

“Sustainability reporting assessment for quality and compliance: the case of Ukrainian banks’ management reports”

AUTHORS

Inna Makarenko  <https://orcid.org/0000-0001-7326-5374>

 <http://www.researcherid.com/rid/AAE-8453-2020>

Victor Sukhonos  <https://orcid.org/0000-0001-5520-0227>

Iryna V. Zhuravlyova  <https://orcid.org/0000-0001-7341-1183>

Sergiy Legenchuk  <https://orcid.org/0000-0002-3975-1210>

Olga Szolno  <https://orcid.org/0000-0002-0766-6935>

ARTICLE INFO

Inna Makarenko, Victor Sukhonos, Iryna V. Zhuravlyova, Sergiy Legenchuk and Olga Szolno (2020). Sustainability reporting assessment for quality and compliance: the case of Ukrainian banks’ management reports. *Banks and Bank Systems*, 15(2), 117-129. doi:[10.21511/bbs.15\(2\).2020.11](https://doi.org/10.21511/bbs.15(2).2020.11)

DOI

[http://dx.doi.org/10.21511/bbs.15\(2\).2020.11](http://dx.doi.org/10.21511/bbs.15(2).2020.11)

RELEASED ON

Friday, 22 May 2020

RECEIVED ON

Thursday, 09 April 2020

ACCEPTED ON

Monday, 18 May 2020

LICENSE



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/)

JOURNAL

"Banks and Bank Systems"

ISSN PRINT

1816-7403

ISSN ONLINE

1991-7074

PUBLISHER

LLC “Consulting Publishing Company “Business Perspectives”

FOUNDER

LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

42



NUMBER OF FIGURES

0



NUMBER OF TABLES

5

© The author(s) 2026. This publication is an open access article.



BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10,
Sumy, 40022, Ukraine
www.businessperspectives.org

Received on: 9th of April, 2020

Accepted on: 18th of May, 2020

Published on: 22nd of May, 2020

© Inna Makarenko, Victor Sukhonos,
Iryna V. Zhuravlyova, Sergiy
Legenchuk, Olga Szołno, 2020

Inna Makarenko, Doctor of Economics,
Associate Professor, Associate Professor
of the Accounting and Tax Department,
Sumy State University, Ukraine.
(Corresponding author)

Victor Sukhonos, Doctor of Law,
Professor, Professor of the Department
of Criminal Law and Judiciary, Sumy
State University, Ukraine.

Iryna V. Zhuravlyova, Doctor of
Economics, Professor, Head of the
Finance Department, Simon Kuznets
Kharkiv National University of
Economics, Ukraine.

Sergiy Legenchuk, Doctor of
Economics, Professor, Head of the
Accounting and Audit Department,
State University "Zhytomyr
Polytechnic", Ukraine.

Olga Szołno, Ph.D., Adjunct, Business
Finance and Accounting Department,
Maria Curie-Skłodowska University
Lublin, Poland.



This is an Open Access article,
distributed under the terms of the
[Creative Commons Attribution 4.0
International license](https://creativecommons.org/licenses/by/4.0/), which permits
unrestricted re-use, distribution, and
reproduction in any medium, provided
the original work is properly cited.

Conflict of interest statement:

Author(s) reported no conflict of interest

Inna Makarenko (Ukraine), Victor Sukhonos (Ukraine), Iryna V. Zhuravlyova (Ukraine),
Sergiy Legenchuk (Ukraine), Olga Szołno (Poland)

SUSTAINABILITY REPORTING ASSESSMENT FOR QUALITY AND COMPLIANCE: THE CASE OF UKRAINIAN BANKS' MANAGEMENT REPORTS

Abstract

Management report is a new form of sustainability reporting (SR) in Ukraine, and its assessment for quality of environmental, social and governance (ESG) criteria disclosure and compliance among banks plays a crucial role for auditors in the verification process. The Quality and Compliance Bank Management Reports (Q&C BMR) Index methodology was developed for this purpose. The methodology includes a range of formal, content, assurance and disclosure scorings. According to the results of a continuous assessment of these management reports of 75 state, private and foreign-owned banks in Ukraine for the 2018 fiscal year, the average Q&C BMR Index is 61.2%. This indicates a fairly high level of quality and compliance with regulatory requirements for disclosure by banks of Ukraine in their SR. Differentiation of the studied population of banks in terms of Q&C BMR Index allowed distinguishing the following rating groups: A – leaders, B – pursuers, C – starters, and D – outsiders. There is a clear trend in the relationship between the ownership of a bank and its Q&C BMR index. Despite the rather high average value of the index, there is an opportunity to improve Ukrainian banks' SR in the context of its further standardization and disclosure of the full set of ESGs – a criterion for all rating groups (especially C and D). Q&C BMR Index can be used as a benchmark by banks, regulators and auditors when comparing the level of disclosure by banks and their transparency.

Keywords

reporting, sustainable development, bank, verification,
ESG-criteria

JEL Classification

Q01, G21, M40, M41

INTRODUCTION

Banks' sustainability reporting (SR) is not only an image and an authoritative determinant for promoting banking services or ensuring regulatory transparency requirements for the banking business. The importance of quality and compliance of such reporting with regulatory requirements has grown due to the fact that banks provide financial services to consumers and create stability in the financial markets. In addition, their resources can be mobilized to finance sustainable development initiatives. Therefore, the SR disclosure by banks in social, environmental and governance (ESG) criteria has a significant social effect.

For a long time, corporate social responsibility (CSR) initiatives, sustainable development and the achievement of its goals (SDGs), as well as the disclosure under the ESG criteria by Ukrainian banks were quite discrete and fragmented. PUMB, Platinum Bank, Ukrasotsbank, Ukrgasbank and some others, published their SR. This undoubtedly proves that CSR banking projects were not disclosed at a high level.

Improving banks' financial efficiency or developing a CSR mechanism are important in this context, but the assessment of banks' SR as a basis for determining the quality and compliance of such disclosures will allow the introduction of a new approach to CSR in the banking sector.

Implementation of management reports by Ukrainian banks is a response to the reform of the national accounting and auditing system in the light of Ukraine's European integration and the fulfilment of the Directive 2013/34/EU of the European Parliament and the Council on the annual financial statements, consolidated financial statements and related reports for certain types of undertakings as of June 26, 2013. Directive 2014/95/EU amends Directive 2013/34/EU on the disclosure of non-financial and diversity information by some large undertakings and groups as of October 22, 2014 (European Union Law, 2013, 2014).

