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Informational Performance of Audit

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Case of French Companies

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Discovering Thoughts, Inventing Future

VOLUME 22 ISSUE 2 VERSION 1.0



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: D
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VOLUME 22 ISSUE 2 (VER. 1.0)

OPEN ASSOCIATION OF RESEARCH SOCIETY

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USA Toll Free Fax: +001-888-839-7392

Offset Typesetting

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GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: D
ACCOUNTING AND AUDITING
Volume 22 Issue 2 Version 1.0 Year 2022
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Informational Performance of Audit Reports Content: Case of French Companies Listed on the Stock Exchange during the Decade 2010-2020

By Assoumou Menye Oscar

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Summary- Proliferation of financial scandals in past decades has caused significant changes both in the financial sector and in the economy in general, leading to a tightening of the rules for assessing economic equilibrium, assessing health and economic profitability of companies. In this context marked by the worsening of a terrible pandemic (covid-19) which upsets' managerial practices, the search for reliable sources of information becomes a priority for survival. Also, the audit report appears to be a reliable, credible source of information likely to improve business decision-making.

At the level of this article, we examine and analyze 4402 annual reports of 691 listed companies over a decade (2010-2020) and measure the effect produced by the presence (absence) of an auditor and the audit report that he emits. The latter appears as a potential double signal, which could impact the eyes of partners, in particular creditors, investors and shareholders.

Keywords: *statutory auditor, audit report, information content, date of event, reservations.*

GJMBR-D Classification: *DDC Code: 657.4580973 LCC Code: HF5616.U5*



Strictly as per the compliance and regulations of:



Informational Performance of Audit Reports

Content: Case of French Companies Listed on the Stock Exchange during the Decade 2010-2020

Assoumou Menye Oscar

Summary- Proliferation of financial scandals in past decades has caused significant changes both in the financial sector and in the economy in general, leading to a tightening of the rules for assessing economic equilibrium, assessing health and economic profitability of companies. In this context marked by the worsening of a terrible pandemic (covid-19) which upsets' managerial practices, the search for reliable sources of information becomes a priority for survival. Also, the audit report appears to be a reliable, credible source of information likely to improve business decision-making.

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The results gotten show that reservations and refusals to certify expressed by auditors harm stock market prices. However, the choice of the announcement date is essential. Among the three hypotheses retained concerning the date of the event, it seems that fifteen days before the date of the general meeting, the announcement of reserves becomes public, and investors react unfavorably to this bad news.

Keywords: statutory auditor, audit report, information content, date of event, reservations.

1. INTRODUCTION

The company's is often considered a complex entity whose various activities and the requirement of economic performance require regular and permanent control. Given the importance of these issues, it is essential that the diverse internal and external control systems are constantly imposed on the companys' to improve the efficiency and functioning of its activities.

In general, the issuance of an audit report meets different normative and legislative standards [2, 33]. Indeed, each country has its regulations which distinguish it, but also which differ from other countries, which makes necessary the use of a single model of the audit report that could be applied to all contexts, like the international audit report. The role assigned to the external auditor consists of giving his opinion on the accounts and the economic statements of the companies as well as on the various information such as the activity reports provided to the shareholders. He is thus the guarantor of the regularity and the sincerity of the data presented in the context of carrying out the due diligence deemed necessary according to the profession's standards. This description of the auditor's role shows that he is indeed a regulator of the accounting quality and financial information. However, it should be noted that this task requires permanent control of the company's accounting system [7].

The external auditor's report is often considered a significant communication tool for users of financial statements. It is, therefore, interesting to study the auditor's role, as an intermediary between the company and external investors. However, it's possible to understand this role through a theoretical and econometric analysis of the informative content of the auditor's report and, in particular, of the reservations that he has formulated.

This contribution attempts to answer an essential question: what behaviors do shareholders adopt around the dates on which auditors issue reservations on certain accounting items likely to affect the financial statements materially? To provide some answers, we wanted to understand the impact of the auditor's report through the study of the evolution of company prices at the time of its publication.

In the first section, we will make a synopsis of the primary research carried out in the field, the second section will detail the approach followed for the collection of data, the sources of the data, the rules retained in the constitution of the sample, the methodology adopted as well as than statistical tests. A third section after that will present the various tests

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carried out on the price share behavior around the dates on which the auditor's issue reservations on certain accounting items likely to affect the financial statements and last section significantly will summarize the main results and conclude.

II. OVERVIEW OF PREVIOUS RESEARCH

a) *Some preliminary observations*

One of the pioneering studies, from the point of view of the methodology used, and the size of the sample of audit reservations, is that of [14], who highlighted three series of methodological difficulties faced by event tests in general and in particular those concerning the effect of the auditor's stock price reservations. The authors show that, on the whole, the informative content of the auditor's report for the American market seems relatively weak, and, limited to the most serious cases of reservations. In another study, [15] concluded that press announcements of audit reserves "subject to" are rare, but if they occur, they induce adverse heritage effects on the stock price concerned. The study done by [17] leads to the same result. However, these results contrast with several other studies, which did not detect this adverse price reaction.

[14] (DDHL hereafter) studied the behavior of stock prices around the dates on which auditors' express reservations relating to uncertainty on certain accounting items, significant delays likely to materially affect the financial statements ("Subject to" qualified audit opinion). The sign and the significance of the abnormal returns of the shares of the companies for which the auditor could not express an opinion, for lack of having the necessary means for his audit work ("disclaimers of audit opinion") are also examined.

The authors consider all of these methodological, conceptual, and procedural problems by developing an original methodology. Indeed, unlike previous studies, DDHL took care to identify the announcement date with great precision.

Their sample is large enough to allow them to analyze the effects on prices of several types of reservations issued by the auditor. The tests on the behavior of cost and the underlying informative content of the reservations issued by the auditor come up against three significant problems: the definition of the date of public announcement, the anticipations, and the previous revelations, and finally, the concomitant revelations.

Regarding the first obstacle, the problem of identifying the announcement date arises in the majority of event studies. The difficulty here stems from the fact that, the first public announcement of a qualified opinion auditor's reservation may occur when the annual accounting result is publicly announced for the first time, when the annual report is available to the public, when the 10 -K is revealed to the public or else when the

company publishes an announcement in the press stating the auditor's reservations and often the difficulties encountered by the company. Studies that assume that the public announcement of a formulated reservation by the auditor is linked to a fixed date (for example the first announcement of accounting profit in the Wall Street Journal) therefore, have a minimal scope. Research undertaken by the authors reveals that it is difficult, if not impossible, to specify a single event date that represents the date of the public announcement of reserve notices for all companies.

Regarding the second hurdle, a qualified audit opinion is informative only to the extent that it reveals information not embodied in the lectures. Some reservations have been anticipated by the market following previous details. Thus, a reservation opinion which a priori is not good news for the company, can represent positive (negative) information for the market if the latter had expected a more (less) severe judgment from the auditor. The authors did not content themselves with observing the sign and the significance of average abnormal returns. They were able to control the problems related to expectations by constructing initial tests based on the technique of squared standardized forecast errors, developed by [6] and [35].

The problem of concurrent information is also difficult to solve. To reduce the impact, the authors examined abnormal returns over short intervals (3 to 5 days), ensuring that the publication of the accounting results is earlier.

b) *Process for changing audit reports in France*

For a very long time in France, audit reports have suffered from a negative image among readers who say they do not use them as a privileged source of information. These reports are often assimilated by their readers into a component of financial statements devoid of any actual informational content [38].

The evolution of the current French audit report to its present form has gone through several stages. First, the reform initiated by the CNCC¹ in 1995 is analysed by [23], who identifies five innovations, based on criticisms formulated by users of the audit report. These innovations concern the respective responsibilities of managers and statutory auditors, the nature of the assurance provided by the audit opinion, the scope of the tests carried out within the framework of the audit mission, more particularly, the appeal, the sampling approach, the nature of the reservations expressed by the auditor in his general report and the addition of a certain number of additional observations to the new audit report [18].

The second phase of the process of evolution of the French audit report corresponds to the introduction by the CNCC, in 2003, of two standards,

¹ National Company of Statutory Auditors.

"N°2-601: general report on the annual accounts" for the annual accounts of individual companies and standard "No. 2-602: report on the consolidated accounts" for the consolidated statements. The same year, there was the integration by the LSF². Of the second part of the audit report, "Justification of the assessments" of the auditor.

Another milestone in the process of changing the audit report in France corresponds to the introduction of the "NEP 700 and 705."³ standards respectively in 2007 and 2006. It should be noted that since the LSF in 2003, the standards audit has acquired the status of a ministerial decree which has made it possible to reinforce their applicability. This public nature makes these NSPs opposable to third parties and institutionalizes the normalizing role of the Company⁴.

c) *Perception of the usefulness and use of the audit report by shareholders and other economic actors*

Shareholders and investors nowadays seek to diversify the sources of information they consult to form an opinion on the solvency and profitability of the company. Among the documents required, we can cite the certified financial statements, mentioning the auditor's opinion on the reliability of the audited accounts. The place of audit reports among the sources of information mobilized by bankers, for example, has been dealt with by certain researchers) [31,32; 19; 5;25;4; 30]. The main observation resulting from this work reveals that this report is only one element among others that shareholders and potential investors consult [25; 39; 21; 38]. In addition, the usefulness of this report varies according to its informational content, more particularly, according to the nature of the audit opinion expressed.

In France, [38] specifies that the audit report occupies the 3rd place among the sources of information used by bankers, just after the financial statements, the appendices, and economic and sectoral data. In a study by [33] concerning the perception of audit reports with reservations by a sample of users, including bankers, the authors point out that the latter have difficulty understanding the sampling principle "testing" applied by auditors during their account verification. As for [33; 2], they highlight bankers' perception of the level of assurance provided by the audit report. Indeed, the audit opinion constitutes a form of guarantee for users regarding the reliability of the company's accounts. Similarly, this level of commitment is, in some cases, confronted with the materiality of the audit, which favors quantitative techniques, subject to criticism from bankers. These increasingly recurrent

criticisms, open the way to materiality of the audit⁵ based on qualitative factors [29].

In another study carried out, the American context, [2] specify that the extent to which stakeholders use the standard audit report (SAR)⁶ depends on their understanding of the message transmitted by the auditor. The authors emphasize the persistence of the gap in bankers' knowledge of the audit message. The common use of the audit report by bankers cannot be explained solely by factors related to its content but also by the very architecture of this document, which lacks consubstantiality. Similarly, the length of the audit report [11; 34] and the brevity of the information it contains [28; 37] seem to be at the origin of the weak attractiveness of this report to users.

The review of these studies allows us to note the existence of a certain ambiguity around the working methods adopted by the auditors, also, in the understanding of specific technical terms [2], which therefore influence their perception of the audit opinion. Indeed, the vagueness that surrounds the auditor's work can then explain the low use of the audit report by bankers or even certain economic operators.

III. INFORMATIONAL AND COMMUNICATIONAL VALUE OF THE FRENCH AUDIT REPORT

The audit report has often been the subject of numerous criticisms relating to its informational contribution and the content of the message it conveys. The communicative value of this report is called into question by authors who highlight the limited communicative potential of this report that does not manage to compete with other information media.

a) *Use of the audit report by companies*

Audit reports used by several professionals has been the subject of several studies [19; 33], mainly in the Anglo-Saxon context. Most of this research shows the low usefulness of the audit report, which unfortunately does not constitute a significant source of information for readers.

In the French context, the work of [22] shows the insufficient attention paid by readers to the financial information contained in audit reports. These raises questions about the communication ensured by the audit reports. One of the elements that may explain the low attractiveness of the audit report is the binary nature of this document, whether or not it validates the financial

² Financial Security Law of 08/01/2003.

³ The NEP 700 standard was revised and approved by order of May 26, 2017.

⁴ Source: <https://www.cncc.fr>

⁵ The materiality of the audit allows the auditor to determine the extent of the audit work, to make a judgment on the material nature of the accounting anomalies that he may have identified and to ultimately issue an opinion on the reliability and the sincerity of the accounting documents. Materiality is set according to quantitative criteria, but also qualitative criteria defined by professional standards (Lahbari and Manita, 2011).

⁶ Unqualified audit report.

statements, without providing additional information to these documents. In this sense, [34] specify that the communication model adopted in the audit report is triangular since it is the result of the interaction of the relationships between the person who produces the description (auditor), the message, or the text (the auditor's account). audit) and the referent (financial statements).

In the first study on the audit report, [21] analyses the information content and the communicative function of this document based on Shannon's ⁷ communication model. The author studies the audit report forms used by professionals such as financial analysts. The main results of this research show that the French professionals interviewed do not use this report in their decision-making processes since it does not allow the audit opinion expressed by the auditor to be transmitted effectively.

b) *Insufficient informational value of the audit report*

The reliability and completeness of the financial information provided by companies are among the main criteria observed by users. They pay particular attention to the quality of the information disclosed and its informational potential. However, since this document is included in the annual report, it does not arouse the users interest in a significant way, and, it often goes unnoticed in the mass of information communicated. Thus, the audit report is often described as a "standard" report (Mock et al. 2013) with low communicative value [11; 12] with no accurate informational content [33].

The research conducted by [11; 12; 34] in different contexts leads to the same conclusions on several points. The audit report, although it is read by several users, is still considered a binary "pass/fail report," which does not provide additional information. The extent of the criticism leveled at this document, and its common use have prompted some legislators to rethink the form and content of this report so it can better meet the expectations of its readers. Therefore, [33] recommend adding additional information to the audit reporting process to strengthen communication around the work done by the auditor. Other authors [41] justify the low use of the audit report by the nature of the information it contains. The authors point out that the current form of this report lacks transparency since it does not provide information on the anomalies not corrected by the management of the company as well as the cases of disagreement with the management (in addition to those which are considered to be insignificant by the listener).

IV. DATA AND METHODOLOGIES

The study covers the period 2010-2020; it concerns 4,402 annual reports of 691 listed companies, according to the distribution indicated in table 1. The total number of consolidated statements is 2,049⁸.

⁷ The communication model of Shannon and Weaver (1948) or the general system of communication.

⁸ Certain reports concerning the period 2005-2009 were also examined. But due to their small number (34 in total), these reports are excluded from the study.

Table 1: Number of reports examined over the period

Year	Number of reports	Number of Companies	Year	Number of reports	Number of Companies
2010	57	46	2016	610	18
2011	162	114	2017	623	10
2012	498	342	2018	606	17
2013	551	90	2019	107	3
2014	575	36	2020	30	-
2015	583	15	2010 to 2020	4 402	691

The review of the reports led to an initial taxonomy of the opinions expressed. The views expressed are divided into five major groups: reports without reservations and observations (01); reports with reservations (02); reports with comments (03), reports with remarks and findings (04); and finally, writes with refusal to certify (05)⁹.

The reasons that led to the formulation of these reservations are ten in number. Out of 304 counted reports, 288 are used¹⁰. Their breakdown by reason is given in Table 2.

Table 2: Breakdown of reports by type of reservation

Year	Number of reports
Uncertainty	88
Limitation of work	39
Accounting principles	40
Non-recognition of transactions and provisions	27
Commitment to pensions and leave	37
Non-compliance with consolidated principles	44
Refusal to certify	13
Reports with reservations	288

a) Choosing the date of the event

One of the hurdles of informational content event testing is the problem of identifying the announcement date. Previous research reveals that it is difficult, if not impossible, to specify a single (or pure) event date that represents the date of the public announcement of reserve notices for all companies.

For each of the companies selected, five dates was noted: the date of the General Meeting; the date of signature of the statutory auditor in the annual and consolidated report; the date of the end of the financial

year; the date of publication of informations in the Bulletin d'Annonces Légales Obligatoires (BALO); the date of announcement of reservations in the press.

It appeared that the report's publication in the BALO occurred after the date of signature by the auditor. As for the publication of reservations in the press, this practice is almost non-existent since only three announcements are listed there. Three hypotheses has been formulated: the first retains a date to fifteen days before the General Meeting of Shareholders (GM-15); the second corresponds to the date of signature by the statutory auditor of the annual and consolidated reports; the third corresponds to the average of the two dates.

Unlike the studies carried out in the United States, this study covers all the reservations expressed on the accounts of listed companies. Despite their interesting methodological approaches, the three most important studies in this area [14; 15; 17] have certain limitations, particularly with regard to the informative content of audit reports.

Apart from the DDHL study, which uses the reservation "Subject to" and "the refusal to certify," and the study by [15], which uses the announcement of reservations in the press, the other works are entirely devoted to examining the first category of "subject" reservations. Part of this limitation is linked to the fact that the different types of reserves are not considered to be material elements, in particular by audit professionals in the United States. However, it should be remembered that opinions such as "adverse opinion" and "refusal to certify" can have a pretty different impact from that of "subject to," even if by the number, the latter is more important. In this study, all the types of reservations and the reasons concerned are examined to carry out various tests in this area.

