio; MACHADO, Lúcio de Souza. *Perícia Contábil: Análise Bibliométrica em Periódicos Brasileiros*. Sociedade, Contabilidade e Gestão, Rio de Janeiro, v. 11, n. 1, p. 102-124, jan./abr. 2016.
23. SCHMITZ, Tatiane; SANTOS, Vanderlei dos; TRUPPEL, Leomar; DALLABONA, Lara Fabiana; TRUPPEL, Elaine Kammers. *Perícia contábil: análise bibliométrica e sociométrica em periódicos e congressos nacionais no período de 2007 a 2011*. RCCC - Revista Catarinense da Ciência Contábil, Florianópolis, v. 12, Edição Especial n. 37, p. 64-79, dez. 2013.
24. SEKUNDA, André. *Perícia Contábil-Financeira e os Sistemas de Amortização: Sistema Francês Versus Sistema de Equivalência a Juros Simples*. RGO - Revista Gestão Organizacional, Paraná, v. 12 n. 2, p. 77-101, mai./ago. 2019.
25. SILVA, Gladson Carvalho; MATIAS, Márcia Athayde. *Perícia Contábil: a visão dos contadores mineiros sobre os requisitos necessários, as atribuições e o campo de atuação da área*. RMC, Revista Mineira de Contabilidade, Belo Horizonte, ano 12, nº 42, p. 28-35 abr./mai./jun. 2011.
26. SILVA, Wagner Ferreira da; NEVES JÚNIOR, Idalberto José das. *A participação do contador em processo de falências e de recuperação de empresas na visão dos magistrados: administração judicial e perícia contábil*. RMC, Revista Mineira de Contabilidade, Belo Horizonte, v. 17, n. 3, p. 32-44, set./dez. 2016.
27. TAVEIRA, Lis Daiana Bessa; MEDEIROS, Ayron Wanderley; CAMARA, Renata Paes de Barros; MARTINS, Joana Darc Medeiros. *Uma análise bibliométrica dos artigos científicos em perícia contábil publicados entre os anos de 1999 a 2012*. Revista de Contabilidade do Mestrado em Ciências Contábeis da UERJ, Rio de Janeiro, v. 18, n. 2, p. 49-64, mai./ago. 2013.
28. TRIVINOS, A. N. S. *Introdução à pesquisa em Ciências Sociais: a pesquisa qualitativa em Educação*. São Paulo: Editora Atlas, 1987.
29. ZANLUCA, J. C. In: WIKIPÉDIA: a encyclopédia livre. Wikipédia, 2011. Disponível em: <https://pt.wikipedia.org/wiki/Per%C3%ADcia_cont%C3%A1bil#cite_note-per%C3%ADcia_1-1>. Acesso em: 11 abr. 2020.

GLOBAL JOURNALS GUIDELINES HANDBOOK 2021

WWW.GLOBALJOURNALS.ORG

MEMBERSHIPS

FELLOWS/ASSOCIATES OF MANAGEMENT AND BUSINESS RESEARCH COUNCIL FMBRC/AMBRC MEMBERSHIPS

INTRODUCTION



FMBRC/AMBRC is the most prestigious membership of Global Journals accredited by Open Association of Research Society, U.S.A (OARS). The credentials of Fellow and Associate designations signify that the researcher has gained the knowledge of the fundamental and high-level concepts, and is a subject matter expert, proficient in an expertise course covering the professional code of conduct, and follows recognized standards of practice. The credentials are designated only to the researchers, scientists, and professionals that have been selected by a rigorous process by our Editorial Board and Management Board.

Associates of FMBRC/AMBRC are scientists and researchers from around the world are working on projects/researches that have huge potentials. Members support Global Journals' mission to advance technology for humanity and the profession.

FMBRC

FELLOW OF MANAGEMENT AND BUSINESS RESEARCH COUNCIL

FELLOW OF MANAGEMENT AND BUSINESS RESEARCH COUNCIL is the most prestigious membership of Global Journals. It is an award and membership granted to individuals that the Open Association of Research Society judges to have made a 'substantial contribution to the improvement of computer science, technology, and electronics engineering.

The primary objective is to recognize the leaders in research and scientific fields of the current era with a global perspective and to create a channel between them and other researchers for better exposure and knowledge sharing. Members are most eminent scientists, engineers, and technologists from all across the world. Fellows are elected for life through a peer review process on the basis of excellence in the respective domain. There is no limit on the number of new nominations made in any year. Each year, the Open Association of Research Society elect up to 12 new Fellow Members.



BENEFIT

TO THE INSTITUTION

GET LETTER OF APPRECIATION

Global Journals sends a letter of appreciation of author to the Dean or CEO of the University or Company of which author is a part, signed by editor in chief or chief author.



EXCLUSIVE NETWORK

GET ACCESS TO A CLOSED NETWORK

A FMBRC member gets access to a closed network of Tier 1 researchers and scientists with direct communication channel through our website. Fellows can reach out to other members or researchers directly. They should also be open to reaching out by other.

Career

Credibility

Exclusive

Reputation



CERTIFICATE

CERTIFICATE, LOR AND LASER-MOMENTO

Fellows receive a printed copy of a certificate signed by our Chief Author that may be used for academic purposes and a personal recommendation letter to the dean of member's university.

Career

Credibility

Exclusive

Reputation



DESIGNATION

GET HONORED TITLE OF MEMBERSHIP

Fellows can use the honored title of membership. The "FMBRC" is an honored title which is accorded to a person's name viz. Dr. John E. Hall, Ph.D., FMBRC or William Walldroff, M.S., FMBRC.

Career

Credibility

Exclusive

Reputation

RECOGNITION ON THE PLATFORM

BETTER VISIBILITY AND CITATION

All the Fellow members of FMBRC get a badge of "Leading Member of Global Journals" on the Research Community that distinguishes them from others. Additionally, the profile is also partially maintained by our team for better visibility and citation. All fellows get a dedicated page on the website with their biography.