In accordance with the requirements of Directives 2013/34/EU and 2014/95/EU, a management report, along with non-financial, corporate governance and state payments reports, is a form of banks' SR as public interests and reporting entities.

In Ukraine, the valuation of non-financial disclosure in the banks' SR became possible due to the use of a management report (consolidated management report) after the acceptance of amendments to the Law of Ukraine On Accounting and Financial Reporting in Ukraine dated July 16, 1999 No. 996-XIV on January 1, 2018 (Legislation of Ukraine, 1999), and the Guidelines for the Preparation of Financial Statements of Ukrainian Banks (Decree of the NBU as of October 24, 2011, No. 373) (Legislation of Ukraine, 2011). Meanwhile, the National Securities and Stock Market Commission of Ukraine (following the Law of Ukraine On Securities and the Stock Market dated February 23, 2006, No. 3480-IV and the Regulation on Disclosure of Information by Issuers of Securities of a Company dated December 3, 2013, No. 2826) establishes some requirements for making the report. As a result, banks are required to present interim and annual corporate governance reports as issuers of securities of joint-stock companies.

This fact complicates the assessment of the sustainability disclosure by Ukrainian banks and requires verification of compliance of their management reports with several regulatory requirements. The assessment of the Ukrainian banks' SR is also vital due to the change in the report form of independent auditors, who audit bank reports.

The remainder of the paper is structured as follows. Section 1 provides an overview of the literature and the regulatory framework regarding management reports of banks. Section 2 provides the characteristics of data used and the research methodology design. Section 3 describes results obtained, while the last section contains some concluding remarks.

1. LITERATURE REVIEW

1.1. General and bank-specific approaches to assessing sustainability reporting

The assessment of SR in different companies is widespread in the academia, despite a relatively short history (mainly during last decade). The main reason for this is the regulatory framework and the development of a list of SR indicators. Scientific works in the studied area will be examined within two issues: by

country and by the specifics of assessing banks' SR. Besides, there are two areas in which attempts are made to assess the quality of sustainability reporting:

1) a cross-country analysis:

- SR practice of different countries all over the world;
- SR in EU member countries; and

2) a single-country analysis.

The most relevant study in cross-country analysis is that by Eccles, Krzus, and Solano (2019). They assess 50 integrated reports in 10 countries (Brazil, France, Germany, Italy, Japan, the Netherlands, South Africa, South Korea, UK, and the USA) and concluded about three categories of disclosure qualities in countries analyzed. The indicator of relevance and credibility of SR in EU member states was investigated by Hąbek and Wolniak (2016) for Poland, Sweden, Denmark, United Kingdom, France and the Netherlands. An integrated report checklist and the score of eight financial sector companies from the Netherlands, France, Italy, and Switzerland were developed by Sofian and Dumitru (2017).

It is worth noting the EU studies on the single-country analysis in individual countries. Krivačić (2017) determines the level of SR quality of companies in Croatia, Daub (2007) provides the results of quantitative and qualitative analysis of corporate SR in Switzerland. Reports of Spanish listed companies for the 2018 fiscal year were assessed by Sierra-Garcia, Garcia-Benau, and Bolas-Araya (2018) using the Non-Financial Statement Content (NFSC) composed of five sub-indices and addressed by the Directive 2014/95/EU disclosure directions and Key Performance Indicator (KPI) of Global Reporting Initiative standards. Truant, Corazza, and Scagnelli (2017) composed Sustainability and Risk Disclosure scores for 30 Italian organizations before the adoption of the Directive 95/2014/EU. Caputo, Leopizzi, Pizzi, and Milone (2019) and Manes-Rossi, Tiron-Tudor, Nicolò, and Zanellato (2018) provide a piece of evidence in the SR assessment in Italy. The first group of authors evaluates non-financial reporting for 223 companies as of December 31, 2015, and 147 companies as of December 31, 2017 (before and after the adoption of Directive 95/2014/EU). The second group of authors assesses the compliance with the EUG and Directive 95/2014/EU of the 50 biggest European companies.

The specifics of banks' SR was also analyzed also taking into account the peculiarities of a country. Thus, Petrushenko (2013) considers the specifics of Ukrainian CSR banks, while Kozmenko, Savchenko, and Kazarinov (2012) describe the convergence of the Ukrainian banking system with EU specifics and Balatskyi and Bondarenko

(2015) – foreign capital influence on it. Plastun, Makarenko, Yelnikova, and Sheliuk (2018) analyses Ukrainian banking system during recent crisis, Buriak, Vozňáková, Sułkowska, and Kryvykh (2019) – in context of social trust recovery for this system after abovementioned crisis.

Nobanee and Ellili (2016) performed a comparative study of conventional and Islamic banks in the UAE. They insisted that the degree of the corporate sustainability disclosure of conventional banks was higher than that of Islamic banks. Kumar and Prakash (2019) described the compliance of sustainability reports of Indian banks with the GRI G4 guidelines and National Voluntary Guidelines on responsible business. Bolas-Araya and Seguí-Mas (2014) investigate 647 reports of European credit cooperative banks published from 2000 to 2012 about their sustainability practices. The authors find that cooperative banks tend to disclose more information on social issues, rather than on the environment. Balcerzak, Klietnik, Streimikiene, and Smrcka (2017) investigated European banks in general. Gavurova, Belas, Kocisova, and Klietnik (2017) analyzed the peculiarities of Czech and Slovak banks, while Kovacova, Klietnik, Valaskova, Durana, and Juhaszova (2019) explored the Visegrád Group, and Grenčíková, Bilan, Samusevych, and Vysochyna (2020) – Central and Eastern European countries.

Khan et al. published a series of studies on the sustainability disclosure in Bangladeshi commercial banks (Khan, Halabi, & Samy, 2009; Khan, 2010; Khan, Halabi, & Samy, 2011). Sobhani, Amran and Zainuddin (2012) also studied the specific bank disclosure in Bangladesh. But they analyzed not only annual or SR but also the websites of banks to search for information on CSR. Hassan and Harahap (2010) provided a cross-country comparative analysis of CSR reporting of banks in Bahrain, Bangladesh, Indonesia, Malaysia, Saudi Arabia, Kuwait and the UAE and concluded that these Islamic banks were inconsistent in providing information about their CSR.