In addition, in previous studies, several methodological obstacles, among which the determination of the date of event are observed. In this regard, DDHL considers a few critical issues in this type of event study: determining the size of the period, determining the date of publication of audit reports, the effect of concurrent information not taken into account by the models, and the rigorous integration of the phenomenon of anticipation.

⁹ Certain reports are excluded from this classification; these are reports in which reserve elements are brought together in accordance with the standards of the Compagnie Nationale des Commissaires aux Comptes (CNCC) but which have not been formally mentioned in the paragraph reserved for the opinion of the auditor. Sixty-seven reservations of this type over the study period are observed. For this category of reservations, the tests concerned are carried out separately and, out of caution, only the reservations formally issued by the statutory auditors are retained for the empirical study.

¹⁰ For three types of reserves, due to low numbers, event tests are not carried out.

The disclosure, for example, in the press of the reservations expressed by the auditor before the publication of the annual reports is rare, even in the United States. The study by [15] concerning this subject is carried out on 114 cases of "subject to" reservations published in the Wall Street Journal. In France, this phenomenon is almost non-existent. The publication of reserves, like other types of accounting information, is observed in the BALO simply after the publication of annual and consolidated reports.

b) Quantification of shareholder reaction

The shareholder's reaction to the publication of audit reports cannot be equated with observed profitability, insofar as other information published simultaneously is likely to affect prices. The methodology of the event study consists of a modeling of "normal" profitability, the "abnormal" part or attributable to the event studied being evaluated by difference with the observed profitability [3].

Simulations by [8; 9] have shown that other simpler variants than the CAPM can be, under certain conditions, as efficient as the most sophisticated models. These results were confirmed by the studies of [16; 26, 27].

In the event of missing data, the missing prices are replaced by the uniform distribution method justified by [24]. The study window or event period is set at thirty sessions on either side of the announcement date.

Different approaches are used to define the norm: the naive system, which consists of equating the standards with the profitability of the market (which is equivalent to assuming that the beta of the security is equal to one), and the market model. In the latter case, several approaches have been used to estimate the beta coefficient: ordinary least squares (OLS), the estimator of [13], that of [36], and finally that of [20]. The index used is weighted by market capitalization. The results obtained using an equally weighted index are not significant. It could be linked to the fact that a substantial number of reservations expressed by auditors relate to large companies. Therefore, when estimating the market model and that of Dimson with an equal-weighted index, the importance of the capitalization of these companies is not reflected.

c) Testing the significance of shareholder reaction

The average return in excess at a given session t is formulated by relation 1.

$$MAR_t = \frac{1}{N} \sum_{i=1}^N AR_{i,t} \quad \forall t = -30, \dots, +30 \quad (1)$$

With MAR_t the average abnormal return of the sample considered over the interval t ; $AR_{i,t}$, the abnormal return of security i over the interval t and N the number of observations.

The cumulative average abnormal return at date t ($CMAR_t$) is defined by relation 2.

$$CMAR_t = \sum_{t=-30}^t MAR_t \quad (2)$$

A Student's test makes it possible to decide on the significant nature of a return; thus, for a given session t , relation 3 gives the Student's tests applied to the average of the excess returns, and relation 4, that applied to the cumulative return mean.

$$T_t = \frac{MAR_t}{\sigma_{MAR_t}} \quad (3)$$

$$CT_t = \frac{CMAR_t}{\sqrt{n} \cdot \sigma_{MAR_t}} \quad (4)$$

The variance of the average abnormal return is estimated over a period preceding the study window and using two methods. The first assumes the independence of the excess average returns from one security to another: the standard deviation calculated on the time series MAR_t is expressed according to relationship 5.

$$\sigma_{MAR_t} = \sqrt{\frac{1}{179} \sum_{t=-211}^{-30} (MAR_t - \overline{MAR})^2} \quad (5)$$

$$\text{With } \overline{MAR} = \frac{1}{180} \sum_{t=-210}^{-31} MAR_t$$

The second method:

$$\sigma_{MAR_t} = \sqrt{\frac{1}{N^2} \sum_{i=1}^N \sigma_{AR_{i,t}}^2} \quad (6)$$

With

$$\sigma_{AR_{i,t}}^2 = \frac{1}{179} \sum_{t=-211}^{-31} (AR_{i,t} - \overline{AR_i})^2 \text{ et } \overline{AR_i} = \frac{1}{180} \sum_{t=-211}^{-31} AR_{i,t} \quad (7)$$

The Student statistic TC_t as calculated assumes that:

$\sigma_{CMAR_t}^2 = (t + 30 + 1) \sigma_{MAR_t}^2$ from the assumption of serial independence.

For a significance level set at 5%, the T_t statistic follows a Student law with $N-1$ degrees of freedom where N is the number of securities in the sample.

V. THE REACTION OF SHAREHOLDERS TO THE PUBLICATION OF AUDIT REPORTS

In a first step, the behavior of share prices is studied around the dates on which the auditors issue reservations on the financial statements. The sign and the significance of the abnormal returns of the shares of the companies for which the auditor was unable to express an opinion are also examined, either because of the seriousness of the reservations observed in the financial statements, or because of the absence of sufficient means to carry out the verifications necessary for its mission.

Most of the studies carried out in the United States use the information contained in the "National Automated Accounting Research System" (NAARS) database to collect data concerning reservations

expressed by auditors. In the absence of such a database in France, direct research is undertaken to gather the necessary information concerning this study. It can be considered an essential factor concerning the reliability and validity of the results obtained.

To better explain the impact of reserves on stock prices around the chosen event dates, the study is also conducted on the subgroups detailed in Table 2.

Empirical tests are performed on the following data:

- All reservations and refusals to certify are mentioned in the annual and consolidated reports;
- All reservations not explicitly mentioned in the paragraph of the auditor's opinion, in the annual and consolidated reports. It should be emphasized that certain information mentioned in words in the form of an observation or a remark is the basis of this investigation;
- All the reservations issued for the first time (and also for the second and third) in the annual and consolidated accounts of all the companies in the sample (the method chosen by DDHL);
- All of the reservations (except the first reservation) are expressed in the annual and consolidated accounts of the companies in the sample;
- All the reservations are expressed on the consolidated accounts from the year 2016.

All results assume an accumulation over the interval (-30, +30) around the chosen announcement date. To facilitate the presentation of the results, the interval -15 to +25 is retained on the graphs, it can be reduced in certain tables.

a) The impact of the announcement of reservations and the refusal to certify issued by the statutory auditors

In a first step, the average abnormal return and the cumulative average abnormal return were calculated for all the reservations and refusals to certify issued by the auditors. Table 3 shows the reservations and denials to certify mentioned by the statutory auditors in the annual and consolidated reports of the companies in the sample.

The results show an adverse reaction around the event date (from twenty days before the event date until the end of the study period)¹¹. The average abnormal return is negative and significant one day before the event date (-0.32% with a t Student of 2.04). At date zero (date AG-15), the average abnormal return is 0.04% (t Student 0.29) but is insignificant. The magnitude of negative profitability in the following days becomes increasingly essential. From the third day after the date of the event (the return is 0.46% with a t Student

of 2.94 on the date t+3), these returns are often negative¹².

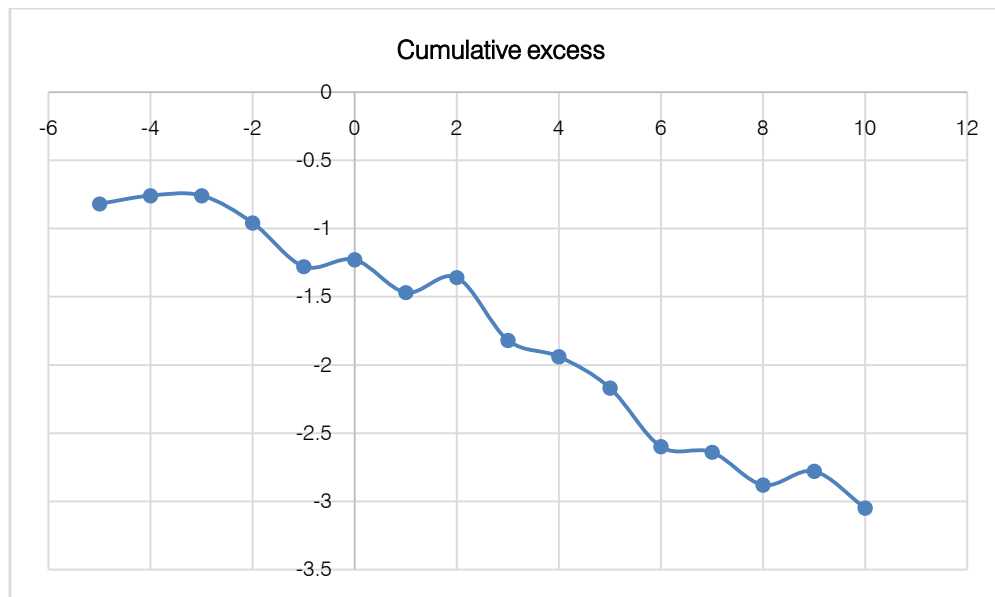
Table 3: Overall impact of reservations and refusal to certify on shareholder wealth

Date	Excess profitability	Cumulative excess	T-test	Cumulative T-test
-5	-0,30	-0,82	-1,93	-1,04
-4	0,06	-0,76	0,41	-0,94
-3	-0,13	-0,76	-0,01	-0,97
-2	-0,19	-0,96	-1,27	-1,14
-1	-0,32	-1,28	-2,04	-1,49
0	0,04	-1,23	0,29	-1,42
1	-0,24	-1,47	-1,55	-1,67
2	0,11	-1,36	0,71	-1,52
3	-0,46	-1,82	-2,94	-2,00
4	-0,12	-1,94	-0,76	-2,10
5	-0,22	-2,17	-1,43	-2,31
6	-0,43	-2,60	-2,77	-2,74
7	-0,04	-2,64	-0,25	-2,75
8	-0,24	-2,88	-1,51	-2,95
9	-0,09	-2,78	0,60	-2,81
10	-0,27	-3,05	-1,73	-3,05

Note: Returns (excess and cumulative) are expressed as a percentage. Abnormal returns are defined concerning the market model; the announcement is assumed to be 15 trading days before the general meeting, and the number of observations is 288.

¹¹ The results in Table 3 are obtained by the naive approach of deducting the return of the index from that of the stock. However, the results obtained are not very sensitive to methodological variants Soltani [1992].

¹² When using the second and third event date, the results are also significant even one day after the event date. The average abnormal return is 0.61% with a t Student of 4.12 on date t1 one day before the second event date; date of signature of the auditor's report. In the case of the third event date, the significance of the returns is observed from the first day after date zero (the return of -0.44% with a t student of 2.84 on date t1, these results are not detailed here, see Soltani [1993]).



Note: This graph represents the cumulative returns over Table 3, 15 sessions before and 25 after the announcement date, which is supposed to be 15 days before the date of the general meeting.

Graph 1: Excess returns around the announcement of reserves

From the results of the tests of the impact of the announcement of reservations and the refusal to certify issued by the statutory auditors on the annual and consolidated financial statements, three main ideas emerge:

- Average abnormal returns are negative around the different event dates. These returns are significant, especially in the interval -1, +3 (one day before and three days after the event dates);
- Among the event dates used, the one corresponding to 15 days before the general meeting gives the most satisfactory results;
- The application of the two market models, simple and Dimson, leads to often similar results in the case of each event date.

The issuance of reservations and the refusal expressed by the statutory auditors in the annual and consolidated reports have a negative and significant impact around the date of the event. It shows that the market reacts to this lousy news well before the announcement date (15 days before the date of the general meeting). This trend will also continue after the event date.

However, the choice of the announcement date is essential. Among the three hypotheses retained concerning the date of the event, it seems that fifteen days before the date of the general meeting, the announcement of reserves becomes public, and investors react unfavorably to this bad news.

b) *The impact of reservations observed but not explicitly mentioned in the paragraph of the auditor's opinion*

To identify the reservations expressed by the statutory auditors, over four thousand annual and

consolidated company reports were examined. Regarding the opinion of the auditors, several types are mentioned in the reports. These are opinions expressed mainly in reservations, observations, remarks, and refusals to certify. In addition, the research carried out reveals certain types of anomalies concerning the conformity of the contents of the reports with the standards established by the CNCC. Among these anomalies, we can mention elements of reservations that are gathered following the standards of the CNCC but that have not been the subject of formal mention in the paragraph reserved for the opinion of the auditor. According to the research, sixty-seven such reserves were observed over the study period. For this category of reservations, the tests concerned are carried out separately, out of caution, only the reservations formally issued by the statutory auditors are retained for the empirical study. However, it is interesting to see whether the publication of information that is not officially expressed in the form of reservations in the reports of the statutory auditors, but which nevertheless contains elements of reservations according to CNCC standards, has an impact or not on stock prices. The same tests carried out on the reservations formally expressed in the reports of the statutory auditors are applied to this type of reservation.

The results show (even though this information is not mentioned in the form of reservations formulated by the auditors in the annual reports) that the market reacts to this type of information. When we use the simple market model with a weighted index (Table 4), for the third event date (the average of two event dates), we observe negative abnormal returns, especially after the event date (-0.69% with a t Student of 2.17 on date 1+4,

four days after the event date). These returns are often negative and significant in the days following the date of the event¹³.

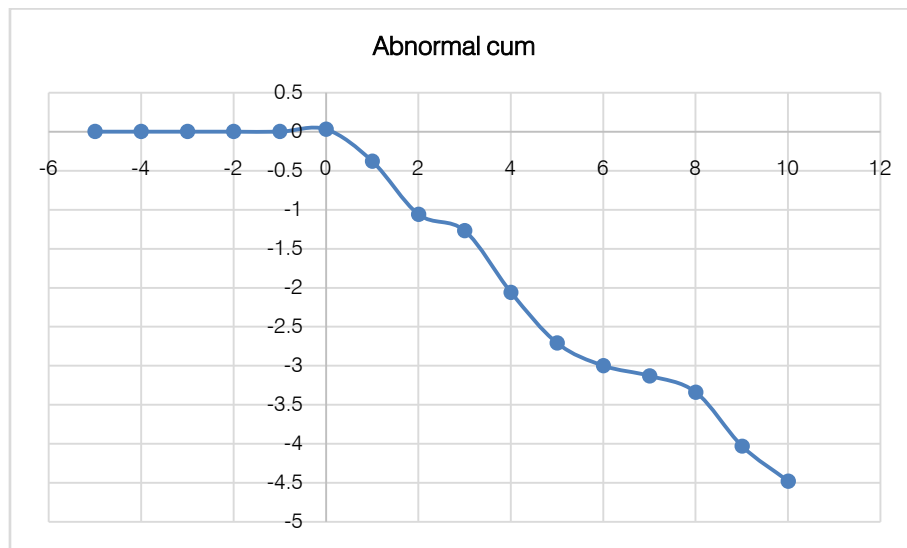
Regarding the second and third event dates, the results obtained are not significant until a few days

later. However, we still observe negative abnormal returns around the event dates.

Table 4: Announcement of reservations not mentioned in the reports

Date	Abnormal profitability	T-Test	Abnormal Cum.	T-test
-5	-0,12	-0,38	0	0
-4	-0,10	-0,33	0	0
-3	-0,18	-0,56	0	0
-2	-0,54	-1,72	0	0
-1	-0,50	-1,59	0	0
0	0,02	0,08	0,03	0,08
1	0,01	0,32	-0,38	-0,69
2	-0,14	-0,44	-1,06	-1,50
3	-0,03	-0,09	-1,27	-1,52
4	-0,69	-2,17	-2,06	-2,17
5	-0,53	-1,67	-2,71	-2,58
6	-0,45	-0,44	-3,00	-2,63
7	-0,72	-2,27	-3,13	-2,56
8	-0,02	-0,07	-3,34	-2,56
9	-0,71	-2,25	-4,03	-2,93
10	-0,29	-0,93	-4,48	-3,09

Note: The returns (excess and cumulative) are expressed in percentages. 59 events are used. The assumed announcement date is set in the middle of the interval between 15 days before the date of the AGM and the date of signature by the auditor of the reports. Abnormal returns are defined regarding the market model. $R_{it} = \alpha_j + b_j R_{mt} + e_{jt}$.



Note: Based on the data in Table 4. The cumulative excess returns are marked by dots joined by a solid line.

Graph 2: Announcement of reservations not mentioned in the reports

As in the previous case (when the second and third event dates are used), average abnormal returns are observed around the intervals used. These results, although significant, are less good than those obtained by using the event date the day (d0 -15) before the date of the general meeting.

Note that, in the previous table, for a date t, the cumulative average abnormal return is calculated by the

sum of the average abnormal returns between -t and +t. For example, for t5, this return represents the sum of the average abnormal returns from t = -5 to t = +5.

¹³ The use of the Dimson model with a weighted index leads to similar results, because at date t+3 (three days after the first event date), the average abnormal return is significant and different from zero (the return is 0.74% with a t student of 2.11).

These results show that the market is reacting to this bad news. However, this negative impact is less significant than when the reservations are clearly expressed by the auditors in the annual reports.