Career

Credibility

Reputation



FUTURE WORK

GET DISCOUNTS ON THE FUTURE PUBLICATIONS

Fellows receive discounts on future publications with Global Journals up to 60%. Through our recommendation programs, members also receive discounts on publications made with OARS affiliated organizations.

Career

Financial



GJ ACCOUNT

UNLIMITED FORWARD OF EMAILS

Fellows get secure and fast GJ work emails with unlimited forward of emails that they may use them as their primary email. For example, john [AT] globaljournals [DOT] org.

Career

Credibility

Reputation



PREMIUM TOOLS

ACCESS TO ALL THE PREMIUM TOOLS

To take future researches to the zenith, fellows receive access to all the premium tools that Global Journals have to offer along with the partnership with some of the best marketing leading tools out there.

Financial

CONFERENCES & EVENTS

ORGANIZE SEMINAR/CONFERENCE

Fellows are authorized to organize symposium/seminar/conference on behalf of Global Journal Incorporation (USA). They can also participate in the same organized by another institution as representative of Global Journal. In both the cases, it is mandatory for him to discuss with us and obtain our consent. Additionally, they get free research conferences (and others) alerts.

Career

Credibility

Financial

EARLY INVITATIONS

EARLY INVITATIONS TO ALL THE SYMPOSIUMS, SEMINARS, CONFERENCES

All fellows receive the early invitations to all the symposiums, seminars, conferences and webinars hosted by Global Journals in their subject.

Exclusive





PUBLISHING ARTICLES & BOOKS

EARN 60% OF SALES PROCEEDS

Fellows can publish articles (limited) without any fees. Also, they can earn up to 70% of sales proceeds from the sale of reference/review books/literature/publishing of research paper. The FMBRC member can decide its price and we can help in making the right decision.

Exclusive

Financial

REVIEWERS

GET A REMUNERATION OF 15% OF AUTHOR FEES

Fellow members are eligible to join as a paid peer reviewer at Global Journals Incorporation (USA) and can get a remuneration of 15% of author fees, taken from the author of a respective paper.

Financial

ACCESS TO EDITORIAL BOARD

BECOME A MEMBER OF THE EDITORIAL BOARD

Fellows may join as a member of the Editorial Board of Global Journals Incorporation (USA) after successful completion of three years as Fellow and as Peer Reviewer. Additionally, Fellows get a chance to nominate other members for Editorial Board.

Career

Credibility

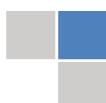
Exclusive

Reputation

AND MUCH MORE

GET ACCESS TO SCIENTIFIC MUSEUMS AND OBSERVATORIES ACROSS THE GLOBE

All members get access to 5 selected scientific museums and observatories across the globe. All researches published with Global Journals will be kept under deep archival facilities across regions for future protections and disaster recovery. They get 10 GB free secure cloud access for storing research files.

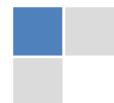


AMBRC

ASSOCIATE OF MANAGEMENT AND BUSINESS RESEARCH COUNCIL

ASSOCIATE OF MANAGEMENT AND BUSINESS RESEARCH COUNCIL is the membership of Global Journals awarded to individuals that the Open Association of Research Society judges to have made a 'substantial contribution to the improvement of computer science, technology, and electronics engineering.

The primary objective is to recognize the leaders in research and scientific fields of the current era with a global perspective and to create a channel between them and other researchers for better exposure and knowledge sharing. Members are most eminent scientists, engineers, and technologists from all across the world. Associate membership can later be promoted to Fellow Membership. Associates are elected for life through a peer review process on the basis of excellence in the respective domain. There is no limit on the number of new nominations made in any year. Each year, the Open Association of Research Society elect up to 12 new Associate Members.



BENEFIT

TO THE INSTITUTION

GET LETTER OF APPRECIATION

Global Journals sends a letter of appreciation of author to the Dean or CEO of the University or Company of which author is a part, signed by editor in chief or chief author.



EXCLUSIVE NETWORK

GET ACCESS TO A CLOSED NETWORK

A AMBRC member gets access to a closed network of Tier 2 researchers and scientists with direct communication channel through our website. Associates can reach out to other members or researchers directly. They should also be open to reaching out by other.

Career

Credibility

Exclusive

Reputation



CERTIFICATE

CERTIFICATE, LOR AND LASER-MOMENTO

Associates receive a printed copy of a certificate signed by our Chief Author that may be used for academic purposes and a personal recommendation letter to the dean of member's university.

Career

Credibility

Exclusive

Reputation



DESIGNATION

GET HONORED TITLE OF MEMBERSHIP

Associates can use the honored title of membership. The "AMBRC" is an honored title which is accorded to a person's name viz. Dr. John E. Hall, Ph.D., AMBRC or William Walldroff, M.S., AMBRC.

Career

Credibility

Exclusive

Reputation

RECOGNITION ON THE PLATFORM

BETTER VISIBILITY AND CITATION

All the Associate members of ASFRC get a badge of "Leading Member of Global Journals" on the Research Community that distinguishes them from others. Additionally, the profile is also partially maintained by our team for better visibility and citation. All associates get a dedicated page on the website with their biography.

Career

Credibility

Reputation



FUTURE WORK

GET DISCOUNTS ON THE FUTURE PUBLICATIONS

Associates receive discounts on the future publications with Global Journals up to 60%. Through our recommendation programs, members also receive discounts on publications made with OARS affiliated organizations.

Career

Financial



GJ ACCOUNT

UNLIMITED FORWARD OF EMAILS

Associates get secure and fast GJ work emails with 5GB forward of emails that they may use them as their primary email. For example, john [AT] globaljournals [DOT] org..