According to the analysis performed, the assessment of SR is country-specific. Moreover, the specifics of the banking sector impose an assessment of the formation of indicators of quality, credibility or compliance of these statements with certain in-

ternational or national rules. The aforementioned determines the importance of research and the assessment of sustainability reporting of Ukrainian banks.

The previous study (Sukhonos & Makarenko, 2017) contains the results of determining legal issues and assessing the sustainability and CSR of Ukrainian companies. This study is a continuation of the previous one regarding the SR and disclosure with ESG, criteria for Ukrainian banks, and corresponds to the analyzed papers on the SR assessment.

The purpose of this study is to assess the disclosure quality of bank management reports as SR according to ESG criteria and their compliance with European and national requirements.

1.2. Management report as a form of sustainability reporting of a bank: review of the regulatory framework

The preparation and submission of management reports by Ukrainian banks, as well as their verification, correspond to a significant and rather inconsistent regulatory framework (see Table 1). The reason for this discrepancy is the transitional period of the development of the accounting, reporting and audit system in Ukraine. They continue

to implement European requirements to put into effect the sustainable development concept.

In particular, Ukrainian legislation on making the SR and audit by banks takes into account the requirements of the fundamental Directives: the Directive 2013/34/EU, the Directive 2014/95/EU, and the Directive 2014/56/EU (European Union Law, 2013, 2014). They are part of a large set of regulatory documents issued by different regulatory bodies and have different guidance:

- 1) The Law of Ukraine On Accounting and Financial Reporting in Ukraine dated July 16, 1999 No. 996-XIV.
- 2) The Procedure for submitting financial statements approved by the Cabinet of Ministers of Ukraine dated February 28, 2000, No. 419.
- 3) The Guidelines for the Preparation of a Management Report approved by the Order of the Ministry of Finance of Ukraine dated December 7, 2018, No. 982.
- 4) The Law of Ukraine On Securities and the Stock Market dated February 23, 2006, No. 3480-IV.
- 5) The Regulation on Disclosure of Information by Issuers of Securities of a company dated December 3, 2013, No. 2826.

Table 1. The procedure for regulating and publishing management reports by banks in Ukraine and their features

Source: Compiled by authors based on regulatory documents listed below.

Government authority for considering	Regulator	Regulatory document	Terms
State Fiscal Service; The State Statistics Committee of Ukraine	The Ministry of Finance of Ukraine	The Law of Ukraine On Accounting and Financial Reporting in Ukraine dated July 16, 1999, No. 996-XIV (Legislation of Ukraine, 1999); The Procedure for submitting financial statements approved by the Cabinet of Ministers of Ukraine dated February 28, 2000, No. 419 (Legislation of Ukraine, 2000); The Guidelines for the Preparation of a Management Report, approved by the Order of the Ministry of Finance of Ukraine dated December 7, 2018, No. 982 (Legislation of Ukraine, 2018)	Until February 28 of the year following the reporting period
National Bank of Ukraine		The Guidelines for the Preparation of Financial Statements of Ukrainian Banks (Decree of the NBU date October 24, 2011, No. 373) (Legislation of Ukraine, 2011)	Until April 30 of the year following the reporting period
The National Securities and Stock Market Commission of Ukraine		The Law of Ukraine On Securities and the Stock Market dated February 23, 2006, No. 3480-IV (Legislation of Ukraine, 2006), The Regulation on Disclosure of Information by Issuers of Securities of a company dated December 3, 2013, No. 2826 (Legislation of Ukraine, 2013)	Until April 30 of the year following the reporting period

- 6) The Law of Ukraine On the Audit of Financial Statements and Audit Activities dated December 21, 2017, No. 2258-VIII.
- 7) The Guidelines for the Preparation of Financial Statements of Ukrainian Banks (Decree of the NBU dated October 24, 2011, No. 373) (Legislation of Ukraine, 1999, 2000, 2006, 2011, 2013, 2017, 2018).

The most comprehensive and detailed are the last guidelines due to their content and the procedure for publishing management reports by banks. According to their requirements, banks submit reports at the request of the NBU. In accordance with the requirements of the NSSMC, they prepare at the same time a management report as issuers of securities and, in accordance with the requirements of the Ministry of Finance, as reporting entities in Ukraine.

2. DATA AND METHODOLOGY

For the study, 75 management reports of Ukrainian banks were analyzed. A period is the financial year 2018. All these reports were evaluated in terms of the quality of disclosure of information on sustainable development and compliance with regulatory requirements. To search for information, two sources were used.

First, corporate websites of Ukrainian banks, where they are required to publish management reports, and auditor confirmation. However, it should be noted that when collecting reports, it was necessary to study in detail the structure of banks' websites, since not all of them published management reports separately. Most of them were part of the banks' annual reports or financial statements. The situation is similar with the reports of independent auditors, which are usually published together with the annual financial statements. As a result, 75 additional sets of bank financial statements and 75 reports of independent auditors were analyzed.

The second source is the publicly available NSSMC disclosure base (stockmarket.qov.ua) for securities issuers, where 75 sets of annual regular information of banks as issuers of securities were checked,

as well as its section Corporate Governance Report and Audit Report was explored to verify the NSSMC requirements.

The study was conducted extensively. Banks were divided into the following groups: publicly-owned banks (5), banks of foreign banking groups (20), and private equity banks (50).

The following four groups of criteria were the base for calculating the index according to assessment types (see Table 2):

1. format and submission of a management report;
2. compliance with regulatory requirements;
3. disclosure according to ESG criteria;
4. certification of a management report by audit.

Management reports were assessed using a binary content analysis system. Content analysis is widely used in academia for reporting analyses and identifying or quantifying the presence or absence of data searched (Miles & Huberman 1994; Gray, Kouhy, & Lavers, 1995; Kothari, Li, & Short, 2009; Unerman, 2000; Adams & Frost, 2008; Scholtens, 2009). This type of analysis for Indian banks SR was used by Kumar and Prakash (2019), Hassan and Harahap (2010).