Insofar as these unmentioned reservations are expressed in the form of an observation or a remark which turns into a reservation in the following years, the market may interpret these observations or these remarks as valid reservations.

One of the significant difficulties concerning the interpretation of the reports of French auditors is the existence of several types of information such as observation, remark, observation, etc., that are not expressed in a standardized form. While the existence of such data in auditors' reports is considered valuable, it may increase the risk of misunderstanding by investors and other interested parties.

c) *The reservations expressed by the auditors on the accounts of several years*

i. *The informative content of the first reservation issued by the statutory auditors*

When the auditor notices errors, anomalies, or irregularities in the accounting principles application or when he sees one or more uncertainties affecting the

annual or consolidated accounts, he expresses his opinion on the statement with a reservation. In subsequent years, the company is likely to take into account the opinion expressed by the auditor and correct any errors or anomalies mentioned in his report. However, there are several cases where the auditor says reservations about the accounts of a company for several successive years. For example, in the previous case, when anomalies that led to reservations or refusal to certify the annual or consolidated accounts for the previous financial year no longer exist at the end of the financial year, the auditor must examine the consequences possible of the impact of the reservations made on the accounts of the previous financial year. Another example relates to the anomaly or error that gave rise to a reservation that remains.

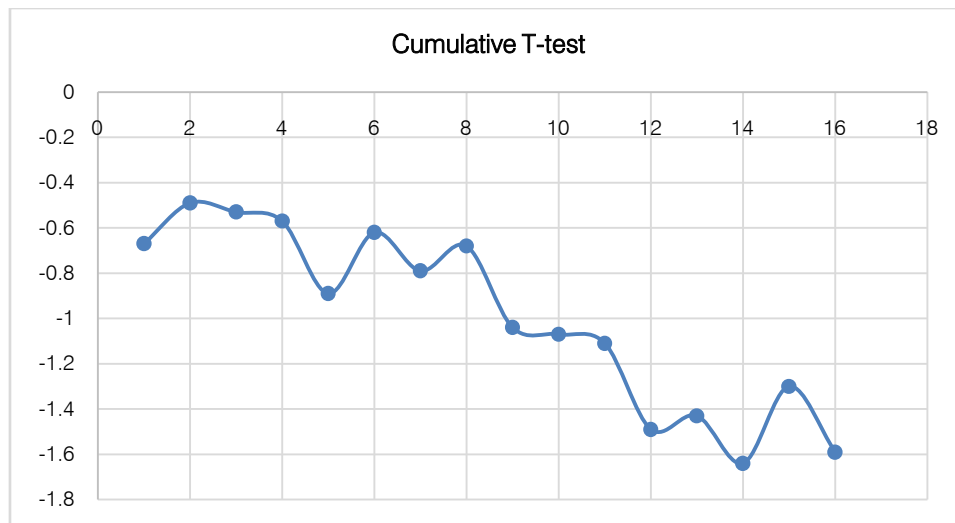
In order to determine the effect of the reservation expressed for the first time in the reports of the Statutory Auditors, the event tests are carried out on all the companies in the sample for which one or more reservations are expressed for the first time. This is consistent with the study done by DDHL, which consider only the first public announcement of a reserve.

Table 5: Announcement of reservations and refusal to certify issued for the first time

Date	Excess return	T-test	Cumulative excess	T-test on cumulative
-5	-0,08	-0,43	-0,60	-0,67
-4	0,15	0,89	-0,45	-0,49
-3	-0,04	-0,24	-0,49	-0,53
-2	-0,05	-0,30	-0,54	-0,57
-1	-0,31	-1,78	-86	-0,89
0	0,25	1,44	-0,60	-0,62
1	-0,19	-1,07	-0,78	-0,79
2	0,11	0,61	-0,68	-0,68
3-	-0,38	-2,16	-1,06	-1,04
4	-0,05	-0,28	-1,11	-1,07
5	-0,05	-0,31	-1,16	-1,11
6	-0,43	-2,44	-1,59	-1,49
7	0,04	0,25	-1,54	-1,43
8	-0,25	-1,44	-1,79	-1,64
9	0,36	2,07	-1,43	-1,30
10	-0,35	-1,99	-1,78	-1,59

Note: Returns (excess and cumulative) are expressed as a percentage. One hundred ten events are used. The supposed announcement date is set 15 days before the GA date. Abnormal returns are defined regarding the market model. ($R_{it} = a_i + b_j R_{mt} + e_{jt}$).

Table 5 shows the average abnormal returns around the first event date (AG - 15) using the simple market model. As this table shows, average abnormal returns are negative around the event date. These returns are significant, particularly on the third day after the event date (-0.38% with a Student's t of 2.16) and on date, t6 (-0.43% with a Student's t of 2.44).



Note: Based on the data in Table 5. The points joined by a solid line represent the average cumulative abnormal returns (CMARt).

Graph 3: Announcement of reservations and refusal to certify issued for the first time

ii. The impact of all the reservations except that of the first reservation

After examining the informative content of the reservations issued for the first time, one can wonder whether all the reservations mentioned in the auditor's reports in the following years can have an impact on stock prices. These makes it possible to show the importance of the reaction of the stock market to the information mentioned in the reports of the auditors, knowing that the investors already hold information concerning the reserves announced in the first year.

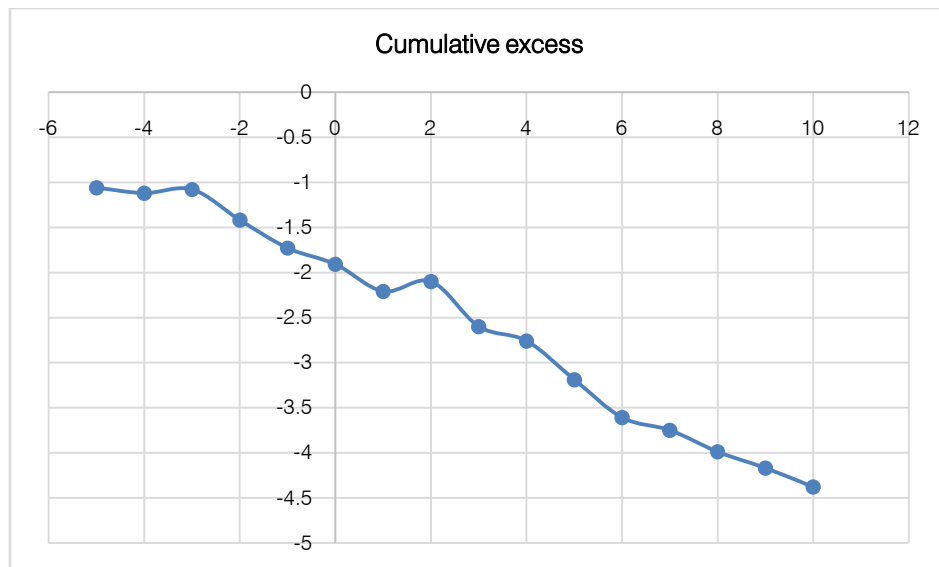
Despite information concerning reservations due to the announcement of this by auditors on company accounts in the past, the following results show that the impact of reservations and refusals to

certify on stock prices is always negative and significant. Table 6 shows the average and cumulative abnormal returns around the first event date (AG-15). These returns are unfavorable well before the event date. For example, five days before the event date, profitability is significantly different from zero at the 5% threshold (-0.50% with a t student of 2.04). These results show that investors can anticipate reservations issued by auditors on specific companies, because the information of the first reservation on these companies already exists. In addition, the significance of the results after the event date shows that the renewal of reservations and refusals to certify a very significant impact on the share prices of the companies concerned.

Table 6: Announcement of reservations and refusal to certify issued except for the first time

Date	Excess return	T-test	Cumulative excess	T-test on cumulative
-5	-0,50	-2,04	-1,06	-0,85
-4	-0,06	-0,23	-1,12	-0,87
-3	0,04	0,04	-1,08	-0,83
-2	-0,35	-0,35	-1,42	-1,08
-1	-0,31	-0,31	-1,73	-1,28
0	-0,19	-0,19	-1,91	-1,39
1	-0,29	-0,29	-2,21	-1,59
2	0,12	0,12	-2,10	-1,49
3	-0,51	-0,51	-2,60	-1,82
4	-0,15	-0,15	-2,76	-1,89
5	-0,44	-0,44	-3,19	-2,17
6	-0,41	-0,41	-3,61	-2,41
7	-0,14	-0,14	-3,75	-2,48
8	-0,24	-0,24	-3,99	-2,60
9	-0,19	-0,19	-4,17	-2,69
10	-0,21	-0,21	-4,38	-2,79

Note: The returns (excess and cumulative) are expressed in percentages. One hundred seven events are used. The supposed announcement date is set 15 days before the GA date. Abnormal returns are defined with reference to the market model ($R_{it} = a_j + b_j R_{mt} + e_{jt}$).



Note: Based on the data in Table 6. The points joined by a solid line represent the average cumulative abnormal returns (CMARt).

Graph 4: Announcement of reservations and refusal to certify except for the first time

iii. The impact of reservations issued on company accounts for the second time

According to the standards established by the CNCC, when elements give rise to a reservation from the auditor on the financial statements of a company in a specific year and persist the following year, the latter can mention in his report the reservation expressed previously. Three cases are mentioned in the CNCC standards under the heading of "resumption of reservations and refusal to certify from the previous year."

- The reasons for the reservation or refusal remain: the auditor quantifies the impact on the result and

expresses a reservation or refuses to certify the annual accounts.

- The reasons for the reservation or refusal no longer exist due to the corrections made by the company, the modifications have affected the result of the current financial year and justified a new reservation.
- Corrections made by the company corrected the anomaly without impacting the current result. If the statutory auditor deems it necessary to ensure a follow-up, he may mention it in the context of the observations provided for by the regulations in force.

Table 7: Announcement of reservations and refusal to certify issued for the second time

Date	Excess return	T-test	Cumulative excess	T-test on cumulative
-5	-0,21	-0,74	-0,41	-0,01
-4	-0,61	-2,12	-0,62	-0,41
-3	-0,20	-0,69	-0,82	-0,54
-2	-0,63	-2,18	-1,45	-0,93
-1	-0,87	-3,01	-2,32	-1,47
0	-0,01	-0,05	-2,33	-1,45
1	-0,65	-2,27	-2,98	-1,83
2	0,46	1,59	-2,52	-1,53
3	-0,83	-2,88	-3,35	-1,99
4	-0,16	-0,55	-3,51	-2,06
5	0,08	0,28	-3,43	-1,99

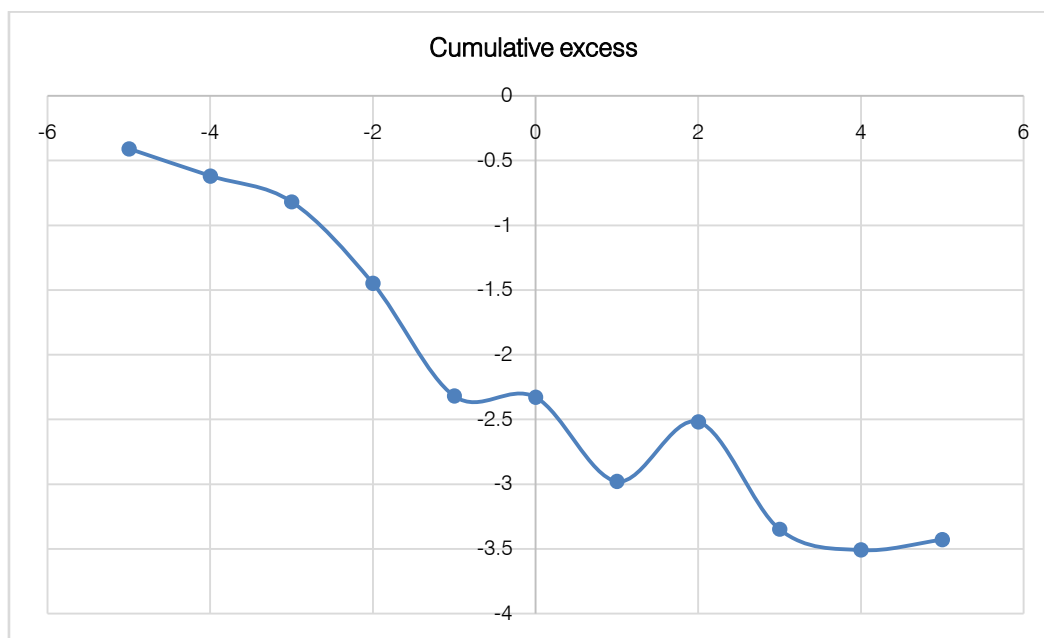
Note: Returns (excess and cumulative) are expressed as a percentage. Forty-nine reservations and refusals to certify are used. The assumed announcement date is that of the report's signature by the auditors. Abnormal returns are defined regarding the market model ($R_{it} = \alpha_j + \beta_j R_{mt} + e_{jt}$).

To examine the impact of the reservations expressed by the auditors on the financial statements of the companies in the following years, various event tests are carried out. Table 7 shows the average and cumulative abnormal returns around the second event

date (date of the signature of the report by the auditor) using the simple market model. It should be recalled that the use of the Dimson model leads to similar results.

As shown in Table 7, the reversal of reserves and the refusal to certify the previous year have a negative and very significant impact on the prices of the securities of the companies in the sample. The average

abnormal returns are very substantial over the interval -1, +1, (-0.87% with a t student of 3.01 and -0.65% with a t student of 2.27, respectively).



Note: according to the data in Table 7. The points joined by a solid line represent the cumulative average abnormal returns (CMAR_t).

Graph 5: Announcement of reservations and refusal to certify issued for the second time

It means that users of the auditors' reports examine with greater attention the impact of the reservations made on the annual and consolidated accounts for the previous financial year. It is observed that these results are more significant than those of the reservation formulated for the first time. In addition, even if the nature of the reservations is often identical, the impact of these reservations is considered by investors as bad news, mainly when information concerning these reservations in the first year is available.

However, when reservations expressed for the third time (25 reservations) by the auditors on the annual or consolidated financial statements are used, the results (average abnormal returns) are not significant. However, there are always negative returns around the event date.

d) *The informative content of the various reasons for reservations mentioned in the annual and consolidated reports*

As shown in Table 2, 304 reservations and refusals to certify are broken down by reason into ten different classes. For the following six types of reservations observed in the annual or consolidated reports of the companies in the sample, event tests are carried out: uncertainty, limitation of work, accounting principles, non-recognition of operations and provisions, pension commitments, and leave, non-compliance with international regulations. In this work, the results

concerning three types of reservations are presented: "uncertainty," "limitation of work," and "disagreement on accounting rules and principles."¹⁴

i. *The informative content of the "uncertainty" reservations*

In certain circumstances, the company's managers do not have sufficient information to translate a situation according to which a concrete decision can be made. For example, when the auditor prepares his report, there are risks relating to certain transactions which cannot be provisioned, or the amount of which can only be provided to a reasonable approximation because their amount is uncertain or not known, or the probability of occurrence is doubtful.

Whether the risk is provisioned or not, the auditor could not obtain sufficient evidence to justify the amount provided or the absence of provision. In addition, going concern risk may be a particular case of uncertainty.

In the present study, among the 304 reserves that are the subject of event tests, 88 are for reasons of uncertainty. Table 8 shows the results for event tests performed on the uncertainty reserves, choosing the third event date (the average between the first two dates).