Career

Credibility

Reputation



PREMIUM TOOLS

ACCESS TO ALL THE PREMIUM TOOLS

To take future researches to the zenith, fellows receive access to almost all the premium tools that Global Journals have to offer along with the partnership with some of the best marketing leading tools out there.

Financial

CONFERENCES & EVENTS

ORGANIZE SEMINAR/CONFERENCE

Associates are authorized to organize symposium/seminar/conference on behalf of Global Journal Incorporation (USA). They can also participate in the same organized by another institution as representative of Global Journal. In both the cases, it is mandatory for him to discuss with us and obtain our consent. Additionally, they get free research conferences (and others) alerts.

Career

Credibility

Financial

EARLY INVITATIONS

EARLY INVITATIONS TO ALL THE SYMPOSIUMS, SEMINARS, CONFERENCES

All associates receive the early invitations to all the symposiums, seminars, conferences and webinars hosted by Global Journals in their subject.

Exclusive





PUBLISHING ARTICLES & BOOKS

EARN 60% OF SALES PROCEEDS

Associates can publish articles (limited) without any fees. Also, they can earn up to 30-40% of sales proceeds from the sale of reference/review books/literature/publishing of research paper.

Exclusive

Financial

REVIEWERS

GET A REMUNERATION OF 15% OF AUTHOR FEES

Fellow members are eligible to join as a paid peer reviewer at Global Journals Incorporation (USA) and can get a remuneration of 15% of author fees, taken from the author of a respective paper.

Financial

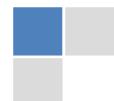
AND MUCH MORE

GET ACCESS TO SCIENTIFIC MUSEUMS AND OBSERVATORIES ACROSS THE GLOBE

All members get access to 2 selected scientific museums and observatories across the globe. All researches published with Global Journals will be kept under deep archival facilities across regions for future protections and disaster recovery. They get 5 GB free secure cloud access for storing research files.



ASSOCIATE	FELLOW	RESEARCH GROUP	BASIC
\$4800 lifetime designation	\$6800 lifetime designation	\$12500.00 organizational	APC per article
Certificate , LoR and Momento 2 discounted publishing/year Gradation of Research 10 research contacts/day 1 GB Cloud Storage GJ Community Access	Certificate , LoR and Momento Unlimited discounted publishing/year Gradation of Research Unlimited research contacts/day 5 GB Cloud Storage Online Presense Assistance GJ Community Access	Certificates , LoRs and Momentos Unlimited free publishing/year Gradation of Research Unlimited research contacts/day Unlimited Cloud Storage Online Presense Assistance GJ Community Access	GJ Community Access



PREFERRED AUTHOR GUIDELINES

We accept the manuscript submissions in any standard (generic) format.

We typeset manuscripts using advanced typesetting tools like Adobe In Design, CorelDraw, TeXnicCenter, and TeXStudio. We usually recommend authors submit their research using any standard format they are comfortable with, and let Global Journals do the rest.

Alternatively, you can download our basic template from <https://globaljournals.org/Template.zip>

Authors should submit their complete paper/article, including text illustrations, graphics, conclusions, artwork, and tables. Authors who are not able to submit manuscript using the form above can email the manuscript department at submit@globaljournals.org or get in touch with chiefeditor@globaljournals.org if they wish to send the abstract before submission.

BEFORE AND DURING SUBMISSION

Authors must ensure the information provided during the submission of a paper is authentic. Please go through the following checklist before submitting:

1. Authors must go through the complete author guideline and understand and *agree to Global Journals' ethics and code of conduct*, along with author responsibilities.
2. Authors must accept the privacy policy, terms, and conditions of Global Journals.
3. Ensure corresponding author's email address and postal address are accurate and reachable.
4. Manuscript to be submitted must include keywords, an abstract, a paper title, co-author(s') names and details (email address, name, phone number, and institution), figures and illustrations in vector format including appropriate captions, tables, including titles and footnotes, a conclusion, results, acknowledgments and references.
5. Authors should submit paper in a ZIP archive if any supplementary files are required along with the paper.
6. Proper permissions must be acquired for the use of any copyrighted material.
7. Manuscript submitted *must not have been submitted or published elsewhere* and all authors must be aware of the submission.

Declaration of Conflicts of Interest

It is required for authors to declare all financial, institutional, and personal relationships with other individuals and organizations that could influence (bias) their research.

POLICY ON PLAGIARISM

Plagiarism is not acceptable in Global Journals submissions at all.

Plagiarized content will not be considered for publication. We reserve the right to inform authors' institutions about plagiarism detected either before or after publication. If plagiarism is identified, we will follow COPE guidelines:

Authors are solely responsible for all the plagiarism that is found. The author must not fabricate, falsify or plagiarize existing research data. The following, if copied, will be considered plagiarism:

- Words (language)
- Ideas
- Findings
- Writings
- Diagrams
- Graphs
- Illustrations
- Lectures



- Printed material
- Graphic representations
- Computer programs
- Electronic material
- Any other original work

AUTHORSHIP POLICIES

Global Journals follows the definition of authorship set up by the Open Association of Research Society, USA. According to its guidelines, authorship criteria must be based on:

1. Substantial contributions to the conception and acquisition of data, analysis, and interpretation of findings.
2. Drafting the paper and revising it critically regarding important academic content.
3. Final approval of the version of the paper to be published.

Changes in Authorship

The corresponding author should mention the name and complete details of all co-authors during submission and in manuscript. We support addition, rearrangement, manipulation, and deletions in authors list till the early view publication of the journal. We expect that corresponding author will notify all co-authors of submission. We follow COPE guidelines for changes in authorship.