Internal verification of scoring results was carried out simultaneously by two authors of this article. Such an approach helped to avoid inconsistencies. The information provided by independent auditors regarding the verification of Ukrainian banks' management reports was used as an additional external verification criteria for the obtained results. This indicates independent opinion of auditors on the quality and compliance of these reports.

The developed bank SR assessment algorithm based on the Q&C BMR Index includes a method for normalizing the values of the management report verification parameters within certain limits.

Firstly, it is necessary to find the number of assess-

Table 2. A scoring criteria system for assessing the quality and compliance of management reports of Ukrainian banks

Source: Developed by authors.

Assessment type	Criteria	1	0
Format and submission of a report	Figuration, details, graphs, tables	Detailed information and visualization are available	No visualization, mostly textual representation
	Format of submission	A separate management report	A management report is a duplicate of a corporate governance report
Compliance with regulatory requirements	NSSMC requirements	Meet the requirements of the Law of Ukraine On Securities and the Stock Market"	Does not meet the requirements of the Law of Ukraine On Securities and the Stock Market
	NBU requirements	Meet the requirements of the Guidelines for the Preparation of Financial Statements of Ukrainian Banks	Does not meet the requirements of the Guidelines for the Preparation of Financial Statements of Ukrainian Banks
Content criteria	Aspects	Disclosure of the social aspects of a bank's activity	No disclosure of the social aspects of a bank's activity
		Disclosure of the environmental aspects of a bank	No disclosure of the environmental aspects of a bank
		Disclosure of anti-corruption activities of a bank	No disclosure of anti-corruption activities of a bank
		Disclosure of information on human rights protection	No disclosure of information on human rights protection
Certification of a management report by audit	A report of independent auditors	Independent auditors report is available	Independent auditors report is not available
	Significant distortions	There are no significant distortions	There are significant distortions
	Consistent with the bank's financial statements	The management report is consistent with the bank's financial statements	The management report is not consistent with the bank's financial statements
	Compliance with the NBU requirements	The management report is prepared according to the NBU requirements	The management report is not prepared according to the NBU requirements
	Company	Big 4	Another company
	Auditor's opinion	Objective and subjective	With notification

ment criteria among the index components, the number of verified (confirmed) criteria, and put the maximum value of the assessment. Suppose that the maximum score of the index will be between 0 and 100. Then the algorithm by the normalization method can be represented as follows:

1. Finding the total minimum and maximum numbers of the assessment criteria [min; max].
2. Finding the number of verified criteria – x .
3. Setting the maximum value of k .
4. Calculating the rating value according to formula (1).

$$y = \left(\frac{x - \min}{\max - \min} \right) \cdot k, \quad x \neq \min, \quad (1)$$

where y is the calculable value (quality index and compliance of the bank's disclosure), x is the num-

ber of verified bank criteria, $\max$ is the maximum number of analysis criteria, and $\min$ is the minimum number of the analysis criteria.

It is suggested to explain the obtained index scores on a 100-scale assessment and with the alphabetic rating system, where x – interval, n – number of scores, and 100 – the maximum score of the rating system ($n \cdot x = 100$).

It is supposed that the minimum score of a bank is E, then the maximum is A. As a result, there are five sets of scores with certain intervals between them. The index score limits with the alphabetic assessment scale (for the convenience of grouping banks) are represented below:

1. A [100;80];
2. B [60;80];
3. C [40;60];
4. D [20;40];
5. E [0;20].

A step-by-step implementation of the algorithm is presented as a Report Assessment, which allows automatically determining the bank index and its rating for auditors during the verification.

Based on the algorithm, Privatbank is assessed. Accordingly, out of 14 general assessment criteria, 10 were verified, and the value was placed in formula (2):

$$\begin{aligned} \text{Q\&C BMR Privatbank} = \\ = \left(\frac{11-0}{14-0} \right) \cdot 100 = 78.57. \end{aligned} \quad (2)$$

According to these intervals, Privatbank has an index score of Group B. A similar assessment procedure was implemented using the Report Assessment program for all 75 banks.

3. RESULTS

The results of the SR assessment of 75 Ukrainian banks for 2018 are very impressive (see Table A1, Appendix A). The average value of the Q&C BMR Index for the banking system of Ukraine is 61.2%. This shows a rather high level of quality and compliance with the regulatory requirements of SR disclosure by Ukrainian banks. In addition, this indicates compliance of the conditions of such disclosure with the analyzed criteria:

- 1) format and submission of reports (formal criteria);
- 2) compliance with regulatory requirements (compliance criteria);
- 3) content criteria (disclosure according to ESG criteria – criteria of social and environmental aspects of bank activity, and, for banks with more than 500 employees, disclosure of corruption and human rights policies);
- 4) certification of a management report by audit (verification criteria). They allow differentiating 75 banks into four main groups according to the value of the Q&C BMR index (Table 3).

According to the commonly accepted system of calculated index values, rating group A is the “leaders”. It includes banks with the highest index values. Group D contains the “outsider banks” with the lowest value. Rating group B stands for “followers” and C stands for “starters”, with intermediate index values. It should be noted that none of the banks fell into the rating group E (which is provided by index values between 0 and 20) in terms of the quality and compliance condition when compiling such a form of SSR as a management report. This fact confirms a rather high level of SR disclosure by Ukrainian banks.

At the same time, the division of banks into four selected groups is not equable. The highest fre-

Table 3. Grouping of Ukrainian banks by the value of the Q&C BMR index

Source: Authors' calculations.