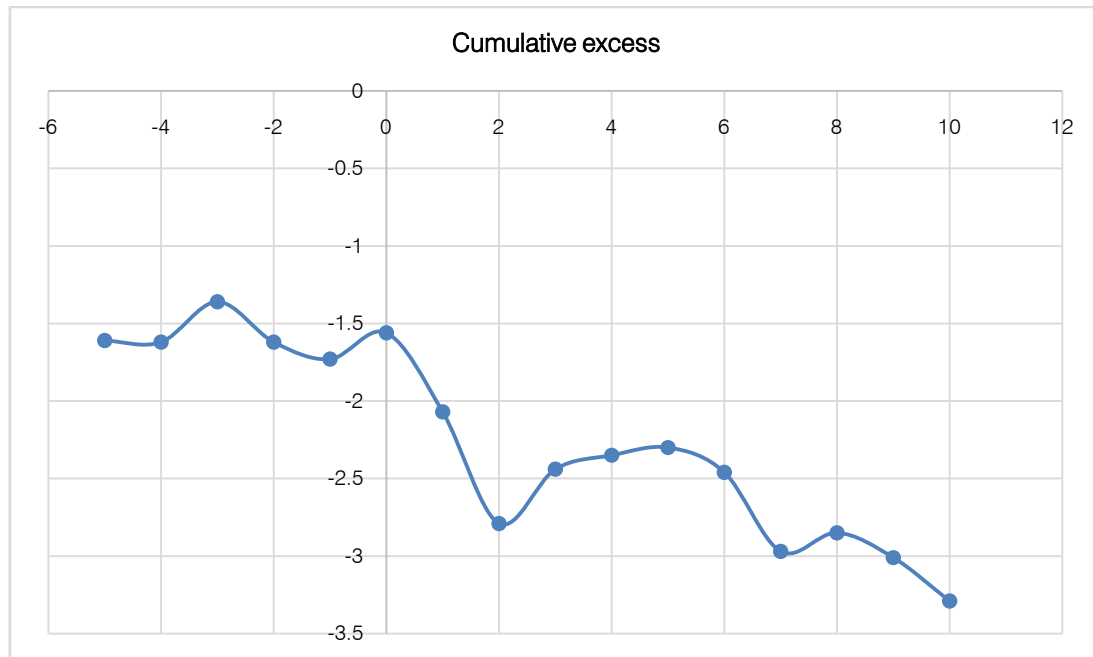
¹⁴ For other types of reserves, see Soltani [1993]

Table 8: Announcement of “uncertainty” reserves

Date	Excess return	T-test	Cumulative excess	T-test on cumulative
-5	-0,26	-1,02	-1,61	-1,21
-4	-0,01	-0,04	-1,62	-1,19
-3	0,26	1,01	-1,36	-0,99
-2	-0,26	-1,02	-1,62	-1,16
-1	-0,11	-0,43	-1,73	-1,22
0	0,17	0,66	-1,56	-1,08
1	-0,51	-1,97	-2,07	-1,41
2	-0,71	-2,75	-2,79	-1,87
3	0,35	1,34	-2,44	-1,62
4	0,09	0,36	-2,35	-1,53
5	0,08	0,18	-2,30	-1,48
6	-0,16	-0,64	-2,46	-1,56
7	-0,51	-1,95	-2,97	-1,86
8	0,12	0,45	-2,85	-1,76
9	-0,15	-0,59	-3,01	-1,83
10	-0,29	-1,10	-3,29	-1,98

Note: Returns are expressed as a percentage. sixty-nine events are used. The assumed announcement date is set in the middle of the interval between 15 days before the date of the AGM and the date of signature of the reports by the auditor. Abnormal returns are defined regarding the Dimson model, according to the specification:

$$R_{i,t} = a_i + \sum_{\tau=-2}^{+2} \beta_{i,t-\tau} RM_{t-\tau} + e_{i,t}; \text{ With RM the index returns, and e the excess returns.}$$



Note: The points joined by a solid line represent the cumulative average abnormal returns (CMARt).

Graph 6: Announcement of “uncertainty” reserves

As the results show, average abnormal returns are negative around the event date. However, these returns are not always significant. Two days after the event date, the profitability is -0.71% (Student's t 2.75) when applying the Dimson model (that for the market model is -0.66% with a t of Student of 2.52). Overall, the results show the seriousness of this type of reserve, because before and after the three-event dates, abnormal returns are often negative.

ii. The “work limitation” reserve and its impact on stock market prices

According to the standards established by the CNCC, the limitations constitute an impossibility for the statutory auditor to implement the procedures that he deemed necessary, and those concerning the collection of evidence.

Table 9: Announcement of reservations "limitation of work"

Date	Excess return	T-test	Cumulative excess	T-test on cumulative
-5	-0,52	-0,99	-0,67	-0,25
-4	-0,79	-1,50	-1,47	-0,54
-3	-0,58	-1,08	-2,04	-0,73
-2	0,34	0,65	-1,70	-0,60
-1	-0,14	-0,26	-1,83	-0,64
0	-0,31	-0,59	-2,14	-0,73
1	-1,16	-2,21	-3,31	-1,11
2	-0,69	-1,31	-3,99	-1,32
3	-1,16	-2,20	-5,15	-1,68
4	0,46	0,88	-4,69	-1,51
5	0,12	0,23	-4,57	-1,45
6	-1,22	-2,23	-5,79	-1,81
7	-0,12	-0,23	-5,91	-1,82
8	0,02	0,04	-5,89	-1,78
9	0,37	0,71	-5,51	-1,66
10	-1,01	-1,92	-6,52	-1,94

Note: The returns (excess and cumulative) are expressed in percentages. Twenty-five events are used. The assumed announcement date is set 15 days before the AGM date - Abnormal returns are defined regarding the Dimson model, according to the specification:

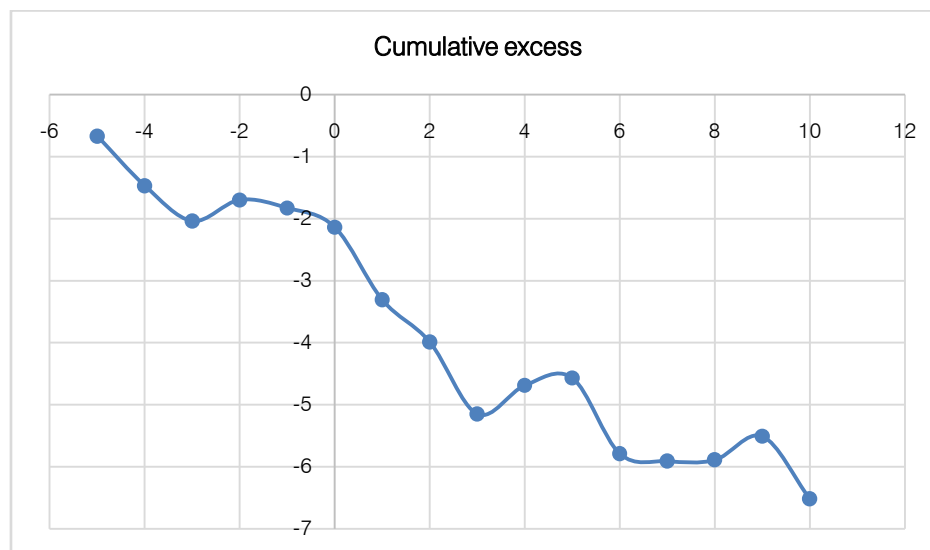
$$R_{i,t} = a_i + \sum_{\tau=-2}^{+2} \beta_{i,t-\tau} RM_{t-\tau} + e_{i,t}; \text{ With RM the index returns, and } e \text{ the excess returns.}$$

Limitations may be imposed by circumstances or by company management. In the first case, the statutory auditor could not carry out the due diligence he considered necessary. This type of certification is used when the limitation, although significant, is insufficient to refuse to certify. For example, the appointment of the auditor after the end of the financial year prevented him from attending the physical inventories, and he was unable to ascertain the quantities by other means of control.

In the second case, the elements of limitation constitute the offense of obstructing the mission of the auditor and must therefore be exceptional. In general,

during the interview on the terms of implementation of the mission, the managers must be informed of the consequences of such a limitation on the general report. As an example, we can also cite the case where the management refuses the auditor to send documents confirming the balances when he considers this procedure essential.

Out of 304 reserves used to perform event tests, 39 are used for limitation reasons of various kinds. These reserves are subject to multiple event tests. Table 9 shows the results obtained by choosing the first date (AG - 15) as the event date.



Note: Based on the data in Table 9. The points joined by a solid line represent the cumulative average abnormal returns (CMARt).

Graph 7: Announcement of "work limitation" reservations

The reading of the results shows that the average abnormal returns are negative and significant around the date of the event when we consider the impact on stock market prices of the reservation issued for a reason "limitation of work" by the auditor. This profitability (-1.16%) is significantly different from zero at the 5% threshold on date $t + 1$ one day after the event date (GA -15). It should be noted that the reason for "limitation of work" is considered a relatively severe type of reservation. For this reason, the average abnormal

returns are often negative and significant after the announcement of this type of reserve.

iii. *The informative content of the reservation "disagreement on accounting rules and principles"*

The auditor, having carried out the due diligence he deemed necessary, noted an accounting irregularity that management refuses to correct. This disagreement is significant enough to have an impact on the certification.

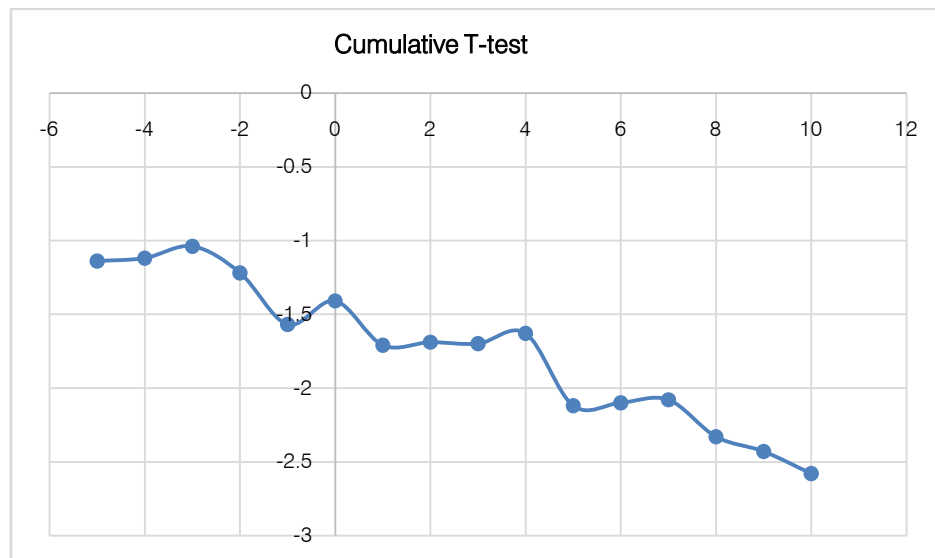
Table 10: Announcement of "disagreement on accounting principles" reservations

Date	Excess return	T-test	Cumulative excess	T-test on cumulative
-5	0,08	0,21	-2,41	-1,14
-4	-0,05	-0,01	-2,41	-1,12
-3	0,12	0,31	-2,28	-1,04
-2	-0,43	-1,05	-2,72	-1,22
-1	-0,83	-2,02	-3,55	-1,57
0	0,31	0,75	-3,24	-1,41
1	-0,75	-1,83	-3,99	-1,71
2	0,02	0,05	-3,97	-1,69
3	-0,13	-0,31	-4,10	-1,70
4	0,12	0,29	-3,98	-1,63
5	-1,26	-3,06	-5,25	-2,12
6	0,01	0,01	-5,24	-2,10
7	0,03	0,09	-5,21	-2,08
8	-0,81	-1,98	6,02	-2,33
9	-0,32	-0,78	-6,34	-2,43
10	-0,48	-1,17	-6,83	-2,58

Note: Returns are expressed in percentages. The supposed announcement date is set 15 days before the GA date. Abnormal returns are defined with reference to the market model $R_{it} = a_j + b_j R_{mt} + e_{jt}$.

The examination of the reports of the statutory auditors during the period 2010-2020 makes it possible to identify 40 reservations of reason "disagreement on the rules and accounting principles." These reserves are

subject to various event tests (Table 10). The following results relate to the average abnormal returns around the second event date (date of the signature of the report by the auditor).



Note: According to the data in Table 10. The triangles joined by a solid line represent the cumulative average abnormal returns (CMARt)

Graph 8: Announcement of "disagreement on accounting principles" reservations

The results show that the average abnormal returns are negative before and after the event. These returns are significant, especially on the eve of the day event date (-0.83% with a Student's t of 2.02). After the event date, we can also observe an average abnormal return significantly different from zero at the 5% threshold on date t+5 (-1.26% with a t student of 3.06), which means that the informative content of the "disagreement on accounting rules and principles" reservation on the price of securities can be considerable. However, the magnitude of these results is less significant than the two aforementioned types of reservations, which is consistent with the level of seriousness of this reservation.

VI. CONCLUSION

In this work, the analysis of 4,402 reports and 2,049 consolidated reports concerning 691 French companies from 2010 to 2020, as well as the systematic study of the reactions of shareholders to the announcement of the reservations issued by the auditors, was undertaken.

The results show that reservations and refusals to certify expressed by auditors hurt stock market prices. However, the choice of the announcement date is essential. Among the three hypotheses retained concerning the date of the event, it seems that fifteen days before the date of the general meeting, the announcement of reserves becomes public, and investors react unfavorably to this bad news.

Regarding the reservations which are not formally expressed by the auditors in the annual or consolidated reports, but which contain elements of reservations according to CNCC standards, the results are also significant. These results show that, when the information elements concerning the reserves are mentioned in the annual and consolidated reports (even if this was not done subject to the reservations expressed in the paragraph reserved for the opinions of the auditors) the market reacts to this bad news.

Moreover, it has been demonstrated that one of the significant difficulties concerning the interpretation of the auditor's reports is the existence of several types of information, such as observation, remark, and observation, which are not expressed, in a standardized form. Although the presence of such data in auditors' reports may be considered valuable, it may nevertheless create confusion.

In the case of refusal to certify, which constitutes the most severe reservation, the results show that the returns observed around the date of the event are not significant, even if they are often negative. However, the results should be interpreted with cautioned given the small sample size.

The comparative results concerning event tests applied in the case of annual and consolidated reports

show that, even though the reservations and refusals to certify mentioned in the writings of the auditors on the annual accounts, have an impact negative on stock market prices, the results are often not significant. It can be explained by the fact that the annual report is not the most critical piece of information for investors. Consolidated reports that contain all the information regarding groups of companies are used more often by external investors and bankers in the decision-making process.

Concerning event tests carried out in the case of different types of reserves (uncertainty, limitation of the work of the statutory auditor, non-compliance with accounting principles, non-recognition of operations and provisions, and pension and holidays), as the results show, the average abnormal returns are negative around the date of the event. However, the extent of these results depends on the type of reservation, which is consistent with the level of seriousness of the reservations expressed by the statutory auditors on the accounts and financial statements of the companies.

Unlike the studies carried out in the United States, this study covers all the reservations expressed on the accounts of listed companies. The discrepancy between the results of this study and those of studies carried out in other countries, particularly the United States, undoubtedly finds its explanation in institutional, economic, and cultural factors - not to mention the differences in terms of accounting standardization and auditing practice. However, given the current trend of harmonizing organizational standards and practices globally, it is clear that such contradictions will diminish.

BIBLIOGRAPHY

1. AFFI-SBF, 1991, "La Base de Données des Actions (1977 à 1990)", document CEREG.
2. Asare, S.K., Wright, A.M. (2012). Investor, Auditors and Lenders Understanding of Message Coveyed by the Standard Audit Report on the Financial Statements. *Accounting Horizons* 26 (2): 193-217.
3. Assoumou Menye O. (2018) "Impact de l'étude d'évènement sur la variation du risque de l'action : une application au cas des divisions d'actions du marché boursier français, *Revue Congolaise de Gestion*, 2018/2 (numéro 26) pp. 103-144.
4. Bamber, Stratton, (1997). The information content of the information content of the uncertainty-modified audit report: Evidence from bank loan officers. *Accounting Horizons*, vol.11 (2): 1-11.
5. Bamber, Stratton, (1983). Usefulness of audit report in loan decision granting. *Accounting Horizons*.
6. BEAVER W. H., 1968, "The Informational Content of Annual Earnings Announcements", *Journal of Accounting Research*, pp. 67-92.
7. Bédard, Gonthier (2014), Auditor commentary in the auditor's report: an analysis of the French