Copyright

During submission of the manuscript, the author is confirming an exclusive license agreement with Global Journals which gives Global Journals the authority to reproduce, reuse, and republish authors' research. We also believe in flexible copyright terms where copyright may remain with authors/employers/institutions as well. Contact your editor after acceptance to choose your copyright policy. You may follow this form for copyright transfers.

Appealing Decisions

Unless specified in the notification, the Editorial Board's decision on publication of the paper is final and cannot be appealed before making the major change in the manuscript.

Acknowledgments

Contributors to the research other than authors credited should be mentioned in Acknowledgments. The source of funding for the research can be included. Suppliers of resources may be mentioned along with their addresses.

Declaration of funding sources

Global Journals is in partnership with various universities, laboratories, and other institutions worldwide in the research domain. Authors are requested to disclose their source of funding during every stage of their research, such as making analysis, performing laboratory operations, computing data, and using institutional resources, from writing an article to its submission. This will also help authors to get reimbursements by requesting an open access publication letter from Global Journals and submitting to the respective funding source.

PREPARING YOUR MANUSCRIPT

Authors can submit papers and articles in an acceptable file format: MS Word (doc, docx), LaTeX (.tex, .zip or .rar including all of your files), Adobe PDF (.pdf), rich text format (.rtf), simple text document (.txt), Open Document Text (.odt), and Apple Pages (.pages). Our professional layout editors will format the entire paper according to our official guidelines. This is one of the highlights of publishing with Global Journals—authors should not be concerned about the formatting of their paper. Global Journals accepts articles and manuscripts in every major language, be it Spanish, Chinese, Japanese, Portuguese, Russian, French, German, Dutch, Italian, Greek, or any other national language, but the title, subtitle, and abstract should be in English. This will facilitate indexing and the pre-peer review process.

The following is the official style and template developed for publication of a research paper. Authors are not required to follow this style during the submission of the paper. It is just for reference purposes.



Manuscript Style Instruction (Optional)

- Microsoft Word Document Setting Instructions.
- Font type of all text should be Swis721 Lt BT.
- Page size: 8.27" x 11", left margin: 0.65, right margin: 0.65, bottom margin: 0.75.
- Paper title should be in one column of font size 24.
- Author name in font size of 11 in one column.
- Abstract: font size 9 with the word "Abstract" in bold italics.
- Main text: font size 10 with two justified columns.
- Two columns with equal column width of 3.38 and spacing of 0.2.
- First character must be three lines drop-capped.
- The paragraph before spacing of 1 pt and after of 0 pt.
- Line spacing of 1 pt.
- Large images must be in one column.
- The names of first main headings (Heading 1) must be in Roman font, capital letters, and font size of 10.
- The names of second main headings (Heading 2) must not include numbers and must be in italics with a font size of 10.

Structure and Format of Manuscript

The recommended size of an original research paper is under 15,000 words and review papers under 7,000 words. Research articles should be less than 10,000 words. Research papers are usually longer than review papers. Review papers are reports of significant research (typically less than 7,000 words, including tables, figures, and references)

A research paper must include:

- a) A title which should be relevant to the theme of the paper.
- b) A summary, known as an abstract (less than 150 words), containing the major results and conclusions.
- c) Up to 10 keywords that precisely identify the paper's subject, purpose, and focus.
- d) An introduction, giving fundamental background objectives.
- e) Resources and techniques with sufficient complete experimental details (wherever possible by reference) to permit repetition, sources of information must be given, and numerical methods must be specified by reference.
- f) Results which should be presented concisely by well-designed tables and figures.
- g) Suitable statistical data should also be given.
- h) All data must have been gathered with attention to numerical detail in the planning stage.

Design has been recognized to be essential to experiments for a considerable time, and the editor has decided that any paper that appears not to have adequate numerical treatments of the data will be returned unrefereed.

- i) Discussion should cover implications and consequences and not just recapitulate the results; conclusions should also be summarized.
- j) There should be brief acknowledgments.
- k) There ought to be references in the conventional format. Global Journals recommends APA format.

Authors should carefully consider the preparation of papers to ensure that they communicate effectively. Papers are much more likely to be accepted if they are carefully designed and laid out, contain few or no errors, are summarizing, and follow instructions. They will also be published with much fewer delays than those that require much technical and editorial correction.

The Editorial Board reserves the right to make literary corrections and suggestions to improve brevity.



FORMAT STRUCTURE

It is necessary that authors take care in submitting a manuscript that is written in simple language and adheres to published guidelines.

All manuscripts submitted to Global Journals should include:

Title

The title page must carry an informative title that reflects the content, a running title (less than 45 characters together with spaces), names of the authors and co-authors, and the place(s) where the work was carried out.

Author details

The full postal address of any related author(s) must be specified.

Abstract

The abstract is the foundation of the research paper. It should be clear and concise and must contain the objective of the paper and inferences drawn. It is advised to not include big mathematical equations or complicated jargon.

Many researchers searching for information online will use search engines such as Google, Yahoo or others. By optimizing your paper for search engines, you will amplify the chance of someone finding it. In turn, this will make it more likely to be viewed and cited in further works. Global Journals has compiled these guidelines to facilitate you to maximize the web-friendliness of the most public part of your paper.

Keywords

A major lynchpin of research work for the writing of research papers is the keyword search, which one will employ to find both library and internet resources. Up to eleven keywords or very brief phrases have to be given to help data retrieval, mining, and indexing.

One must be persistent and creative in using keywords. An effective keyword search requires a strategy: planning of a list of possible keywords and phrases to try.

Choice of the main keywords is the first tool of writing a research paper. Research paper writing is an art. Keyword search should be as strategic as possible.

One should start brainstorming lists of potential keywords before even beginning searching. Think about the most important concepts related to research work. Ask, "What words would a source have to include to be truly valuable in a research paper?" Then consider synonyms for the important words.