Rating	Score range	Banks
A (leaders)	85.7 – 92.9	13 CREDIT AGRICOLE BANK, Raiffeisen Bank Aval, Prominvestbank, MTB BANK, Oschadbank, Ukreximbank, ALFA-BANK, KREDO BANK, OTP BANK, UKRSIBBANK, MEGABANK, PUMB, BANK VOSTOK
B (followers)	64.3 – 78.6	22 PrivatBank, PROCREDIT BANK, INDUSTRIALBANK, CRYSTALBANK, TASCOMBANK, UNIVERSAL BANK, BANK FORWARD, PIRAEUS BANK ICB, SEB CORPORATE BANK6 Idea Bank, AP BANK, CB ACCORDBANK, Ukrgasbank, Deutsche Bank DBU, BTA BANK, SBERBANK, CLEARING HOUSE, Pivdennyi Bank, BANK PORTAL, BANK UKRAINIAN CAPITAL, CIB, OKCI BANK
C (starters)	42.9 – 57.1	32 SETTLEMENT CENTER, JOINT STOCK BANK, RADABANK, IBOX BANK, ALPARI BANK, BANK GRANT, BANK SICH, BANK FOR INVESTMENTS AND SAVINGS, COMINVESTBANK, MOTOR-BANK, FIRST INVESTMENT BANK, Ukrainian Bank for Reconstruction and Development, UNEX BANK, BANK FAMILNY, CREDITWEST BANK, CITIBANK, ALTBANK, ASVIO BANK, BANK CREDIT DNEPR, CB ZEMELNY CAPITAL, MetaBank, RWS BANK, SKY BANK, UKRCONSTINVESTBANK, Policombank, CREDIT EUROPE BANK, ING Bank Ukraine, SC JSCB ARCADEA, JSCB CONCORD, JSCB Lviv, BANK 3/4, BANK TRUST-CAPITAL, EIB
D (outsiders)	21.4 – 35.7	8 PRAVEX BANK, A - BANK, CB GLOBUS, IIB, Poltava-bank, Misto Bank, BANK ALLIANCE, BANK AVANGARD

Table 4. Grouping of Ukrainian banks according to the value of the Q&C BMR index and the type of ownership

Source: Authors' calculations.

Ownership	Banks	A		B		C		D	
		Reports	%	Reports	%	Reports	%	Reports	%
Publicly-owned	5	2	40.0	2	40.0	1	20.0	0	0.0
With foreign capital	20	7	35.0	8	40.0	4	20.0	1	5.0
Private equity	50	4	8.0	12	24.0	27	54.0	7	14.0
Total	75	13	17.3	22	29.3	32	42.7	8	10.7

quency of banks is typical for rating groups of B-followers (22 banks) and C-starters (32 banks). It reflects the need to further standardize SR of banks and improve their disclosure according to ESG criteria.

The rating groups of leaders (A) and outsiders (D) are characterized by comparatively lower frequencies and include 13 banks (17.3%) and 8 banks (10.7% of the studied population), respectively.

Table 4 presents the analysis of the Q&C BMR index and the position of a bank in a particular group according to the ownership type.

A clear trend is found in the relationship between the ownership of a bank and the value of its Q&C BMR index.

4. DISCUSSION

The leading banks of rating group A are mostly publicly-owned or are part of foreign banking groups compared to banks with private equity. It should be noted that Ukrgasbank was the first publicly-owned bank to publish a full sustainability report in addition to the minimum requirements for preparing and submitting a management report in 2018. Banks with foreign capital, as a rule, form the CSR system, include SDGs in their activities, and disclose information in accordance with ESG criteria following the traditions and policies adopted in the parent structures.

Group B – followers – has a similar number of publicly-owned banks and banks with foreign capital. However, the number of Ukrainian private equity banks increases to 12. There is a fundamental difference between this group and the leaders in terms of quality and compliance. Despite the

same level of meeting the formal, compliance and verification criteria, the compliance with content criteria is different. In particular, Group A banks disclose not only ESG criteria in their corporate governance reports, but also anti-corruption and human rights policies. Banks of Group B mainly focus on the social aspects of CSR, with minimal disclosure of environmental criteria. Anti-corruption policies (even at a bank with more than 500 employees) are covered by only five banks, and human rights policies are covered by three banks. Bollas-Araya and Seguí-Mas (2014) also conclude that social aspects prevail in banks' disclosures.

Banks from groups C and D follow minimal formal, compliance and verification criteria. Social and environmental non-financial criteria are rarely disclosed. This group consists mostly of banks with private equity (54%).

Three banks from Group D have not prepared their management reports in accordance with the Guidelines for the Preparation of Financial Statements of Ukrainian Banks (Decree of the NBU dated October 24, 2011, No. 373) (Legislation of Ukraine, 2011). Two out of these three have not even disclosed the minimum information in their corporate governance reports in accordance with the NSSMC requirements (as stated in the Law of Ukraine On Securities and the Stock Market dated February 23, 2006, No. 3480-IV and the Regulation on Disclosure of Information by Issuers of Securities of the company dated December 3, 2013, No. 2826).

Detailed explanation on the role of formal criteria (compliance with regulatory requirements) and verification criteria can contribute to a greater understanding of the essence of the Q&C BMR index. If there is no question about the level of compliance with the relevant criteria (banks of

all rating groups mostly comply with the regulators' requirements), data visualization in management reports is provided by only 32 banks out of 75 (42.3%). Meanwhile, the effective presentation of indicators in management reports is made by 12 out of the 13 banks of Group A. This is in line of the best international practice of SR submission.

The presence of the verification criteria shows that auditors from large audit networks verified banks'

reports. It is an SR characteristic that indicates the banks-leaders. 10 of the 13 management reports of these banks were audited by Big Four companies. In addition, auditors gave an opinion with a notice for some banks. This applies to 72.0 % of banks of groups C and D. There are some modifications in their reports of independent auditors. This fact may indicate the impact of the overall quality of banks' reporting on the quality and compliance of their SR.

CONCLUSION

The developed Q&C BMR Index can be used as a benchmark for comparing the disclosure level of banks and their transparency in general and in relation to ESG criteria in particular. The use of this index is practically significant for auditors and regulatory bodies in assessing banks' SR in order to increase the transparency level of banks and the further development of SR and its standardization.

There is a clear tendency in the correlation between the ownership of a bank and the value of its Q&C BMR index. Therefore, publicly-owned banks and banks with foreign capital should mainly be in higher-rating groups A and B, while banks with private capital in groups C and D.

In addition to the minimum compliance, verification and formal criteria, banks from high-rating groups are characterized by high-quality visualization of indicators in their management reports, verification of management reports by the Big Four companies and no modifications in the audit opinion (certification of a management report by audit).

For any bank, positioning in the index gives an idea of its compliance with the requirements for disclosing information on sustainable development and comparing itself with competing banks.

For regulatory authorities, regular reviews of bank reports provide an analytical basis for determining the level of compliance with regulatory requirements on the sustainable development disclosure. Besides, this makes it possible to ensure the transparency of the banking system, considering the progress of banks in corporate social responsibility and sustainable development goals.