- experience. 35^{ème} congrès de l'Association Francophone de Comptabilité, Lille.
8. BROWN S. J., et WARNER J. B., 1980, "Measuring Security Price Performance", *Journal of Financial Economics*, 8, September, pp. 205-58.
9. BROWN S. J., et WARNER J.B., 1985, "Using Daily Stock Returns: The Case of Event Studies", *Journal of Financial Economics*, 1, September, pp. 3-31.
10. COMPAGNIE NATIONALE DES COMMISSAIRES AUX COMPTES, 1985.
11. Coram, J. Mock, T., Turner, J. and Gray, G. (2011). The Communicative Value of the Auditor's Report. *Australian Accounting Review*, Vol. 21 (3): 235-252.
12. Church
13. DIMSON E., 1979, "Risk Measurement when Shares Are Subject to Infrequent Trading", *Journal of Financial Economics*, June, pp. 197-226.
14. DODD P., DOPUCH N. D., HOLTHAUSEN R. W. ET LEFTWICH R.W., 1984, "Qualified Audit Opinions and Stock Prices: Information Content, Announcement Dates and Concurrent Disclosures", *Journal of Accounting and Economics*, 6, pp. 3-38.
15. DOPUCH N HOLTHAUSEN R. W. ET. LEFTWICH R. W. 1986, Abnormal Stock Returns Associated with Media Disclosures of Subject to Qualified Audit Opinions", *Journal of Accounting and Economics*, 8, pp. 93-117.
16. DYCKMAN T., PHILBRICK D. et STEPHEN J., 1984, "A Comparison of Event Study Methodologies Using Daily Stock Returns A Simulation Approach", *Journal of Accounting Research*, 22, supplement, pp. 1-33.
17. ELLIOTT J. A., 1982, "Subject to" Audit Opinions and Abnormal Security Returns: Outcomes and Ambiguities", *Journal of Accounting Research*, 20 Autumn, p. 617-638.
18. Escaffre L, Abbadi A., (2016) « Le rapport d'Audit comme un signal potentiel à la disposition des PME françaises : Proposition d'un design de recherche » Comptabilité et gouvernance, mai. Clermont-Ferrand, France, pp.cd-rom
19. Firth, M. (1980). Perceptions of auditor independence an official ethical guideline. *The accounting review*, 55 (3): 451-466.
20. FOWLER D. J. et RORKE C.H., 1983, "Risk Measurement When Shares are Subject to Infrequent Trading, Comment", *Journal of Financial Economics*, 12, pp. 272-283.
21. Gonthier N. (1996). Une contribution à l'analyse de l'information transmise par les rapports d'audit. Doctorat en Sciences de Gestion, Paris, Université Paris-
22. Gonthier-Besacier, N. (1999), L'efficacité de la communication établie par les rapports d'audit : une revue des méthodologies de mesure développée dans la littérature, *Comptabilité, contrôle, Audit*, tome 5 (1) 1999 : 109-130.
23. Gonthier-Besacier, N. (2001), Une mesure de la reformulation du rapport général du commissaire aux comptes. *Comptabilité-Contrôle-Audit*, vol.1 (7): 161-182.
24. HACHETTE I. et MAI FI. M., 1991, "Le traitement des Données Manquantes pour la Recherche en Finance : le cas de la base de données AFFI-SBF", *Cahier de recherches du CEREG*. Université Paris-Dauphine, n°9112.
25. Houghton, K. (1983). Audit reports: their impact on the loan decision process and outcome: an experiment. *Accounting and business research*: 15-20.
26. JAIN P. C., 1986 a, "Analysis of the Distribution of Security Market Model Prediction Errors for Daily Returns Data", *Journal of Accounting Research*, 24, n° 1, Spring, pp. 76-98.
27. JAIN P. C., 1986 b, "Relation Between Market Model Predictions Errors and Omitted Variables: A Methodological Note", *Journal of Accounting Research*, 24, n° 1, Spring, pp. 187-193.
28. KPMG (2019), Panorama du référentiel IFRS, quelles différences avec les normes françaises ? octobre 2019.
29. Lahbari, H. et Manita, R. (2011), L'impact des facteurs qualitatifs sur les jugements éthiques de la matérialité en audit. 32^e Congrès de l'AFC « Comptabilités, Economie et Société ». Montpellier.
30. LaSalle et Anandarajan, (1997), Bank loan officers' reactions to audit reports issued to entities with litigation and going concern uncertainties. *Accounting Horizons*, vol.11 (2): 33-40.
31. Libby, R. (1979 a), The impact of uncertainty reporting on the loan decision. *Journal of accounting research*: 35-57.
32. Libby, R. (1979 b), Bankers'and auditors' perceptions of the message communicated by the audit report. *Journal of accounting research*: 99-122.
33. Mock, T., Turner J., Gray G., and Coram P. (2009). The unqualified auditor's report: A study of user perceptions, effects on user decisions and decisions processes, and directions for future research. An unpublished report to the Auditing Standards Board and the International Auditing and Assurance Standards Board (June) New York, NY.
34. Mock, J. Bédard, J., Coram, p., David, S., Espahbodi, R. and Warne, R. (2013). The Audit Reporting Model: Current Research Synthesis and Implications. *Auditing: A Journal of Practice & Theory*, vol.32, Supplement 1: 323-351.
35. PATELL J. M, 1976, "Corporate Forecasts of Earnings Per Share and Stock Price Behavior-Empirical Tests", *Journal of Accounting Research*, Autumn, pp. 246-260.

36. SCHOLES M. et. WILLIAMS J., 1977, "Estimating Betas from Nonsynchronous Data", *Journal of Financial Economics*, 5, pp. 309- 327.
37. PwC, Les Mémentos experts, IFRS 2021, Editions Francis Lefebvre, 2020
38. SOLTANI B., 1996, Le commissaire aux comptes et le marché financier : Etudes empiriques du rôle informationnel de l'auditeur légal, Edition Economica
39. SOLTANI B., 1992, "Le Contenu Informationnel des Rapports d'Audit pour les Marchés Financiers et les Institutions Financières" Thèse de doctorat, Université Paris Dauphine.
40. SOLTANI B., 1993, "Le contenu informationnel des rapports d'audit", *Cahier de Recherches du CEREG*, n° 93-03.
41. Turner, J., Mock, T. Coram, P. and Gray, G. (2010). Improving transparency and relevance of Auditors communications with Financial Statement Users. *Current issues in Auditing*, vol. 4, issue 1: A1-A8.



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GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: D
ACCOUNTING AND AUDITING
Volume 22 Issue 2 Version 1.0 Year 2022
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

The Effects of Entity Shielding on Claims to Assets: Implications for Financial Reporting

By Todd Sayre

Abstract- Strong entity shielding enables corporations to shield firm assets not only from shareholders but also from each shareholder's personal creditors. This implies that corporations, not shareholders, own the firm assets. This paper tests this implication by examining legal scholarship on shareholder ownership. The results indicate that, unlike sole proprietors, shareholders have no legal claims to firm assets. This result responds to FASB/ISAB convergence discussions regarding whether corporate reports should take a proprietary or entity perspective. Shareholders have no claims to firm assets, yet balance sheets imply shareholders have exclusive claims to net assets, identical to those of sole proprietors. Therefore, the propriety perspective appears inappropriate for corporate balance sheets. The paper discusses how standard setters can use entity shielding to determine claims to firm assets as a principled approach to differentiate reporting perspectives among reporting entities.

Keywords: reporting entity; reporting perspective; entity shielding; liquidation protection.

GJMBR-D Classification: DDC Code: 346.410666 LCC Code: KD2100



THE EFFECTS OF ENTITY SHIELDING ON CLAIMS TO ASSETS: IMPLICATIONS FOR FINANCIAL REPORTING

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Abstract- Strong entity shielding enables corporations to shield firm assets not only from shareholders but also from each shareholder's personal creditors. This implies that corporations, not shareholders, own the firm assets. This paper tests this implication by examining legal scholarship on shareholder ownership. The results indicate that, unlike sole proprietors, shareholders have no legal claims to firm assets. This result responds to FASB/ISAB convergence discussions regarding whether corporate reports should take a proprietary or entity perspective. Shareholders have no claims to firm assets, yet balance sheets imply shareholders have exclusive claims to net assets, identical to those of sole proprietors. Therefore, the propriety perspective appears inappropriate for corporate balance sheets. The paper discusses how standard setters can use entity shielding to determine claims to firm assets as a principled approach to differentiate reporting perspectives among reporting entities.

Keywords: *reporting entity; reporting perspective; entity shielding; liquidity protection.*

1. INTRODUCTION

The IASB and FASB's goal to converge accounting standards faltered over conflicts regarding the "nature of the reporting entity," which is part of the Conceptual Framework Reporting Entity, Phase D. In a 2008 joint Exposure Draft, IASB and FASB recommended that "[a]n entity's financial reporting should be prepared from the perspective of the entity (entity perspective) rather than the perspective of its owners or a particular class of owners (proprietary perspective)" (IASB 2008, 5). But when FASB realized that a business corporation's balance sheet from the entity perspective would not label net assets as Shareholders' Equity, it abandoned plans to converge reporting entity perspectives.¹

An entity perspective for business corporations would have balance sheet simply that the corporation itself holds exclusive ownership claims to the net assets. For example, FASB requires that nonprofit corporations label the net assets as "Net Assets." In contrast, FASB continues to require business corporations to use the proprietary perspective, which show shareholders with exclusive ownership claims to the firm's net assets, including the profit.

The reporting perspective most appropriate for each reporting entity (i.e., firm) should depend on underlying principles to which standard setters agree.

This paper assumes that the claims that various entities (i.e., firm-members) have to the firm's resources (i.e., firm-assets) implies what reporting perspective is appropriate for each type of reporting entity (i.e., firm-type).

The paper finds that shareholders, unlike sole proprietors, of business corporations have no legal claims to the corporation's net assets or profit. Instead, shareholders of business corporations have similar claims to those of beneficiaries of nonprofit corporations. The reason for the similarity is that both business and nonprofit corporations have liquidity protection because their firm-assets are shielded from firm-members, as well as the firm-members' creditors. The ability to shield the creditors of firm-members cannot be accomplished through private contracting and, as such, this type of liquidity protection distinguishes the business corporation from other business firm-types (e.g., partnerships).

The paper concludes that this unique feature of liquidity protection afforded to business corporations necessarily restricts shareholders' claims to firm-assets. Specifically, shareholders, because of liquidity protection, have no claims to the firm's net assets, while sole proprietors with no liquidity protection have exclusive claims to firm-assets. Therefore, requiring business corporations to present net assets as part of Shareholders' Equity misrepresents shareholders claims to the net assets. Shareholders do not have identical claims to firm-assets to those of sole proprietors; rather the opposite is true, they have no claims. The shareholders' lack of claims is more similar to those of nonprofit corporation's beneficiaries, who also lack claims.

The shareholders' lack of claims to the firm-assets implies that the proprietary perspective is inappropriate for the balance sheet of the business corporation. FASB is aware of the inconsistency, recently replacing FASB (1978 paragraph 30) "claims to those resources," (i.e., firm-assets) with FASB (2008 OB12), "claims against the reporting entity." Unfortunately, this adjustment was not based on any explicit underlying principle useful to the goal of converging accounting standards.

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¹ www.iasplus.com/en/meeting-notes/iasb/2010/agenda_1011/agenda_1551#entity-versus-proprietary-perspective

The goal of the FASB/IASB joint convergence project was to find underlying principals to guide the rules of standard setters. Toward this end, Van Mourik (2014) recommends categorizing firms according to whether they have limited liability or not, based on Demsetz (1967). Demsetz (1967, 358) defines the public corporation as having 3 characteristics, a legal personality, limited liability, and transferable shares. But, as this paper explains, limited liability is unnecessary for corporations to exist and can be privately contracted to a large degree. More importantly, Demsetz' definition does not include entity shielding as a characteristic of a corporation when, without it, transferable shares could not exist. If stock markets can and have existed with limited liability, but not entity shielding, which is a more important characteristic of the firm?

Instead, to determine the appropriate reporting perspective for each firm-type, academics should focus on how entity shielding affects firm-members' claim to the net assets. Entity shielding uniquely identifies firm-type, cannot be privately contracted, and enables transferable shares, without which founders could not maintain personal liquidity. Entity shielding, not limited liability, should serve standard setters as the principle underlying determining the reporting perspective is required for each firm-type.

II. ENTITY SHIELDING

Hansmann, Kraakman, and Squire (2006, 1336) explains that firms, like individuals, are legal persons in the sense that they "...enjoy the legal power to commit assets to bond their agreements with their creditors and, correlatively, to shield those assets from the claims of their owners' personal creditors." Firms differ from natural persons in that their firm-assets or "bonding assets are, at least in part, distinct from assets owned by the firm's owners or managers, in the sense that the firm's creditors have a claim on those assets that is prior to that of the personal creditors of the firm's owners or managers." In the quote, the authors use the term "owners" loosely to include sole proprietors, partners, founders, investors, shareholders, creditors, managers, employees, and customers. In this paper, "firm-members" is used to describe these groups.

a) *Types of Entity Shielding*

Hansmann et al. (2006, 1337-1338) call this separation of firm-assets from personal assets, "entity shielding," defining 3 types. The first type is "weak entity shielding," which provides the claims of the firm's creditors priority over those of personal creditors. Weak entity shielding is found in all firms, including sole proprietorships and general partnerships. The second type is "strong entity shielding," which provides weak entity shielding as well as two forms of "liquidation protection," one that shields firm-assets from firm-members, like shareholders, and another that shields

firm-assets from the personal creditors of firm-members. Strong entity shielding is found in business corporations. The third type of entity shielding, called "complete entity shielding," provides complete liquidity protection by more strongly, relative to strong entity shielding, restricting firm-members and their personal creditors from any claim to the firm-assets. This form of entity shielding is found in nonprofit corporations.

b) *Liquidity Protection*

In strong and complete entity shielding, there are 2 types of liquidation protection. The first type of liquidation protection bars firm-members (e.g., shareholders, partners) from unilaterally withdrawing any portion of the firm-assets. Partnerships, through private contracting, have never achieved this type of long-term liquidation protection, as courts have been, "reluctant to enforce restrictions on free alienation of property if made in perpetuity." (Hansmann et al. 2006, 1342)

The second type of liquidation protection bars the personal creditors of firm-members (e.g., shareholders) from forcing withdrawals to satisfy personal debts. Partnership have not accomplished this type of liquidation protection, even in the short-run, as it cannot be accomplished through private contracting and, instead, requires special rules of entity law. For corporations to contractually shield firm-assets from the personal creditors of shareholders, it requires that corporations secure contractual waivers from all shareholders' personal creditors. Since such waivers would increase personal borrowing costs, shareholders would have an incentive to conceal their personal creditors. This problem increases as more shareholders are added and shares are made freely transferrable. According to Hansmann et al. (2006, 1338), "These problems can be solved only by impairing the rights of personal creditors without their contractual consent [through] a special rule of property law respecting assets committed to the firm, and entity law provides that rule."

c) *Benefits of Entity Shielding*

Entity shielding enables firms to embrace relatively longer-term and larger-scale projects with longer-term contracts, bonded by locked-in assets. Specifically, according to Ciepley (2013, 144), strong entity shielding enables the firm to "...increases its productivity (by enabling asset and labor specialization) and lowers its capital costs (by lowering the risk and monitoring costs of its creditors and investors)." Moreover liquidity protection enables tradable shares, which, in turn, enables founders to relinquish their personal assets to the corporation, yet maintain personal liquidity.

Dari-Mattiacci (2017) documents anecdotal evidence on how entity shielding benefits productivity by examining differences between the Dutch East India Company (VOC), founded in 1602 and the British East

India Company (EIC), founded in 1600. Dari-Mattiacci (2017, 196) explains that “[t]he two companies started with comparable capital but differed in an important dimension: the VOC charter adopted a longer maturity for its equity. This induced immediately another innovation, namely the free transferability of shares to ensure liquidity for the locked-in capital.” When the States General of the Netherlands granted the (VOC) strong entity shielding in 1612 “...for the first time in history, a private firm had gained the prospect of indefinite life.” As a result, “...VOC could thus outspend and outperform the EIC for decades,” consistent with the assertion above that entity shielding results in increased productivity.

d) *Limited Liability*

Hansmann et al. (2006, 1338) assert that entity shielding is the core defining feature or the “sine qua non of the legal entity...” Corporations cannot exist without government-granted liquidity protection against the shareholders’ personal creditors. In contrast corporations can exist without limited liability. In fact, corporations existed for over 250 years until England and America enacted limited liability protection for shareholders in the mid-1800s. In America, California did not grant limited liability until 1931. Moreover, firms can privately contract with creditors to provide shareholders with limited liability protection against firm creditors. Although they cannot do the same against torts, if the risks are known and reserves established, the effect on stock prices should be minimal. (See Weinstein 2003, 2005; Hessen 1979)

Thus, liquidity protection is necessary for corporations to exist, but limited liability is not. The same is true for freely tradable shares. Hansmann et al. (2006, 1350) notes that, “...firms with unlimited liability have been traded in public markets into the twentieth century;” therefore, unlike liquidity protection, “...limited liability is in fact neither necessary nor sufficient for freely tradable shares to exist.”

III. PREDICTIONS

This paper focuses on the effects of entity shielding on firm-members’ legal claims to firm-assets in order to potentially provide standard setters with a principled basis on which to determine the appropriate reporting perspective (e.g., entity, proprietorship) for each firm-type (e.g., partnership, nonprofit corporation). Specifically, the prediction focuses on the effects of entity shielding on firm-members’ claims to firm-assets.

Alternative Hypothesis 1: Firm-members of firm-types with liquidity protection have less legal ownership claims

to firm-assets than do firm-members of firm-types without liquidity protection.²

FASB (1985, 10) requires that “[E]quity (net assets) describe levels or amounts of resources or claims to or interests in resources at a moment in time.”³ If the results show that the legal claims of firm-members to the firm-assets vary across reporting entities (i.e., firm-type), the balance sheet should reflect this in its reporting perspective. To the extent the paper indicates a mismatch between reporting perspective and legal claims to firm-assets, the results are potentially useful in resolving the conflict over reporting perspective between the FASB and IASB.

IV. EVIDENCE

a) *Assumptions and Method*

To test Alternative Hypothesis 1, this paper examines the legal claims firm-members have to firm-assets across firm-types. To this end, we evaluate firm-members with regard to their legal rights (i.e., claims) and powers (i.e., ability to claim) to the firm-assets for the firm-types: sole proprietorship; general partnership; business corporation; and nonprofit corporation.

The paper assumes that the term, “claim,” as used in the standards, represents *legal* claims. This assumption is consistent with FASB (2010, BC 26), which states that, Wrong.