It may take the discovery of only one important paper to steer in the right keyword direction because, in most databases, the keywords under which a research paper is abstracted are listed with the paper.

Numerical Methods

Numerical methods used should be transparent and, where appropriate, supported by references.

Abbreviations

Authors must list all the abbreviations used in the paper at the end of the paper or in a separate table before using them.

Formulas and equations

Authors are advised to submit any mathematical equation using either MathJax, KaTeX, or LaTeX, or in a very high-quality image.

Tables, Figures, and Figure Legends

Tables: Tables should be cautiously designed, uncrowned, and include only essential data. Each must have an Arabic number, e.g., Table 4, a self-explanatory caption, and be on a separate sheet. Authors must submit tables in an editable format and not as images. References to these tables (if any) must be mentioned accurately.



Figures

Figures are supposed to be submitted as separate files. Always include a citation in the text for each figure using Arabic numbers, e.g., Fig. 4. Artwork must be submitted online in vector electronic form or by emailing it.

PREPARATION OF ELECTRONIC FIGURES FOR PUBLICATION

Although low-quality images are sufficient for review purposes, print publication requires high-quality images to prevent the final product being blurred or fuzzy. Submit (possibly by e-mail) EPS (line art) or TIFF (halftone/ photographs) files only. MS PowerPoint and Word Graphics are unsuitable for printed pictures. Avoid using pixel-oriented software. Scans (TIFF only) should have a resolution of at least 350 dpi (halftone) or 700 to 1100 dpi (line drawings). Please give the data for figures in black and white or submit a Color Work Agreement form. EPS files must be saved with fonts embedded (and with a TIFF preview, if possible).

For scanned images, the scanning resolution at final image size ought to be as follows to ensure good reproduction: line art: >650 dpi; halftones (including gel photographs): >350 dpi; figures containing both halftone and line images: >650 dpi.

Color charges: Authors are advised to pay the full cost for the reproduction of their color artwork. Hence, please note that if there is color artwork in your manuscript when it is accepted for publication, we would require you to complete and return a Color Work Agreement form before your paper can be published. Also, you can email your editor to remove the color fee after acceptance of the paper.

TIPS FOR WRITING A GOOD QUALITY MANAGEMENT RESEARCH PAPER

Techniques for writing a good quality management and business research paper:

1. Choosing the topic: In most cases, the topic is selected by the interests of the author, but it can also be suggested by the guides. You can have several topics, and then judge which you are most comfortable with. This may be done by asking several questions of yourself, like "Will I be able to carry out a search in this area? Will I find all necessary resources to accomplish the search? Will I be able to find all information in this field area?" If the answer to this type of question is "yes," then you ought to choose that topic. In most cases, you may have to conduct surveys and visit several places. Also, you might have to do a lot of work to find all the rises and falls of the various data on that subject. Sometimes, detailed information plays a vital role, instead of short information. Evaluators are human: The first thing to remember is that evaluators are also human beings. They are not only meant for rejecting a paper. They are here to evaluate your paper. So present your best aspect.

2. Think like evaluators: If you are in confusion or getting demotivated because your paper may not be accepted by the evaluators, then think, and try to evaluate your paper like an evaluator. Try to understand what an evaluator wants in your research paper, and you will automatically have your answer. Make blueprints of paper: The outline is the plan or framework that will help you to arrange your thoughts. It will make your paper logical. But remember that all points of your outline must be related to the topic you have chosen.

3. Ask your guides: If you are having any difficulty with your research, then do not hesitate to share your difficulty with your guide (if you have one). They will surely help you out and resolve your doubts. If you can't clarify what exactly you require for your work, then ask your supervisor to help you with an alternative. He or she might also provide you with a list of essential readings.

4. Use of computer is recommended: As you are doing research in the field of management and business then this point is quite obvious. Use right software: Always use good quality software packages. If you are not capable of judging good software, then you can lose the quality of your paper unknowingly. There are various programs available to help you which you can get through the internet.

5. Use the internet for help: An excellent start for your paper is using Google. It is a wondrous search engine, where you can have your doubts resolved. You may also read some answers for the frequent question of how to write your research paper or find a model research paper. You can download books from the internet. If you have all the required books, place importance on reading, selecting, and analyzing the specified information. Then sketch out your research paper. Use big pictures: You may use encyclopedias like Wikipedia to get pictures with the best resolution. At Global Journals, you should strictly follow here.



6. Bookmarks are useful: When you read any book or magazine, you generally use bookmarks, right? It is a good habit which helps to not lose your continuity. You should always use bookmarks while searching on the internet also, which will make your search easier.

7. Revise what you wrote: When you write anything, always read it, summarize it, and then finalize it.

8. Make every effort: Make every effort to mention what you are going to write in your paper. That means always have a good start. Try to mention everything in the introduction—what is the need for a particular research paper. Polish your work with good writing skills and always give an evaluator what he wants. Make backups: When you are going to do any important thing like making a research paper, you should always have backup copies of it either on your computer or on paper. This protects you from losing any portion of your important data.

9. Produce good diagrams of your own: Always try to include good charts or diagrams in your paper to improve quality. Using several unnecessary diagrams will degrade the quality of your paper by creating a hodgepodge. So always try to include diagrams which were made by you to improve the readability of your paper. Use of direct quotes: When you do research relevant to literature, history, or current affairs, then use of quotes becomes essential, but if the study is relevant to science, use of quotes is not preferable.

10. Use proper verb tense: Use proper verb tenses in your paper. Use past tense to present those events that have happened. Use present tense to indicate events that are going on. Use future tense to indicate events that will happen in the future. Use of wrong tenses will confuse the evaluator. Avoid sentences that are incomplete.

11. Pick a good study spot: Always try to pick a spot for your research which is quiet. Not every spot is good for studying.