Another area in which these requirements can be implemented is the use of the Reports Assessment program developed as part of the study, to automatically verify and evaluate the bank management reports for audit companies. Using the proposed approach allows you to increase the validity of an auditor's opinion for the tasks of checking management reports of banks.

The study allows you to demonstrate the limitations of national approaches to disclosure of management reports of Ukrainian banks. Its results are the basis for the development of measures to further improve management reports of banks, as well as SR of financial institutions, and their standardization in Ukraine. Current trends in increasing their transparency in the EU and the world are taken into account.

Future investigations aim to expand the time horizon of research. That is, an assessment of bank management reports in Ukraine for 2019 will be available from April 30, 2020 (or from a date that depends on quarantine restrictions). Moreover, it will be interesting to compare the quality and compliance of SR of banks from other countries, including Europe and Ukraine.

ACKNOWLEDGMENT

The comments of an editor and anonymous referees have been gratefully acknowledged. Inna Makarenko gratefully acknowledges financial support from the Ministry of Education and Science of Ukraine – Corporate Social and Environmental Responsibility for Sustainable Development: Partnership of Stakeholders in the Real, Financial and Public Sectors of the Economy (0117U003933).

AUTHOR CONTRIBUTIONS

Conceptualization: Inna Makarenko.

Data curation: Olga Szołno.

Formal analysis: Iryna V. Zhuravlyova, Olga Szołno.

Funding acquisition: Inna Makarenko.

Investigation: Inna Makarenko.

Methodology: Inna Makarenko, Victor Sukhonos, Sergiy Legenchuk.

Project administration: Inna Makarenko, Victor Sukhonos.

Resources: Sergiy Legenchuk.

Software: Inna Makarenko.

Supervision: Victor Sukhonos.

Validation: Inna Makarenko, Iryna V. Zhuravlyova, Sergiy Legenchuk, Olga Szołno.

Visualization: Olga Szołno.

Writing – original draft: Inna Makarenko, Iryna V. Zhuravlyova, Sergiy Legenchuk.

Writing – reviewing & editing: Victor Sukhonos, Iryna V. Zhuravlyova.

REFERENCES

- Adams, C. A., & Frost, G. R. (2008). Integrating sustainability reporting into management practices. *Accounting Forum*, 32(4), 288-302. <https://doi.org/10.1016/j.accfor.2008.05.002>
- Balatskyi, Y. O., & Bondarenko, A. F. (2015). Current trends of banking system development in Ukraine under the influence of foreign capital. *Aktualni problemy ekonomiky – Actual Problems of Economics*, 172(10), 332-340. (In Ukrainian). Retrieved from http://nbuv.gov.ua/j-pdf/ape_2015_10_43.pdf
- Balcerzak, A. P., Klietnik, T., Streimikiene, D., & Smrcka, L. (2017). Non-Parametric Approach to Measuring the Efficiency of Banking Sectors in European Union Countries. *Acta Polytechnica Hungarica*, 14(7), 51-70. <https://doi.org/10.12700/APH.14.7.2017.7.4>
- Bollas-Araya, H.-M., & Seguí-Mas, E. (2014). *Sustainability reporting in cooperative banks an analysis of their disclosure in Europe*. Retrieved from http://www.aeca1.org/pub/on_line/comunicaciones_xviicongresoacea/cd/72h.pdf
- Buriak, A., Vozňáková, I., Sułkowska, J., & Kryvykh, Y. (2019). Social trust and institutional (Bank) trust: Empirical evidence of interaction. *Economics and Sociology*, 12(4), 116-129. Retrieved from [https://www.economics-sociology.eu/?709,en_social-trust-and-institutional-\(bank\)-trust-empirical-evidence-of-interaction](https://www.economics-sociology.eu/?709,en_social-trust-and-institutional-(bank)-trust-empirical-evidence-of-interaction)
- Caputo, F., Leopizzi, R., Pizzi, S., & Milone, V. (2019). The Non-Financial Reporting Harmonization in Europe: Evolutionary Pathways Related to the Transposition of the Directive 95/2014/EU within the Italian Context. *Sustainability*, 12(1), 1-13. <https://doi.org/10.3390/su12010092>
- Daub, C.-H. (2007). Assessing the Quality of Sustainability Reporting: An Alternative Methodological Approach. *Journal of Cleaner Production*, 15(1), 75-85. <https://doi.org/10.1016/j.jclepro.2005.08.013>
- Eccles, R. G., Krzus, M. P., & Solano, C. (2019). A Comparative Analysis of Integrated Reporting in Ten Countries. SSRN. <http://dx.doi.org/10.2139/ssrn.3345590>
- European Union Law. (2013). Directive 2013/34/EU of the European Parliament and of the Council of 26 June 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC. *Official Journal of the European Union*, L182/19. Retrieved from <https://eur-lex.europa.eu/eli/dir/2013/34/oj>
- European Union Law. (2014). Directive 2014/95/EU of the European Parliament and of