This paper assumes that the legal claims creditors have to firm-assets are uncontroversial, leaving the firm’s net assets for others to claim. For the sole proprietors and partners, the analysis is straightforward as they both have exclusive legal ownership claims to the firm’s net assets. For the nonprofit business, no firm-member at any time has any claim to the firm’s net assets. Therefore, the only firm-type that requires examination is the business corporation.

This section examines the shareholders’ legal claims to the corporation’s net assets and compares them to the firm-members’ claims in other firm-types. Given the assumed claims of the sole proprietors, partners, and firm-members of nonprofit corporations, the Null Hypothesis cannot be rejected. The test of the hypothesis continues with evaluating the shareholders’ claims to the business corporation’s net assets.

b) *Rights of Share Ownership*

To determine the extent to which shareholders have claims to the firm-assets, this paper first identifies the rights and powers engendered from share

² Since all firms have weak entity shielding, which gives priority to firm-creditors over the personal creditors of firm-members, it is not investigated. Firm-types differ in their degree of liquidity protection.

³ FASB (2008), Concept Statement No. 8, replaces the term “claims to resources” with “claims against the reporting entity.” Without a clear definition otherwise, this paper interprets the phrases to mean the same thing, that the balance sheet should present the various firm-members legal claims to the firm-assets.

ownership. Blair and Stout (1999, 250-251) note that, "corporate assets belong not to the shareholders but to the corporation itself." Blair (2003, 293) explains that when founders incorporate, they become shareholders giving up the property rights to their personal assets in exchange for shares of the firm's stock, which maintains their liquidity.

Shareholders do not own the firm; they simply own the firm's shares. The rights and duties shareholders have to the firm-assets stems solely from the contractual rights of shares. Shareholders who own voting shares have the right (a) to sell the share, (b) receive dividends if declared, (c) file derivative lawsuits against the board, (d) vote the proxy in important decisions, and (e) nominate and vote in board member elections. These rights that accrue to shares provide shareholders with political influence over board decision, but they are not property rights.

c) *Rights of Property Ownership*

As discussed, the FASB's phrase, "claims to...resources" refers to the legal claims firm-members have to the firm-assets. Therefore, we use property law to evaluate the shareholders legal claims to firm-assets. While the notion of property ownership is embodied in the law, jurists have yet to "...capture the relation between the idea of ownership and the detailed rules of a private property system in a precise legal definition" (Waldron 1985, 334). Rather, our legal system defines ownership as a family of legal relationships to a thing,⁴ sometimes referred to as a "bundle rights."⁵ These "rights" are actually a collection of *rights*, *powers*, *duties*, and *liabilities*,⁶ where any single "right" is neither necessary nor sufficient to conclude ownership.⁷ Despite its subjectivity,⁸ the bundle of rights approach to

the question of ownership represents the dominant paradigm of property law.

Legal scholars credit A. M. (Tony) Honoré (1921-) with advancing the most generally accepted set of legal relations for ascertaining ownership.⁹ In his seminal paper, "Ownership" (1961), Honoré lists 11 "standard incidents of ownership."¹⁰ The list includes: the *rights* to (1) possess, (2) use, (3) manage, (4) income, (5) capital, and (6) residuary; the *powers* to (7) alienate (i.e., sell) and (8) transfer; the (9) *duty* to prohibit harmful use; the (10) *liability* to execution for personal debts and the (11) *immunity* (i.e., no liability) from expropriation.¹¹

d) *Legal Relations*

These legal terms, *rights*, *powers*, *duties*, and *liabilities*, have precise meanings. Credit this to Wesley Newcomb Hohfeld (1879-1918),¹² a legal scholar who, tiring of the misuse of these terms, suggested a system of corresponding legal relations. Specifically, to exist, *rights* require *duties* and *powers* require *liabilities*, and vice versa. For example, in order for one to claim a *right* to possess a thing, others must have a *duty* to exclude themselves from that thing.¹³ Similarly, in order for one to claim a *power* to create legal relations, another must have a corresponding *liability* to those relations once created.¹⁴ For example, an agent has the *power* to create legal relations to which a principal will have a *liability*. "A general claim of most recent major works on the subject of property, especially the books of Becker, Waldron, and Munzer, is that the actual nature of property has been satisfactorily explained by the Hohfeld-Honoré bundle of rights analysis." (Penner

⁴ For instance, "You have property in the suit of clothes you are wearing; your property is not the suit of clothes, but the rights you have in it..." (Bowen 1926, 41). "Property relates to the legal relationship with a thing and the power that is able to be exercised over the thing - not the thing itself (*Yanner v. Eaton* 1999, HCA 53 per the majority Gleeson, CJ, Gaudron, Kirby and Hayne, JJ)." (Toner 2006, 81).

⁵ "The currently prevailing understanding of property in what might be called mainstream Anglo-American legal philosophy is that property is best understood as a "bundle of rights." (Penner 1996). Also, "The conception of property as an infinitely variable collection of rights, powers, and duties has today become a kind of orthodoxy." (Merrill & Smith 2001, 365).

⁶ Black's Law Dictionary (2009, 1138) defines ownership as, "The bundle of rights allowing one to use, manage, and enjoy property, including the right to convey it to others."

⁷ Honoré (1961, 138), referring to "right" as an "incident," states that, "[These] incidents, though they may be together sufficient, are not individually necessary condition for the person of inheritance to be designated owner of a particular thing...the use of 'owner' will extend to cases in which not all the listed incidents are present."

⁸ While the family of resemblances approach results in blurred edges, as when a duck fails to quack, the term "ownership" is still meaningful. "[T]here is no common essence shared by all things we call 'games': board games, football, solitaire, throwing ball against a wall, and so on. But we can nevertheless use the word 'game' meaningfully.

Wittgenstein uses the phrase 'family resemblance' to refer to this sort of overlapping and criss-crossing resemblance." (Warburton 2001, 232-233)

⁹ Penner (1994,861) notes that Honoré's incidents of ownership, "[d]espite its oversimplicity,...still operates as a background understanding of property.." (p. 859) [...] "A.M. Honoré played a decisive role in advancing the bundle of rights metaphor by cataloguing a generally accepted list of the "incidents" of property or ownership."

¹⁰ I have adapted these incidents at the margins based on Munzer (1990).

¹¹ If one has immunity from expropriation, this means that others have no power to take ownership. In terms of correlatives, if others have no power, the owner has no liability. Thus, immunity and no liability mean the same thing.

¹² Wesley Newcomb Hohfeld (1879-1918) posthumously authored the seminal text, *Fundamental Legal Conceptions, As Applied in Judicial Reasoning and Other Legal Essays* (1919), largely based on his articles published in 1913 and 1917 in the Yale Law Review.

¹³ "The existence of a right is the existence of a state of affairs in which one person (the right-holder) has a claim on an act or forbearance from another person (the duty-bearer) in the sense that, should the claim be exercised or in force, and the act or forbearance not be done, it would be justifiable, other things being equal, to use coercive measures to extract either the performance required or compensation in lieu of that performance." (Becker 1977, 8)

¹⁴ Regarding power, "The nearest synonym for any ordinary case seems to be (legal) 'ability.'" (Hohfeld 1913, 45)

1996, 713) Table 1 shows the Incidents of Ownership of Honoré sorted by Hohfeld's legal relations.¹⁵ These legal relations capture whether firm-members have a claim to firm-assets.

Table 1: Incidents of Ownership

Legal Relations	Incidents of Ownership*
Rights	(1) Right to possess—to have exclusive control of the thing.
	(2) Right to use—personal use and enjoyment of the thing.
	(3) Right to income—to receive exclusive benefits from others using the thing
	(4) Right to capital—to have the exclusive control over destroying the thing and exclusive benefit of what remains.
	(5) Right to manage—to have exclusive control over use of the thing.
	(6) Right to residuary—to have the right to receive rights and powers of others when contracts expire.
Powers	(7) Power to alienate—the ability to sell ownership to others.
	(8) Power to transfer—the ability to transfer ownership to successors.
Duties	(9) Duty to prohibit harmful use—to have personal liability if the thing harms others.
Liabilities	(10) Liability of execution—to have liability in what you own for personal debt.
	(11) Immunity (i.e., no liability) from expropriation—the immunity from others taking ownership without consent (e.g., for debts).

Based on Honoré (1961), Munzer (1990)

e) Analysis

The sole proprietor has every incident of ownership, while the firm-members (e.g., beneficiaries) of nonprofit corporation have none. A shareholder of a business corporation can be its sole shareholder, its controlling shareholder, or its non-controlling shareholder. The analysis focuses on non-controlling shareholders since they represent most shareholders.

This paper provides a legal analysis of ownership claims to firm-assets for accountants, who are not legal experts. The legal experts agree that, “[c]ontrary to widely held ‘common sense’, shareholders do not own corporations; nor do they own the assets of corporations. Shareholders only own shares...”¹⁶ (Also see Stout 2012)

While accountants as non-experts in law should accept the consensus of the legal experts, they should also understand the legal intuition as to why the legal experts conclude that shareholders do not own the firm-assets. That is, accounting standard setters should understand basic property law and corporation law if they require corporate balance sheets to show firm-members' claims to firm-assets. The following sections explain the shareholders' legal claims to net assets in terms of their legal rights, powers, duties, and liabilities of ownership.

f) Right to possess

Do shareholders have a *right to possess* corporate assets? As Professor Ian Lee states, “...shareholders have no property rights in the corporation's assets: a shareholder of Wal-Mart Stores, Inc. can be prosecuted for shoplifting from Wal-Mart.” (Lee 2005 p. 11) Even “...a sole shareholder has no independent right which is violated by trespass upon or conversion of the corporation's property.”¹⁷ Rather, a sole shareholder, like other outsiders, has a *duty to exclude* him or herself from the corporate assets. Shareholders have no *right to possess* corporate assets.

g) Right to Use

Do shareholders have a *right to use* corporate assets? Although shareholders have no *right to possess*, but do they still have the power to contract with corporate assets, which is a form of *use*? The answer is, “no.” The Model Business Corporation Act (MBCA) states that, “All corporate powers shall be exercised by or under the authority of, and the business and affairs of the corporation managed by or under the direction of, its board of directors...” (MBCA Ann. §8.01b 3d ed. Supp. 2000-2002) and Delaware General Corporation Law (DGCL) states that the corporation's business and affairs “shall be managed by or under the direction of a board of directors.” [DGCL § 141 (a) (2001)]

Stout (2002, 1191) states that, “...shareholders...enjoy neither direct control over the firm's assets nor direct access to them...” and “...do

¹⁵ Hohfeld's jural correlatives are rights and duties, powers and liabilities, privileges and no rights and immunities and disabilities. To simplify the discussion, I translated the latter two correlatives into opposites of the former two.

¹⁶ For the quote and signatories, see <https://themoderncorporation.wordpress.com/company-law-memo/>

¹⁷ Per *W. Clay Jackson Enterprises, Inc. v. Greyhound Leasing and Financial Corp.*, 463 F. Supp. 666, 670 (D. P.R. 1979) as quoted in Bainbridge (2002).

not have the right to exercise control over the corporation's assets. The corporation's board of director's holds that right." Thus, it is the board, not the shareholders, that has the *power to contract* with corporate assets. This finding, combined with the previous finding that shareholders have no *right to possess*, results in the verdict below. Shareholders have no *right to use* corporate assets.

h) *Liability of Execution*

Do shareholders have the *liability of execution* against corporate assets? The liability of execution is "the liability of the owner's interest to be taken away from him for debt, either by execution of a judgment debt or on insolvency..." (Honoré 1961, 123) In order for shareholders to have the *liability of execution*, personal creditors would need the *power* to legally enforce payment in corporate assets. Entity shielding, as defined in this paper, disables personal creditors from this *power*; thus, shareholders cannot have the *liability of execution*. Shareholders do not have the liability of execution.

i) *Prohibit Harmful Use*

Do shareholders have a duty to *prohibit harmful use* of the corporate assets? In order for shareholders to have a *duty to prohibit harmful use*, others must have corresponding *rights* to recourse, if the duty is breached. State statutes prohibit parties wronged by the corporation from pursuing recourse against the shareholders. For example, "A shareholder of a corporation is not personally liable for the acts or debts of the corporation..." (MBCA §6.22(b)) Thus, because of limited liability, the most shareholders can lose is the market value of their stock. Shareholders have no *duty to prohibit harmful use* of corporate assets.

j) *Right to Manage*

Do shareholders have a *right to manage* the corporate assets? Honoré defines the *right to manage* as the "...right to decide how and by whom the thing owned will be used." [...] "This right depends, legally, on a cluster of powers, chiefly powers of licensing acts which would otherwise be unlawful and powers of contracting: the power to admit others to one's land, to permit others to use one's things, to define the limits of such permission, and to contract effectively in regard to the use (in the literal sense) and exploitation of the thing owned." (Honoré 1961, 116)

The analysis on the *right to use*, established that shareholders cannot directly contract with corporate assets. But, as Honoré implies, the *right to manage* also includes the *power* to permit others to use the thing and to "define the limits of such permission." For our purposes, this definition translates to the following questions: (1) To what degree do shareholders have the *power* to designate board membership? (2) To what

degree do shareholders have the *power* to limit board discretion in managing corporate assets?

Related to the first question, legal experts maintain that the shareholder's right to vote in board elections gives shareholders negligible *power* to designate board membership. These experts cite several contributing factors. First, absent a proxy contest, the nominees of the existing board are automatically elected.¹⁸ Second, shareholders who do launch proxy contests pay for the printing and distribution of the proxy materials, while incumbent directors and management pay with corporate funds. Third, shareholders are "rationally apathetic" toward proxy fights, in part, because they have the option to sell their shares.¹⁹ Forth, boards can create obstacles for insurgents by staggering the terms of its members²⁰ and increasing the number and heterogeneity²¹ of shareholders in order to reduce "...the incentive and ability of each shareholder to gather information and monitor effectively..." (Monks 2001, 102) The result, explains Former SEC Chair, Arthur Levitt Jr., is that "...board elections are one-party affairs, with the incumbent board's choices winning in virtually every case" [...] "A director has a better chance of being struck by lightning than losing an election." (Levitt 2006, 14) Others who voice similar opinions include Vice Chancellor of the Delaware Court of Chancery, Leo Strine,²² and legal scholars Bob Monks,²³ Stephen Bainbridge,²⁴ and Jill Frisch.²⁵

¹⁸ "In practice...the election of directors (absent a proxy contest) is predetermined by the existing board nominating the next year's board." (Bainbridge 2002, footnote 10).

¹⁹ "Rather than try to control the decisions of the management, which is harder to do with many stockholders than with only a few, unrestricted salability provides a more acceptable escape to each stockholder from continued policies with which he disagrees." (Alchian and Demsetz 1972, 13)

²⁰ Many boards are staggered, meaning that discontent shareholders must have their insurgents prevail in two consecutive elections in order to elect a majority of the board. Delaware General Corporation Law section 141(d) permits a corporation's charter to create up to three classes of directors, only one of which is elected each year, or boards may be classified with shareholder approval.

²¹ To the extent shareholders differ in levels of information and preferences, they are a heterogeneous group. "When, as is often the case today, the corporation has a complicated capital structure consisting of several classes of shares or is part of a holding company system which has such a capital structure, the interests of the dominant shareholders may be widely divergent from those of the holders of other classes, particularly if the corporation fails to prosper." (Dodd 1941, 926)

²² Vice Chancellor of the Delaware Court of Chancery, Leo Strine, has noted in a law review article that the "proxy mechanism is tilted heavily in favour of the management slate, and contested elections rarely occur outside the takeover context," [which of course raises questions about] "a corporate election process that is so heavily biased towards incumbents and their self-chosen successors." (Quoted in Donaldson 2005)

²³ "[T]he American shareholder cannot nominate directors, he cannot remove them, he cannot--except at the arbitrary pleasure of the SEC--communicate advice to them. Democracy is a cruelly misleading word

In addition, Professor Bebchuk studied proxy contests conducted by all listed companies between 1996 and 2004, finding that only seventeen corporations, with a market capitalization over \$200 million, experienced proxy contests to replace management outside of the takeover context. Of these, only two of the insurgents won. "A plausible interpretation of the evidence is that, even when shareholder dissatisfaction with board actions and decisions is substantial, challengers face considerable impediments to replacing boards." (Bebchuk 2005, 13) Thus, we can conclude that the shareholders' power to designate board membership is negligible.

This conclusion has implications for the second question involving the degree to which shareholders have the power to limit board discretion over corporate assets. The negligible power to designate board membership confers a similarly negligible threat to board discretion. Even so, shareholders hold political influence of the board, conferring some control over the firm-assets. At a higher political level, shareholder groups and advocates can lobby the SEC for more influence over board decisions.