12. Know what you know: Always try to know what you know by making objectives, otherwise you will be confused and unable to achieve your target.

13. Use good grammar: Always use good grammar and words that will have a positive impact on the evaluator; use of good vocabulary does not mean using tough words which the evaluator has to find in a dictionary. Do not fragment sentences. Eliminate one-word sentences. Do not ever use a big word when a smaller one would suffice.

Verbs have to be in agreement with their subjects. In a research paper, do not start sentences with conjunctions or finish them with prepositions. When writing formally, it is advisable to never split an infinitive because someone will (wrongly) complain. Avoid clichés like a disease. Always shun irritating alliteration. Use language which is simple and straightforward. Put together a neat summary.

14. Arrangement of information: Each section of the main body should start with an opening sentence, and there should be a changeover at the end of the section. Give only valid and powerful arguments for your topic. You may also maintain your arguments with records.

15. Never start at the last minute: Always allow enough time for research work. Leaving everything to the last minute will degrade your paper and spoil your work.

16. Multitasking in research is not good: Doing several things at the same time is a bad habit in the case of research activity. Research is an area where everything has a particular time slot. Divide your research work into parts, and do a particular part in a particular time slot.

17. Never copy others' work: Never copy others' work and give it your name because if the evaluator has seen it anywhere, you will be in trouble. Take proper rest and food: No matter how many hours you spend on your research activity, if you are not taking care of your health, then all your efforts will have been in vain. For quality research, take proper rest and food.

18. Go to seminars: Attend seminars if the topic is relevant to your research area. Utilize all your resources.

19. Refresh your mind after intervals: Try to give your mind a rest by listening to soft music or sleeping in intervals. This will also improve your memory. Acquire colleagues: Always try to acquire colleagues. No matter how sharp you are, if you acquire colleagues, they can give you ideas which will be helpful to your research.

20. Think technically: Always think technically. If anything happens, search for its reasons, benefits, and demerits. Think and then print: When you go to print your paper, check that tables are not split, headings are not detached from their descriptions, and page sequence is maintained.



21. Adding unnecessary information: Do not add unnecessary information like "I have used MS Excel to draw graphs." Irrelevant and inappropriate material is superfluous. Foreign terminology and phrases are not apropos. One should never take a broad view. Analogy is like feathers on a snake. Use words properly, regardless of how others use them. Remove quotations. Puns are for kids, not grown readers. Never oversimplify: When adding material to your research paper, never go for oversimplification; this will definitely irritate the evaluator. Be specific. Never use rhythmic redundancies. Contractions shouldn't be used in a research paper. Comparisons are as terrible as clichés. Give up ampersands, abbreviations, and so on. Remove commas that are not necessary. Parenthetical words should be between brackets or commas. Understatement is always the best way to put forward earth-shaking thoughts. Give a detailed literary review.

22. Report concluded results: Use concluded results. From raw data, filter the results, and then conclude your studies based on measurements and observations taken. An appropriate number of decimal places should be used. Parenthetical remarks are prohibited here. Proofread carefully at the final stage. At the end, give an outline to your arguments. Spot perspectives of further study of the subject. Justify your conclusion at the bottom sufficiently, which will probably include examples.

23. Upon conclusion: Once you have concluded your research, the next most important step is to present your findings. Presentation is extremely important as it is the definite medium through which your research is going to be in print for the rest of the crowd. Care should be taken to categorize your thoughts well and present them in a logical and neat manner. A good quality research paper format is essential because it serves to highlight your research paper and bring to light all necessary aspects of your research.

INFORMAL GUIDELINES OF RESEARCH PAPER WRITING

Key points to remember:

- Submit all work in its final form.
- Write your paper in the form which is presented in the guidelines using the template.
- Please note the criteria peer reviewers will use for grading the final paper.

Final points:

One purpose of organizing a research paper is to let people interpret your efforts selectively. The journal requires the following sections, submitted in the order listed, with each section starting on a new page:

The introduction: This will be compiled from reference material and reflect the design processes or outline of basis that directed you to make a study. As you carry out the process of study, the method and process section will be constructed like that. The results segment will show related statistics in nearly sequential order and direct reviewers to similar intellectual paths throughout the data that you gathered to carry out your study.

The discussion section:

This will provide understanding of the data and projections as to the implications of the results. The use of good quality references throughout the paper will give the effort trustworthiness by representing an alertness to prior workings.

Writing a research paper is not an easy job, no matter how trouble-free the actual research or concept. Practice, excellent preparation, and controlled record-keeping are the only means to make straightforward progression.

General style:

Specific editorial column necessities for compliance of a manuscript will always take over from directions in these general guidelines.

To make a paper clear: Adhere to recommended page limits.

Mistakes to avoid:

- Insertion of a title at the foot of a page with subsequent text on the next page.
- Separating a table, chart, or figure—confine each to a single page.
- Submitting a manuscript with pages out of sequence.
- In every section of your document, use standard writing style, including articles ("a" and "the").
- Keep paying attention to the topic of the paper.



- Use paragraphs to split each significant point (excluding the abstract).
- Align the primary line of each section.
- Present your points in sound order.
- Use present tense to report well-accepted matters.
- Use past tense to describe specific results.
- Do not use familiar wording; don't address the reviewer directly. Don't use slang or superlatives.
- Avoid use of extra pictures—include only those figures essential to presenting results.

Title page:

Choose a revealing title. It should be short and include the name(s) and address(es) of all authors. It should not have acronyms or abbreviations or exceed two printed lines.

Abstract: This summary should be two hundred words or less. It should clearly and briefly explain the key findings reported in the manuscript and must have precise statistics. It should not have acronyms or abbreviations. It should be logical in itself. Do not cite references at this point.

An abstract is a brief, distinct paragraph summary of finished work or work in development. In a minute or less, a reviewer can be taught the foundation behind the study, common approaches to the problem, relevant results, and significant conclusions or new questions.