- the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups. *Official Journal of the European Union*, L 330/1. Retrieved from <http://data.europa.eu/eli/dir/2014/95/oj>
11. Gavurova, B., Belas, J., Kocisova, K., & Klietstik, T. (2017). Comparison of selected methods for performance evaluation of Czech and Slovak commercial banks. *Journal of Business Economics and Management*, 18(5), 852-876. <https://doi.org/10.3846/16111699.2017.1371637>
 12. Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting: a review of the literature and longitudinal study of UK disclosure. *Accounting, Auditing & Accountability Journal*, 8(2), 47-77. <https://doi.org/10.1108/09513579510146996>
 13. Grenčíková, A., Bilan, Yu., Samusevych, Ya., & Vysochyna, A. (2020). Drivers and inhibitors of entrepreneurship development in central and eastern European countries. *Proceedings of the 33rd International Business Information Management Association Conference* (pp. 2536-2547). IBIMA 2019: Education Excellence and Innovation Management. Retrieved from <https://ibima.org/accepted-paper/drivers-and-inhibitors-of-entrepreneurship-development-in-central-and-eastern-european-countries/>
 14. Hąbek, P., & Wolniak, R. (2016). Assessing the quality of corporate social responsibility reports: the case of reporting practices in selected European Union member states. *Quality & Quantity*, 50, 399-420. <https://doi.org/10.1007/s11135-014-0155-z>
 15. Hassan, A., & Harahap, S. S. (2010). Exploring Corporate Social responsibility disclosure: The case of Islamic Banks. *International Journal of Islamic and Middle Eastern Finance and Management*, 3(3), 203-227. <https://doi.org/10.1108/17538391011072417>
 16. Khan, M. (2010). The effects of corporate governance elements on corporate social responsibility (CSR) Reporting: Empirical evidence from private commercial banks of Bangladesh. *International Journal of Law and Management*, 52(2), 82-109. <https://doi.org/10.1108/17542431011029406>
 17. Khan, M. H., Azizul Islam, M., Kayeser Fatima, J., & Ahmed, K. (2011). Corporate sustainability reporting of major commercial banks in line with GRI: Bangladesh evidence. *Social Responsibility Journal*, 7(3), 347-362. <https://doi.org/10.1108/17471111111154509>
 18. Khan, M., Halabi, A., & Samy, M. (2009). Corporate Social Responsibility (CSR) Reporting: A Study of Selected Banking Companies in Bangladesh. *Social Responsibility Journal*, 5(3), 344-357. <https://doi.org/10.1108/17471110910977276>
 19. Kothari, S. P., Li, X., & Short, J. E. (2009). The effect of disclosures by management, analysts, and business press on cost of capital, return volatility, and analyst forecasts: a study using content analysis. *Accounting Review*, 84(5), 1639-1670. <https://doi.org/10.2308/accr.2009.84.5.1639>
 20. Kovacova, M., Klietstik, T., Valaskova, K., Durana, P., & Juhaszova, Z. (2019). Systematic review of variables applied in bankruptcy prediction models of Visegrad group countries. *Oeconomia Copernicana*, 10(4), 743-772. <https://doi.org/10.24136/oc.2019.034>
 21. Kozmenko, S., Savchenko, T., & Kazarinov, D. (2012). Assessment of financial convergence of Ukraine with the CIS countries and the European Union. *Banks and Bank Systems*, 7(4), 5-17. Retrieved from <https://businessperspectives.org/journals/banks-and-bank-systems/issue-175/assessment-of-financial-convergence-of-ukraine-with-the-cis-countries-and-the-european-union>
 22. Krivačić, D. (2017). Sustainability reporting Quality: the analysis of companies in Croatia. *Journal of Accounting and Management*, VII(1), 1-14. Retrieved from <https://hrcak.srce.hr/194710>
 23. Kumar, K., & Prakash, A. (2019). Examination of sustainability reporting practices in Indian banking sector. *Asian Journal of Sustainability and Social Responsibility*, 4(2), 1-16. <https://doi.org/10.1186/s41180-018-0022-2>
 24. Legislation of Ukraine. (1999). Law of Ukraine On Accounting and Financial Reporting in Ukraine (No. 996-XIV). *Vidomosti Verkhovnoi Rady (VVR)*, 40, st. 365. Retrieved from <http://zakon3.rada.gov.ua/laws/show/996-14/page>
 25. Legislation of Ukraine. (2000). *The Procedure for the submission of financial statements approved by Cabinet of Ministers of Ukraine as of February 28, 2000*, No. 419. Retrieved from <https://zakon.rada.gov.ua/laws/show/419-2000-%D0%BF>
 26. Legislation of Ukraine. (2006). *Law of Ukraine On Securities and the Stock Market as of February 23, 2006*, No. 3480-IV. Retrieved from <https://zakon.rada.gov.ua/laws/show/3480-15>
 27. Legislation of Ukraine. (2011). *The Guidelines for the Preparation of Financial Statements of Ukrainian Banks* (Decree of the NBU as of October 24, 2011, No. 373). Retrieved from <https://zakon.rada.gov.ua/laws/show/z1288-11>
 28. Legislation of Ukraine. (2013). *Regulation on Disclosure of Information by Securities Issuers of the company as of December 03, 2013*, No. 2826. Retrieved from <https://zakon.rada.gov.ua/laws/show/z2180-13#n17>
 29. Legislation of Ukraine. (2017). Law of Ukraine On the audit of financial statements and auditing activities" (as of December 21, 2017, No. 2258-VIII). *Vidomosti Verkhovnoi Rady (VVR)*, 9, 2018, st. 50. Retrieved from <https://zakon.rada.gov.ua/laws/show/2258-19>
 30. Legislation of Ukraine. (2018). *The Guidelines for the Preparation of a Management Report, approved by the Order of the Ministry of Finance of Ukraine as of December*