The only other threat shareholders have over board discretion stems from their power to file derivative lawsuits against the board. But like to the right to vote, this power to sue has only a negligible affect over board discretion. First, the board has a fiduciary duty not to its shareholders, but to the corporation itself.²⁶ For this reason, shareholders do not file lawsuits for fiduciary breaches on their own behalf, but on that of the corporation, and recovery is typically for the sole benefit of the corporation.²⁷ Second, the "business judgment

rule" makes it difficult for shareholders to win suits against the board for breaches in fiduciary duties.²⁸ The business judgment rule shifts "...the duty of care from negligence to gross negligence: violations are found only where there is 'reckless indifference' to or a deliberate disregard of the interests of the whole body of stockholders."²⁹ (Dibadj 2006, 485) Third, constituency statutes, adopted by the majority of states since the early 1980's, authorize the board to consider the interests of other corporate constituents. Frisch (2004, 16) notes that "[i]n many cases, the statutes explicitly provide that directors will not be required to regard the effects of a corporate decision on any particular group – including shareholders – as a dominant factor."³⁰ Fourth, corporations may include in the articles of incorporation provisions that, in effect, insulate directors from monetary damages for breaching the director's duty of care.³¹

corporation itself, where its benefits "accrue to all the corporation's stakeholders."

²⁸ The Delaware Supreme Court states that it "will not substitute its own notions of what is or is not sound business judgment" if "the directors of a corporation acted on an informed basis, in good faith and in the honest belief that the action taken was in the best interests of the company." The first quote is *Aronson v. Lewis*, 473 A.2d 805, 812 (Del. 1984) and the second, *Sinclair Oil Corp. v. Levien*, 280 A.2d 717, 720 (Del. 1971). Also, according to the business judgment rule, "...courts must defer to the board of directors' judgment absent highly unusual exceptions." (Bainbridge 2008, 6).

²⁹ "[I]n the rare instance where the Delaware Supreme Court found directors to have behaved in a grossly negligent manner, the Delaware legislature subsequently permitted corporations to contract out of even gross negligence, at least as to monetary liability..." [Moreover], "...directors invariably have indemnification rights and insurance, and courts have limited the ability of shareholders to obtain discovery in derivative actions alleging director misconduct." (Dibadj 2006, 486, quoting Loewenstein 2004, 377). Also, see Solomon & Palmiter (1994 §9.1.1).

³⁰ Corporate constituency statutes are, "...laws that either required or allowed corporate management to exercise their fiduciary duties with regard to the effects on employees, customers, and larger communities of interest. (Winkler 2004, 123) "As the court explained in *GAF v. Union Carbide Corp.*, the board must balance investors interests, on the one hand, and the legitimate concerns and interests of employees and management . . . on the other." (Frisch 2004, 17). "While most of these laws are permissive—allowing but not requiring directors to take into account the non-shareholder constituencies—at least one state, Connecticut, obliges management consideration of 'interests of the corporations employees, customers, creditors and suppliers, and ... community and societal considerations including those of any community in which any office or other facility of the corporation is located.'" (Winkler 2004, 123)

³¹ "Following the court's decision in *Smith v. Van Gorkom*, and in reaction to it, the Delaware General Assembly enacted Del. Gen. Corp. Laws Section § 102(b)(7). Section 102(b)(7) permits a corporation to include in its articles of incorporation a provision, which states, in essence, that no director shall be liable in monetary damages for a breach of the director's duty of care. Section 102(b)(7) was intended to eliminate director liability for conduct that, at worst, involved mere breaches of the duty of care. Importantly, though, it was also intended to protect directors from protracted, expensive and time-consuming litigation." (Bodner 2005, 6) "Daines and Klausner have even found cases in which corporations in states that lacked statutory non-shareholder constituency provisions, such as Delaware, adopted such provisions in their charters." (Frisch 2004, 18)

to describe the situation of the American shareholder in 2006." (Bob Monks quoted in *The Economist*, Mar 09, 2006).

²⁴ Even in contested elections, the proxy regulatory regime discourages even large shareholders from conducting proxy fights. (See Bainbridge 2002, footnote 92).

²⁵ "[W]hile shareholders nominally have the right to elect directors, their limited power over the nominating process and the corporate proxy machinery prevent shareholders from using their voting rights." (Frisch 2004, 16).

²⁶ Under the Standard of Conduct for Directors: "Each member of the board of directors, when discharging the duties of a director, shall act: (1) in good faith, and (2) in a manner the director reasonably believes to be in the best interests of the corporation." (RMBCA §8.30 (a)). "Under Delaware law, the board of directors owes the corporation the fiduciary duties of care good faith, and loyalty." (Bainbridge 2002)

²⁷ "A stockholder seeking redress for a wrong done to the corporation as of which the directors fail to act may bring suit derivatively in the name of the corporation. In addition to the real defendants (i.e., the alleged wrongdoers), the corporation is included as a nominal defendant. Yet, the suit proceeds on its behalf, and ordinarily recovery is solely for the benefit of the corporation." [...] "A derivative action is the functional equivalent of a suit by a stockholder to compel the corporation to sue plus a suit by the corporation, asserted by the stockholder on its behalf, against those liable to it. Since a derivative action asserts a right belonging to the corporation, the recovery belongs to the corporation." (Bork 2005 p. 6) Also, see Blair & Stout, (1999, 294-95 footnote 48) stating, "management's fiduciary duty to shareholders is payable, not to those shareholders, but to the

In summary, shareholders have negligible power to designate board membership. In addition threats deriving from the shareholder's rights to vote and sue have negligible impact on limiting board discretion. Indeed, other constituents, such as labor, arguably have more influence over board discretion than do shareholders. Shareholders have no *right to manage*.

k) *Right to Income*

Do shareholders have a *right to income* of the corporation? Honoré (1961, 169) defines income as "...a surrogate of use, a benefit derived from forgoing personal use of a thing and allowing others to use it for reward." In order for shareholders to have a *right to income*, others must have a corresponding *duty to exclude* themselves. But corporate law does not prohibit other corporate constituents (e.g., labor) from seeking to obtain this same income. Therefore, shareholders do not have an exclusive right to *all* income. This does not necessarily imply, however, that shareholders have no right to *any* income.

In order for shareholders to have a *right to any income*, the board would need a *duty* to declare dividends. State statutes *permit* the board to declare dividends from corporate income, but there is no legal obligation.³² Therefore, strictly speaking, shareholders have no right to *any* corporate income.

Still, for the sake of argument, shareholders could have the *power* to force the board to declare dividends and thus, in effect, they would have the *right* to at least some income. This issue is related to the *right to manage*, regarding whether shareholders have the *power* to limit board discretion. The difference is that the board decision under examination here is not one of general management, but is specific to declaring dividends.

The classic case law on this subject is Dodge v. Ford Motor Company (Mich. 1919) in which the Michigan Supreme Court ruled in favor of Dodge, ordering Ford to pay a special dividend of \$19 million--\$1.9 million to Dodge and over \$10 million to Ford. The specifics of this case were unique. First, Dodge owned a large (i.e., 10%) minority interest. Second, Dodge argued that, "...Ford was cutting off dividends to kill one competitor (the Dodges) and building a huge new factory to threaten the competitive position of them and others." Third, Ford's testimony professed a business strategy antithetical to capitalism.³³ These special

circumstances make the ruling difficult to generalize to other situations.³⁴

The precedent for Dodge v. Ford is expressed in Pyle v. Gallaher, 75 A. 373 (Del. 1908) has been that "[t]hat a shareholder in a corporation has no property interest in the profits of the business carried on by the corporation until a dividend has been declared out of such profits" is "substantially correct", which the court applied in Dodge v. Ford follows:

It is a well-recognized principle of law that the directors of a corporation, and they alone, have the power to declare a dividend of the earnings of the corporation, and to determine its amount. Courts of equity will not interfere in the management of the directors unless it is clearly made to appear that they are guilty of fraud or misappropriation of the corporate funds, or refuse to declare a dividend when the corporation has a surplus of net profits which it can, without detriment to its business, divide among its stockholders, and when a refusal to do so would amount to such an abuse of discretion as would constitute a fraud, or breach of that good faith which they are bound to exercise towards the stockholders...so long as they do not abuse their discretionary powers, or violate the company's charter, the courts cannot interfere. (Dodge, 204 Mich. at 500.)

This summary illustrates the obstacles shareholders face in bringing lawsuits against the large, diversified corporation for the board not paying dividends. As a result, to my knowledge, there has not been another successful shareholder lawsuit for dividends against a large corporation.

Legal experts agree, the business judgment rule obliterates the power of shareholders to force boards to declare dividends. Professor M. Todd Henderson states that, "The decision to withhold dividends and invest in new businesses is, under current law, unassailable." (Henderson 2007, 28) Professor Ken Greenwood states that, "...legal doctrine makes clear that shareholders have the same legal right to dividends as waiters have to tips: an expectation that is not enforceable in court..." (Greenwood 2006, 108). Professor Lynn Stout explains that corporate profit can be used to, "...raise managers' salaries, start an on-site childcare center, improve customer service, beef up retirees' pensions, or make donations to charity." (Stout 2002, 1194)

³² If anything, state statutes place restrictions on the size of the dividend the board can declare. "No distribution may be made if, after giving it effect: (1) the corporation would not be able to pay its debts as they become due in the usual course of business..." (MBCA 2002 § 6.40(c))

³³ "Ford's testimony was too much for the trial court to bear. After all, if a firm as large and important to the American economy were permitted to pursue an overtly socialist strategy, the political impact and the effect on other firms could be enormous. The geopolitical context of the trial made this point clear." (Henderson 2007, 21)

³⁴ Some use this decision to argue that corporations have a legal obligation to maximize profit for shareholders. First, legal scholars disagree with this interpretation. For example, "Dodge is often misread or mist aught as setting a legal rule of shareholder wealth maximization. This was not and is not the law." (Henderson 2007, 1) Second, case law related to takeovers suggests that corporations have no such obligation. For example, in *Paramount Communications Inc. v. Time Inc.* Delaware Supreme Court, 1990. 571 A.2d 1140: "[A] board of directors . . . is not under any per se duty to maximize shareholder value."

In conclusion, shareholders have no *right* to *any* of the corporate income because state statutes do not force the board to declare dividends. Moreover, case law shows that courts will force the board to declare dividends only under idiosyncratic circumstances. Thus, legal experts agree that shareholders have negligible *power* to force the board to declare dividends.

l) *Right to Capital*

Do shareholders *have a right* to capital? One with the right to capital has the, "...liberty to consume, waste or destroy the whole or part of it." (Honoré 1961, 120) Taking this definition less literally, upon dissolution, shareholders may receive the remaining assets after all other claimants are paid. But for shareholders to claim the *right to capital*, they would need the *power* to dissolve the corporation. A shareholder does not have unilateral *power* to dissolve the corporation, as state statutes provide that the board has sole discretion.³⁵ Therefore, shareholders have no *right* to capital.³⁶

m) *Right to Residuary*

Do shareholders have a *right to residuary* in the corporate assets or income? When a person's incident of ownership terminates, the person who receives that incident is said to have a "residuary right" to it.³⁷ For example, when a lease terminates, the lessor claims the *right to possess*; thus, the lessor has the *residuary right to possess*. In the principal-agent model, when the agency relationship terminates, the principal regains the right to manage. In this case, the principal has the *residuary right to manage*.

One might argue that the shareholder's right to vote gives shareholders *residuary rights* to those incidents claimed by the board (e.g., the *right to manage*). Certainly, the more *power* shareholders have

to designate board membership, the more powerful their *residuary rights*. Since, as was noted, non-controlling shareholders have negligible power to designate board membership, their residuary rights are negligible.

For this incident of ownership, the situation is different for sole and controlling shareholders. The sole shareholder, through the exclusive *power* to nominate and elect the full board, has strong *residuary rights to manage and income*. Controlling shareholders have less power to designate board membership³⁸ and, thus, weaker *residuary rights to manage and income*.³⁹ In addition, controlling shareholders also have the *residuary right to capital*, which the sole shareholder has outright.⁴⁰ Non-controlling shareholders' residuary rights are negligible, while the sole shareholder and controlling shareholders have *residuary rights to manage and income*--the controlling shareholder also has the *residuary right to capital*.

Regarding the *power to alienate & transfer* and *immunity from expropriation*. An analysis is unnecessary for these 3 incidents of ownership since they are either subsumed by other incidents or contingent on the presumption of ownership.⁴¹ That is, the presence of these incidents is contingent upon ownership, without which the incidents are meaningless. Since corporate assets cannot be transferred or expropriated if they are not owned in the first place, these incidents are not discussed further.

n) *Test of Hypothesis*

Table 2 summarizes the evidence, listing whether the legal relation necessary to claim an incident of ownership is present, absent, or a residuary right for each firm-type. As previous noted, the sole proprietor has every incident of ownership, while the firm-members

³⁵ Per DGCL § 275: "Dissolution generally; procedure. (a) If it should be deemed advisable in the judgment of the board of directors of any corporation that it should be dissolved, the board, after the adoption of a resolution to that effect by a majority of the whole board at any meeting called for that purpose, shall cause notice to be mailed to each stockholder entitled to vote thereon of the adoption of the resolution and of a meeting of stockholders to take action upon the resolution. (b) At the meeting a vote shall be taken upon the proposed dissolution. If a majority of the outstanding stock of the corporation entitled to vote thereon shall vote for the proposed dissolution, a certification of dissolution shall be filed with the Secretary of State pursuant to subsection..." Also, see RMBCA § 14.02.

³⁶ The sole shareholder is a special case. According to the DGCL § 275(c), "Dissolution of a corporation may also be authorized without action of the directors if all the stockholders entitled to vote thereon shall consent in writing and power to secure its vote." Thus, a sole shareholder has the power to dissolve the corporation, which, combined with the right to the capital upon dissolution, gives a sole shareholder the residuary right to the capital that remains after all other claimants are paid.

³⁷ Regarding the right to residuary, Honoré (1961, 127) states, "...whenever an interest less than ownership terminates, legal systems always provide for corresponding rights to vest in another. When easements terminate, the 'owner' can exercise the corresponding rights..."

³⁸ Technically, cumulative voting can, at times, reduce a controlling shareholder's power to vote in every board member.

³⁹ However, the controlling shareholder's residuary right to manage would be diminished by additional fiduciary duties to minority shareholders.

⁴⁰ The sole shareholder's power to propose dissolution combines with a sole shareholder's power to secure the vote, resulting in the right to capital (See footnote 36).

⁴¹ The power to alienate refers to the transfer of ownership (i.e., a sale). Alienating "all or substantially all" corporate assets occurs upon dissolution, which is discussed later in relation to the "right to capital." Alienating *some* corporate assets falls under the "right to manage." Thus, the *power to alienate* is subsumed by other incidents of ownership. The incidents of ownership, *power to transfer* and *immunity from expropriation*, while they involve economic benefits, are only *contingently* related to ownership. Waldron (1985) argues that power to transfer is not, in fact, part of the definition of ownership, "but only contingently connected with it." "...in France the operation of the doctrine of *legitima portio* casts a different complexion on wills, bequest and inheritance altogether. What does this show? Does it show that the French have a different concept of ownership from the Americans and the English, so that it is a linguistic error to translate '*propriete*' as 'ownership'? Or does it show that the power of transmissibility by will is not part of the definition of ownership but only contingently connected with it?" (Waldron 1985, 316)

(e.g., beneficiaries) of nonprofit corporations have no benchmarks for the claims of shareholders to the incidents of ownership. These firms serve as corporation's assets.

Table 2: Summary of Findings

Incidents of Ownership**	Liquidity Protection is Not Present		Liquidity Protection is Present			
	Sole Proprietor	General Partner	Sole Shareholder	Controlling Shareholder*	Non-Controlling Shareholder*	Nonprofit Member
Right to possess	Present	Present	Absent	Absent	Absent	Absent
Right to use	Present	Present	Absent	Absent	Absent	Absent
Right to income	Present	Present	Residuary	Residuary	Absent	Absent
Right to capital	Present	Present	Present	Residuary	Absent	Absent
Right to manage	Present	Present	Residuary	Residuary	Absent	Absent
Duty to prohibit harmful use	Present	Present	Absent	Absent	Absent	Absent
Liability of execution	Present	Present	Absent	Absent	Absent	Absent

* Compared to the sole shareholder, these residuary rights are diminished by cumulative voting and fiduciary responsibilities to minority shareholders.

** There are 7 incidents of ownership because 3 were eliminated from the analysis and the right of residuary relates to all other incidents.

Thus, the main result of the analyses is that, like firm-members of nonprofit corporations, the non-controlling shareholders have no incidents of ownership. They have no right to any of the corporate income or assets, and arguably less power than other firm-members (e.g., managers, employees) to obtain them. In no meaningful sense do these non-controlling shareholders possess ownership claims to the corporation's assets.

Regarding the Alternative Hypothesis, the evidence supports the hypothesis that firm-members of firm-types with liquidity protection have less legal ownership claims to firm-assets than do firm-members of firm-types without liquidity protection.⁴² Specifically, the firm-members of those firm-types without liquidity protection (i.e., sole proprietorships and partnerships) have greater ownership claims to firm-assets than do firm-members of firm-types with liquidity protection (i.e., business corporations and nonprofit corporations). No statistical test is necessary because all firm-types legally must have identical incidents of ownership to the firm-assets.