Write your summary when your paper is completed because how can you write the summary of anything which is not yet written? Wealth of terminology is very essential in abstract. Use comprehensive sentences, and do not sacrifice readability for brevity; you can maintain it succinctly by phrasing sentences so that they provide more than a lone rationale. The author can at this moment go straight to shortening the outcome. Sum up the study with the subsequent elements in any summary. Try to limit the initial two items to no more than one line each.

Reason for writing the article—theory, overall issue, purpose.

- Fundamental goal.
- To-the-point depiction of the research.
- Consequences, including definite statistics—if the consequences are quantitative in nature, account for this; results of any numerical analysis should be reported. Significant conclusions or questions that emerge from the research.

Approach:

- Single section and succinct.
- An outline of the job done is always written in past tense.
- Concentrate on shortening results—limit background information to a verdict or two.
- Exact spelling, clarity of sentences and phrases, and appropriate reporting of quantities (proper units, important statistics) are just as significant in an abstract as they are anywhere else.

Introduction:

The introduction should "introduce" the manuscript. The reviewer should be presented with sufficient background information to be capable of comprehending and calculating the purpose of your study without having to refer to other works. The basis for the study should be offered. Give the most important references, but avoid making a comprehensive appraisal of the topic. Describe the problem visibly. If the problem is not acknowledged in a logical, reasonable way, the reviewer will give no attention to your results. Speak in common terms about techniques used to explain the problem, if needed, but do not present any particulars about the protocols here.

The following approach can create a valuable beginning:

- Explain the value (significance) of the study.
- Defend the model—why did you employ this particular system or method? What is its compensation? Remark upon its appropriateness from an abstract point of view as well as pointing out sensible reasons for using it.
- Present a justification. State your particular theory(-ies) or aim(s), and describe the logic that led you to choose them.
- Briefly explain the study's tentative purpose and how it meets the declared objectives.



Approach:

Use past tense except for when referring to recognized facts. After all, the manuscript will be submitted after the entire job is done. Sort out your thoughts; manufacture one key point for every section. If you make the four points listed above, you will need at least four paragraphs. Present surrounding information only when it is necessary to support a situation. The reviewer does not desire to read everything you know about a topic. Shape the theory specifically—do not take a broad view.

As always, give awareness to spelling, simplicity, and correctness of sentences and phrases.

Procedures (methods and materials):

This part is supposed to be the easiest to carve if you have good skills. A soundly written procedures segment allows a capable scientist to replicate your results. Present precise information about your supplies. The suppliers and clarity of reagents can be helpful bits of information. Present methods in sequential order, but linked methodologies can be grouped as a segment. Be concise when relating the protocols. Attempt to give the least amount of information that would permit another capable scientist to replicate your outcome, but be cautious that vital information is integrated. The use of subheadings is suggested and ought to be synchronized with the results section.

When a technique is used that has been well-described in another section, mention the specific item describing the way, but draw the basic principle while stating the situation. The purpose is to show all particular resources and broad procedures so that another person may use some or all of the methods in one more study or referee the scientific value of your work. It is not to be a step-by-step report of the whole thing you did, nor is a methods section a set of orders.

Materials:

Materials may be reported in part of a section or else they may be recognized along with your measures.

Methods:

- Report the method and not the particulars of each process that engaged the same methodology.
- Describe the method entirely.
- To be succinct, present methods under headings dedicated to specific dealings or groups of measures.
- Simplify—detail how procedures were completed, not how they were performed on a particular day.
- If well-known procedures were used, account for the procedure by name, possibly with a reference, and that's all.

Approach:

It is embarrassing to use vigorous voice when documenting methods without using first person, which would focus the reviewer's interest on the researcher rather than the job. As a result, when writing up the methods, most authors use third person passive voice.

Use standard style in this and every other part of the paper—avoid familiar lists, and use full sentences.

What to keep away from:

- Resources and methods are not a set of information.
- Skip all descriptive information and surroundings—save it for the argument.
- Leave out information that is immaterial to a third party.

Results:

The principle of a results segment is to present and demonstrate your conclusion. Create this part as entirely objective details of the outcome, and save all understanding for the discussion.

The page length of this segment is set by the sum and types of data to be reported. Use statistics and tables, if suitable, to present consequences most efficiently.

You must clearly differentiate material which would usually be incorporated in a study editorial from any unprocessed data or additional appendix matter that would not be available. In fact, such matters should not be submitted at all except if requested by the instructor.



Content:

- Sum up your conclusions in text and demonstrate them, if suitable, with figures and tables.
- In the manuscript, explain each of your consequences, and point the reader to remarks that are most appropriate.
- Present a background, such as by describing the question that was addressed by creation of an exacting study.
- Explain results of control experiments and give remarks that are not accessible in a prescribed figure or table, if appropriate.
- Examine your data, then prepare the analyzed (transformed) data in the form of a figure (graph), table, or manuscript.

What to stay away from:

- Do not discuss or infer your outcome, report surrounding information, or try to explain anything.
- Do not include raw data or intermediate calculations in a research manuscript.
- Do not present similar data more than once.
- A manuscript should complement any figures or tables, not duplicate information.
- Never confuse figures with tables—there is a difference.

Approach:

As always, use past tense when you submit your results, and put the whole thing in a reasonable order.

Put figures and tables, appropriately numbered, in order at the end of the report.

If you desire, you may place your figures and tables properly within the text of your results section.

Figures and tables:

If you put figures and tables at the end of some details, make certain that they are visibly distinguished from any attached appendix materials, such as raw facts. Whatever the position, each table must be titled, numbered one after the other, and include a heading. All figures and tables must be divided from the text.