- 07, 2018, No. 982. Retrieved from <https://zakon.rada.gov.ua/rada/show/v0982201-18/ed20181207/stru>
31. Manes-Rossi, F., Tiron-Tudor, A., Nicolò, G., & Zanellato, G. (2018). Ensuring More Sustainable Reporting in Europe Using Non-Financial Disclosure – De Facto and De Jure Evidence. *Sustainability*, 10(4), 1-20. <https://doi.org/10.3390/su10041162>
 32. Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: an expanded source book*. Sage, Newbury Park, CA.
 33. Nobanee, H., & Ellili, N. O. (2016). Corporate Sustainability Disclosure in Annual Reports: Evidence from UAE Banks: Islamic versus Conventional. *Renewable and Sustainable Energy Reviews*, 55, 1336-1341. <https://doi.org/10.1016/j.rser.2015.07.084>
 34. Petrushenko, Y. (2013). Peculiarities of implementing of the corporate social responsibility concept in the national economy of Ukraine. *Journal of Institutional Studies*, 5(1), 92-107. Retrieved from <https://hjournal.ru/en/journals/journal-of-institutional-studies/2013/56-no-1/484-peculiarities-of-implementing-of-the-corporate-social-responsibility-concept-in-the-national-economy-of-ukraine.html>
 35. Plastun, A., Makarenko, I., Yelnikova, Yu., & Sheliuk, A. (2018). Crisis and financial data properties: A persistence view. *Journal of International Studies*, 11(3), 284-294. <https://doi.org/10.14254/2071-8330.2018/11-3/22>
 36. Scholtens, B. (2009). Corporate social responsibility in the international banking industry. *Journal of Business Ethics*, 86(2), 159-175. <https://doi.org/10.1007/s10551-008-9841-x>
 37. Sierra-Garcia, L., Garcia-Benau, M. A., & Bollas-Araya, H. M. (2018). Empirical Analysis of Non-Financial Reporting by Spanish Companies. *Administrative Sciences*, 8(3), 29. <https://doi.org/10.3390/admsci8030029>
 38. Sobhani, F. A., Amran, A., & Zainuddin, Y. (2012). Sustainability Disclosure in Annual Reports and Websites: A Study of the Banking Industry in Bangladesh. *Journal of Cleaner Production*, 23(1), 75-85. <https://doi.org/10.1016/j.jclepro.2011.09.023>
 39. Sofian, I., & Dumitru, M. (2017). The Compliance of the Integrated Reports Issued by European Financial Companies with the International Integrated Reporting Framework. *Sustainability*, 9(8), 1-16. <https://doi.org/10.3390/su9081319>
 40. Sukhonos, V., & Makarenko, I. (2017). Sustainability reporting in the light of corporate social responsibility development: Economic and legal issues. *Problems and Perspectives in Management*, 15(1), 166-174. [https://doi.org/10.21511/ppm.15\(1-1\).2017.03](https://doi.org/10.21511/ppm.15(1-1).2017.03)
 41. Truant, E., Corazza, L., & Scagnelli, S. D. (2017). Sustainability and Risk Disclosure: An Exploratory Study on Sustainability Reports. *Sustainability*, 9(4), 636. <https://doi.org/10.3390/su9040636>
 42. Unerman, J. (2000). Methodological issues-reflections on quantification in corporate social reporting content analysis. *Accounting, Auditing & Accountability Journal*, 13(5), 667-681. Retrieved from <https://www.deepdyve.com/lp/emerald-publishing/methodological-issues-reflections-on-quantification-in-corporate-QZq5N8YBBG?>

APPENDIX A

Table A1. Q&C BMR index and bank rating in 2018

Source: Authors' calculations.

No.	Bank	Property	Score	Rating
1	CREDIT AGRICOLE BANK	F	92.857	A
2	Raiffeisen Bank Aval	F	92.857	A
3	Prominvestbank	F	92.857	A
4	MTB BANK	Pr	92.857	A
5	Oschadbank	Pu	85.714	A
6	Ukreximbank	Pu	85.714	A
7	ALFA-BANK	F	85.714	A
8	KREDOBANK	F	85.714	A
9	OTP BANK	F	85.714	A
10	UKRSIBBANK	F	85.714	A
11	MEGABANK	Pr	85.714	A
12	PUMB	Pr	85.714	A
13	BANK VOSTOK	Pr	85.714	A
14	CB PrivatBank	Pu	78.571	B
15	PROCREDIT BANK	F	78.571	B
16	INDUSTRIALBANK	Pr	78.571	B
17	CRYSTALBANK	Pr	78.571	B
18	TASCOMBANK	Pr	78.571	B

Table A1 (cont.). Q&C BMR index and bank rating in 2018

No.	Bank	Property	Score	Rating
19	UNIVERSAL BANK	Pr	78.571	B
20	BANK FORWARD	F	71.429	B
21	PIRAEUS BANK ICB	F	71.429	B
22	SEB CORPORATE BANK	F	71.429	B
23	Idea Bank	F	71.429	B
24	AP BANK	Pr	71.429	B
25	CB ACCORDBANK	Pr	71.429	B
26	UkrGasbank	Pu	71.429	B
27	Deutsche Bank DBU	F	67.857	B
28	BTA BANK	F	64.286	B
29	SBERBANK	F	64.286	B
30	CLEARING HOUSE	Pr	64.286	B
31	Pivdennyi Bank	Pr	64.286	B
32	BANK PORTAL	Pr	64.286	B
33	BANK UKRAINIAN CAPITAL	Pr	64.286	B
34	CIB	Pr	64.286	B
35	OKCI BANK	Pr	64.286	B
36	SETTLEMENT CENTER	Pu	57.143	C
37	JOINT STOCK BANK RADABANK	Pr	57.143	C
38	IBOX BANK	Pr	57.143	C
39	ALPARI BANK	Pr	57.143	C
40	BANK GRANT	Pr	57.143	C
41	BANK SICH	Pr	57.143	C
42	BANK FOR INVESTMENTS AND SAVINGS	Pr	57.143	C
43	COMINVESTBANK	Pr	57.143	C
44	MOTOR-BANK	Pr	57.143	C
45	FIRST INVESTMENT BANK	Pr	57.143	C
46	Ukrainian Bank for Reconstruction and Development	Pr	57.143	C
47	UNEX BANK	Pr	57.143	C
48	BANK FAMILNY	Pr	57.143	C
49	CREDITWEST BANK	F	50.000	C
50	CITIBANK	F	50.000	C
51	ALTBANK	Pr	50.000	C
52	ASVIO BANK	Pr	50.000	C
53	BANK CREDIT DNEPR	Pr	50.000	C
54	CB ZEMELNY CAPITAL	Pr	50.000	C
55	MetaBank	Pr	50.000	C
56	RWS BANK	Pr	50.000	C
57	SKY BANK	Pr	50.000	C
58	UKRCONSTINVESTBANK	Pr	50.000	C
59	Policombank	Pr	50.000	C
60	CREDIT EUROPE BANK	F	42.857	C
61	ING Bank Ukraine	F	42.857	C
62	JSCB ARCADA	Pr	42.857	C
63	JSCB CONCORD	Pr	42.857	C
64	JSCB Lviv	Pr	42.857	C
65	BANK 3/4	Pr	42.857	C
66	BANK TRUST-CAPITAL	Pr	42.857	C
67	EIB	Pr	42.857	C
68	PRAVEX BANK	F	35.714	D
69	A-BANK	Pr	35.714	D
70	CB GLOBUS	Pr	35.714	D
71	IIB	Pr	35.714	D
72	Poltava-bank	Pr	35.714	D
73	Misto Bank	Pr	28.571	D
74	BANK ALLIANCE	Pr	21.429	D
75	BANK AVANGARD	Pr	28.571	D

Note: F – banks of foreign banking groups; Pr – private equity banks; Pu – publicly-owned banks.