Discussion:

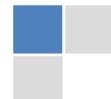
The discussion is expected to be the trickiest segment to write. A lot of papers submitted to the journal are discarded based on problems with the discussion. There is no rule for how long an argument should be.

Position your understanding of the outcome visibly to lead the reviewer through your conclusions, and then finish the paper with a summing up of the implications of the study. The purpose here is to offer an understanding of your results and support all of your conclusions, using facts from your research and generally accepted information, if suitable. The implication of results should be fully described.

Infer your data in the conversation in suitable depth. This means that when you clarify an observable fact, you must explain mechanisms that may account for the observation. If your results vary from your prospect, make clear why that may have happened. If your results agree, then explain the theory that the proof supported. It is never suitable to just state that the data approved the prospect, and let it drop at that. Make a decision as to whether each premise is supported or discarded or if you cannot make a conclusion with assurance. Do not just dismiss a study or part of a study as "uncertain."

Research papers are not acknowledged if the work is imperfect. Draw what conclusions you can based upon the results that you have, and take care of the study as a finished work.

- You may propose future guidelines, such as how an experiment might be personalized to accomplish a new idea.
- Give details of all of your remarks as much as possible, focusing on mechanisms.
- Make a decision as to whether the tentative design sufficiently addressed the theory and whether or not it was correctly restricted. Try to present substitute explanations if they are sensible alternatives.
- One piece of research will not counter an overall question, so maintain the large picture in mind. Where do you go next? The best studies unlock new avenues of study. What questions remain?
- Recommendations for detailed papers will offer supplementary suggestions.



Approach:

When you refer to information, differentiate data generated by your own studies from other available information. Present work done by specific persons (including you) in past tense.

Describe generally acknowledged facts and main beliefs in present tense.

THE ADMINISTRATION RULES

Administration Rules to Be Strictly Followed before Submitting Your Research Paper to Global Journals Inc.

Please read the following rules and regulations carefully before submitting your research paper to Global Journals Inc. to avoid rejection.

Segment draft and final research paper: You have to strictly follow the template of a research paper, failing which your paper may get rejected. You are expected to write each part of the paper wholly on your own. The peer reviewers need to identify your own perspective of the concepts in your own terms. Please do not extract straight from any other source, and do not rephrase someone else's analysis. Do not allow anyone else to proofread your manuscript.

Written material: You may discuss this with your guides and key sources. Do not copy anyone else's paper, even if this is only imitation, otherwise it will be rejected on the grounds of plagiarism, which is illegal. Various methods to avoid plagiarism are strictly applied by us to every paper, and, if found guilty, you may be blacklisted, which could affect your career adversely. To guard yourself and others from possible illegal use, please do not permit anyone to use or even read your paper and file.



CRITERION FOR GRADING A RESEARCH PAPER (COMPILED)
BY GLOBAL JOURNALS

Please note that following table is only a Grading of "Paper Compilation" and not on "Performed/Stated Research" whose grading solely depends on Individual Assigned Peer Reviewer and Editorial Board Member. These can be available only on request and after decision of Paper. This report will be the property of Global Journals.

Topics	Grades		
	A-B	C-D	E-F
<i>Abstract</i>	Clear and concise with appropriate content, Correct format. 200 words or below Above 200 words	Unclear summary and no specific data, Incorrect form Above 250 words	No specific data with ambiguous information
<i>Introduction</i>	Containing all background details with clear goal and appropriate details, flow specification, no grammar and spelling mistake, well organized sentence and paragraph, reference cited	Unclear and confusing data, appropriate format, grammar and spelling errors with unorganized matter	Out of place depth and content, hazy format
<i>Methods and Procedures</i>	Clear and to the point with well arranged paragraph, precision and accuracy of facts and figures, well organized subheads	Difficult to comprehend with embarrassed text, too much explanation but completed	Incorrect and unorganized structure with hazy meaning
<i>Result</i>	Well organized, Clear and specific, Correct units with precision, correct data, well structuring of paragraph, no grammar and spelling mistake	Complete and embarrassed text, difficult to comprehend	Irregular format with wrong facts and figures
<i>Discussion</i>	Well organized, meaningful specification, sound conclusion, logical and concise explanation, highly structured paragraph reference cited	Wordy, unclear conclusion, spurious	Conclusion is not cited, unorganized, difficult to comprehend
<i>References</i>	Complete and correct format, well organized	Beside the point, Incomplete	Wrong format and structuring

INDEX

A

Artifact · 39

C

Collinearity · 34
Consecutive · 2
Contemporaneous · 32
Contingent · 38
Conventional · 31, 32

D

Deciles · 5
Depicts · 42
Despite · 1, 42, 43, 47, 50
Distinct · 1, 4, 5, 36, 39
Distorted · 1, 2, 38, 39
Distortions · 2, 38, 39
Divergent · 41, 44, 45, 50

E

Echoes · 2, 39
Empirical · 1, 39, 40, 51

H

Hinged · 43

I

Impacted · 41
Implications · 1, 37
Incurred · 1, 3
Influential · 34
Integrity · 3

L

Linearity · 34

O

Obligation · 42
Obscured · 35
Omitting · 5

P

Peculiar · 42, 44
Persistence · 35
Pertaining · 1
Predictability · 39
Proactive · 41
Proximity · 2

R

Requisition · 4
Residuals · 32, 34
Robustness · 34

S

Sequential · 3
Skepticism · 2, 39
Skewness · 5
Spillage · 47
Spurious · 35
Stationarity · 35, 36
Stewardship · 42
Suboptimal · 1
Surmise · 35
Surpass · 46

U

Univariate · 36

W

Witnessed · 41



save our planet

Global Journal of Management and Business Research



Visit us on the Web at www.GlobalJournals.org | www.JournalofBusiness.Org
or email us at helpdesk@globaljournals.org



ISSN 9755853

© Global Journals