V. IMPLICATIONS FOR ACCOUNTING

In a sole proprietorship, the equality, assets equal liabilities plus net worth, ignoring measurement concerns, makes eminent economic sense. Calling the sole proprietor's net worth, "Owner's Equity" in order to imply that s/he has legal claim to the firm's net assets does not appear unreasonable. A balance sheet with a

"proprietary perspective" presents the firm's net assets, particularly the profits, as claimed by one type of firm-member. Calling the net assets, "Owner's Equity" shows that the sole proprietor has legal claims to the net assets.

Applying this "proprietary perspective," to large, widely held corporations, Sprague (1908) called net assets, "net worth," while Hatfield (1909) called net assets, "proprietorship." Couchman (1921) asserted that the "rights of persons to these assets" include "the rights of creditors, known as liabilities, and the rights of proprietors," the shareholders of corporations. In arguing that the proprietary perspective applies to the business corporation, Couchman (1921, 265) asserts that,

...surplus forms a part of the proprietorship, [as] it was either contributed to the organization by the proprietors themselves or has accrued to their credit within the organization...As to the surplus arising from earnings...[s]ome organization in their annual balance-sheets use the term "undivided profits" to display that portion of the net earnings of the preceding period which has not been appropriated, transferring the undivided profits of other periods to the surplus account. Portions of earned surplus may be set aside under many distinctive headings to show the purposes for which they are appropriated, such as "reserve for sinking fund," "reserve for betterments," "reserve for new factory...It is also desirable that in the balance-sheet the accountant should display surplus in such manner that the amount available for dividends may be readily ascertainable.⁴³

⁴² Obviously, everything could be restated using a null, rather than an alternative, hypothesis, but the result would be clumsy wording with no substantively different conclusion.

⁴³ Couchman (1921, 265) uses the term "surplus" "in its widest sense, that is, to measure any excess of asset value which a corporation may have over the sum of its liabilities and outstanding capital stock."

The larger size of the corporation, with more dispersed share ownership led to questioning whether the proprietary perspective was appropriate for such corporations. For example, Berle and Means (1932) called shareholders of such corporations “nominal owners,” arguing that they would more accurately be described as “creditors.” “By the late 1920’s, it had become commonplace to remark on the resemblance between shareholders and bondholders.” (Ireland 2001, 149; also, Lippman, 1914, 60-61)⁴⁴

Accounting academics responded with what became known as “entity theory” or the “entity perspective.” For example, Paton (1922, p. 38) argued that “an equity” is a “value representation of a right in property...Properties connote equities and equities connote properties...” in order to prescribe listing the claims of shareholders and creditors as “equities.” This version of the entity perspective prescribing a balance sheet with assets equal to equities was included in Paton and Littleton (1940), a report commissioned by the American Accounting Association to establish a “framework of accounting theory” (Bedford & Zeigler 1975, 438). In 1941, the committee of the American Institute of Accountants rejected Paton and Littleton to avoid “...de-privileging of stockholders, inherent in entity theory” (Cilloni, Marinoni & Merino 2013, 61). Since then, standard setters have required the proprietary perspective for the balance sheets of business corporations.

FASB (1985, 18) states that, “In a business enterprise, the equity is the ownership interest. It stems from ownership rights (or the equivalent) and involves a relation between an enterprise and its owners as *owners* rather than as employees, suppliers, customers, lenders, or in some other nonowner role. FASB (1985, Footnote 30) continues, “Other entities with proprietary or ownership interests in a business enterprise are commonly known by specialized names, such as stockholders, partners, and proprietors...but all are also covered by the descriptive term *owners*.”

Therefore, the balance sheet of the business corporation substitutes the sole proprietor’s “Owner’s Equity” with “Shareholders’ Equity,” implying that shareholders and sole proprietors have identical claims to the firm’s net assets and profits. The only reasonable inference to draw from this balance sheet presentation is that shareholders, like sole proprietor’s and partners, have exclusive legal ownership claims to the corporation’s net assets and profits.

⁴⁴ According to Holstrom & Kaplan (2003, 15), until the late 1970s, “management was loyal to the corporation, not to the shareholder,” where management, “...was not to maximize shareholder wealth, but to ensure the growth (or at least the stability) of the enterprise by ‘balancing’ the claims of all important corporate ‘stakeholders’--employees, suppliers, and local communities, as well as shareholders.”

In contrast, according to the evidence, non-controlling shareholders have no ownership claims to the net assets or profits. Specifically, shareholders have far fewer legal claims to firm-assets than do sole proprietors and partners and only slightly more claims to firm-assets than beneficiaries of nonprofit corporations.

Nonprofit and business corporations both have liquidation protection and, as the evidence reveals, their firm-members (e.g., non-controlling shareholders for the business corporation) have no legal ownership claims to firm-assets. Therefore, perhaps the balance sheet of the business corporation should be more similar to those of the nonprofit corporation than to those of the sole proprietorship. For example, firm-members of nonprofit corporations have no claims to firm-assets; therefore, FASB requires nonprofits to label the net assets as, “Net Assets.” If the shareholders of business corporations have no claims to the firm-assets, how accurately does the balance sheet represent firm-members’ legal claims to corporation’s net assets if it calls them “Shareholders’ Equity”? Does calling the net assets of the business corporation “Net Assets,” like nonprofit corporation better represent the non-existent claims of firm-members, including shareholders, to the firm-assets?

This question is perhaps why a recent accounting standard, FASB (2008, OB12) Concepts Statements No. 8, uses the phrase “the claims against the reporting entity,” replacing, “the claims to those resources” and similar phrasing FASB used for decades.⁴⁵ FASB (2010, 14) provides the justification for the change, arguing, “...that in many cases, claims against an entity are not claims on specific resources. In addition, many claims will be satisfied using resources that will result from future net cash inflows. Thus, while all claims are claims against the entity, not all are claims against the entity’s existing resources.” The takeaway for this paper is that FASB itself knows that the balance sheet does not accurately show shareholders’ legal claims to net assets.

What is the Solution?

The IASB and FASB’s goal to converge accounting standards faltered over conflicts about whether financial reporting should take an entity or proprietary perspective, as noted in the introduction. Van Mourik (2014) examines the conflict, finding confusion on both sides and providing a list of papers on various types of equity theories, which would be helpful in understanding the different reporting perspectives. Ultimately, Van Mourik (2014) uses limited liability as the principle by which to determine reporting perspective for each firm-type. Van Mourik’s focus on limited liability is based on Demsetz (1967) three

⁴⁵ FASB (1978, 6) Concepts Statement No. 1 states, “Financial reporting should provide information about the economic resources of an enterprise, the claims to those resources...”

characteristics of public corporations: (1) its legal personality, (2) its limited liability for common shareholders, and (3) its free transferability of shares.

But, as this paper has explained, limited liability is unnecessary for a corporation to exist and can be privately contracted to a large degree. More importantly, Demsetz' definition does not include entity shielding as a characteristic of a corporation when, without it, transferable shares could not exist. If stock markets can and have existed with limited liability, but not entity shielding, which is a more important characteristic of the business corporation? Instead, to determine the appropriate reporting perspective for each firm-type, academics should focus on how entity shielding affects firm-members' (e.g., shareholders') claim to the firm-assets.

VI. CONCLUSION

In a 2008 joint Exposure Draft, IASB and FASB recommended that "[A]n entity's financial reporting should be prepared from the perspective of the entity (entity perspective) rather than the perspective of its owners or a particular class of owners (proprietary perspective)" (IASB 2008, 5). But when FASB realized that an entity perspective would not list net assets and profits under Shareholders' Equity, it abandoned plans to converge reporting entity perspectives.⁴⁶ Instead, FASB continues to require the proprietary perspective for business corporations, which implies that shareholders have exclusive ownership claims to the firm's net assets, including the profit.

The reporting perspective most appropriate for each reporting entity should depend on underlying principles to which standard setters agree. This paper assumes that the claims firm-members have to the firm-assets implies what reporting perspective is appropriate for each firm-type.

This paper finds that shareholders, unlike sole proprietors, of business corporations have no legal claims to the corporation's net assets or profit. Instead, shareholders of business corporations have similar claims to those of beneficiaries of nonprofit corporations. The reason for the similarity is that both business and nonprofit corporations have liquidity protection because their firm-assets are shielded from firm-members, as well as the firm-members' creditors. The ability to shield the creditors of firm-members cannot be accomplished through private contracting and, as such, this type of liquidity protection distinguishes the business corporation from other business firm-types.

The unique feature of liquidity protection afforded to business corporations necessarily restricts shareholders' claims to firm-assets. Specifically,

shareholders, because of liquidity protection, have no claims to the firm's net assets, while sole proprietors with no liquidity protection have exclusive claims to firm-assets. Therefore, requiring business corporations to present net assets as part of Shareholders' Equity misrepresents shareholders claims to the net assets. Shareholders do not have identical claims to firm-assets to those of sole proprietors; rather the opposite is true, they have no claims.

The shareholders' lack of claims to the firm-assets implies that the proprietary perspective is inappropriate for the balance sheet of the business corporation. Academics should focus on how entity shielding affects each firm-members claim to the net assets., because entity shielding uniquely identifies firm-type, cannot be privately contracted, and enables transferable shares without which founders could not maintain personal liquidity. Entity shielding, not limited liability, should serve standard setters as the principle underlying what reporting perspective should be required for each firm-type.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Alchian, Armen A., Harold Demsetz. 1972. "Production, Information Costs, and Economic Organization." *The American Economic Review*. Vol. 62. No. 5. Dec. pp. 777-795.
2. Bainbridge, Stephen M. 2002. "The Board of Directors as a Nexus of Contracts: A Critique of Gulati, Klein & Zolt's 'Connected Contracts' Model." *UCLA, School of Law Research Paper No. 02-05*.
3. _____. 2008. *The New Corporation Governance in Theory and Practice*. Oxford University Press.
4. Bebchuk, Lucian Arye. 2005. "The Case for Increasing Shareholder Power" 118 *Harv. L. Rev.* 833-842.
5. Becker, Lawrence, C. 1977. *Property Rights: Philosophic Foundations*. Routledge.
6. Blair, Margaret M. 2003. "Locking in Capital: What Corporate Law Achieved for Business Organizers in the Nineteenth Century," *UCLA Law Review*. Vol 51. 387.
7. _____. and Lynn A. Stout. 1999. "A Team Production Theory of Corporate Law," *Virginia Law Review*, Vol. 85, 2. 247-328.
8. Bodner, Randall W. and Peter L. Welsh. 2005. "Disney Directors Not Liable But Questions Remain." *Insights; the Corporate & Securities Law Advisor*. Englewood Cliffs: Sep. Vol.19, Issue 9. 2-8.
9. Bork, Paul. 2005. "Fiduciary Duties of a Director of a Delaware Corporation." Prepared for Board of Directors 101 - October 27. *Massachusetts Society of Certified Public Accountants Inc. and National Association of Corporate Directors Co-Sponsors*. 1-21.

⁴⁶ www.iasplus.com/en/meeting-notes/iasb/2010/agenda_1011/agenda1551#entity-versus-proprietary-perspective

10. Bowen, Ezra. 1926. "The Concept of Private Property." *Cornell Law Quarterly*. 11. 41-48.
11. Ciepley, D. 2013. "Beyond public and private: Toward a political theory of the corporation." *American Political Science Review*, 107(1), 139-158.
12. Couchman, C. B. 1921. "Classification of surplus." *Journal of Accountancy* (pre-1986), 32(000004), 265.
13. Dari-Mattiacci, G., Gelderblom, O., Jonker, J., & Perotti, E. C. 2017. "The emergence of the corporate form." *The Journal of Law, Economics, and Organization*, 33(2), 193-236.
14. Demsetz, Harold. 1967. Toward a Theory of Property. *The American Economic Review*. Vol. 57, 2. 347-359
15. Dibadj, Reza. 2006. "Delaying Corporate Law." *Hofstra Law Review*. Vol. 34. p. 469-533.
16. Dodd, E. Merrick, Jr. 1941. "The Modern Corporation, Private Property, and Recent Federal Legislation." *Harv. L. Rev.* Vol. 54. 917-948.
17. Donaldson, David C. 2005. "The Nomination of Directors Under U.S. and German Law." Manuscript. Revised Draft: January.
18. Easterbrook, Frank H. & Daniel R. Fischel. 1991. *The Economic Structure of Corporate Law*. Cambridge, MA: Harvard University Press.
19. FASB 1978 Statement of Financial Accounting Concepts No. 1, Objectives of Financial Reporting by Enterprises, November.
20. FASB 1985 Statement of Financial Accounting Concepts No. 6. New York: Financial Accounting Standards Board, November.
21. FASB 2010 Statement of Financial Accounting Concepts No. 6. Conceptual Framework for Financial Reporting, September.
22. Greenwood, Daniel J.H. 2006. "The Dividend Puzzle: Are Shares Entitled to the Residual?" 32. *Journal of Corporation Law*. 103-159.
23. Hansmann, H., & Kraakman, R. 2000. "The essential role of organizational law." *The Yale law journal*, 110(3), 387-440.
24. _____. 2002. "Property, contract, and verification: The numerus clausus problem and the divisibility of rights." *The Journal of Legal Studies*, 31(S2), S373-S420.
25. _____. & Squire, R. 2006. "Law and the Rise of the Firm." *Harvard Law Review*., 119, 1335.
26. Hatfield, H. R. 1909. *Modern Accounting, Its Principles and Some of Its Problems*. D. Appleton.
27. Henderson, Todd M. 2007. "Everything Old Is New Again: Lessons from Dodge v. Ford Motor Company." *Working Paper*. University of Chicago Law School. December. Available at SSRN: http://ssrn.com/abstract_id=1070284
28. Hessen, Robert. 1979. "A New Concept of Corporations: A Contractual and Private Property Model." 30. *Hastings Law Journal*. 327-350.
29. Hohfeld, Wesley N. 1913. "Some Fundamental Legal Conceptions as Applied in Judicial Reasoning," 23 *Yale Law Journal*. 16.
30. _____. 1917. "Fundamental Legal Conceptions as Applied in Judicial Reasoning," 26. *Yale Law Journal*. 710.
31. IASB (2008) Exposure Draft: An improved Conceptual Framework for Financial Reporting; Chapter 1: The Objective of Financial Reporting, Chapter 2: Qualitative Characteristics and Constraints on Decision-useful Financial Reporting Information, Jointly with the FASB.
32. Ireland, Paddy. 2001. *Defending the Rentier: Corporate Theory and the Reprivatisation of the Public Company*. John Parkinson et al (eds), *The Political Economy of the Company*, Hart.
33. Levitt, A. Jr. "Stocks Populi" 2006. *Wall Street Journal*. p. A14. October 27.
34. Lippmann, Walter 1985. *Drift and Mastery*. Madison, WI: University of Wisconsin Press.
35. Loewenstein, Mark J. 2004. "The Quiet Transformation of Corporate Law." *SMU Law Review*. 57. 353. 384-85.
36. Merrill, Thomas W. and Henry E. Smith. 2001. "What Happened to Property in Law and Economics?" *The Yale Law Journal*. Nov. 111, 2. ABI/INFORM Global. 357-398.
37. Monks, Robert A.G. and Nell Minow. 2001. *Corporate Governance*. Blackwell Publishing Ltd. 2nd Ed.
38. Munzer, Stephen R. 1990. *A Theory of Property*. Cambridge University Press. 1st Ed.
39. Paton, W. A. 1922. *Accounting Theory with Special Reference to the Corporate Enterprise*. New York, NY: The Ronald Press Company.
40. _____. & A. C. Littleton. 1940. *An Introduction to Corporate Accounting Standards*. Monograph No. 3. American Accounting Association.
41. Penner, J. E. 1996. "The 'Bundle of Rights' Picture of Property." 43. *UCLA Law Review*. 711-820.
42. _____. 1994. "Note, Distributive Liberty: A Relational Model of Freedom, Coercion, and Property Law." 107. *Harv. L. Rev*.
43. Sprague, C. E. 1908. *The Philosophy of Accounts*. New York.
44. Stout, Lynn A. 1995. "Are Stock Markets Costly Casinos? Disagreement, Market Failure, and Securities Regulation" *Virginia Law Review*, Vol. 81, No. 3 Apr. 611-712.
45. _____. 2002. "Bad & Not-So Bad Arguments for Shareholder Primacy." *Southern California Law Review*, Vol. 75, 1189.

46. _____. 2012. Shareholder Value Myth: How Putting Shareholders First Harms Investors, Corporations, and the Public. Berrett-Koehler Publishers. 1-149.
47. Toner, Janice. 2006. "Property Rights: An Analysis of Their Implications for Understanding Land Rights in Australia." *Extension Farming Systems Journal*. vol. 1. no. 1. Industry Forum. 79-84.
48. Van Mourik 2014 The Equity Theories and the IASB Conceptual Framework.pdf
49. Waldron, Jeremy. 1985. "What is Private Property." *Oxford Journal of Legal Studies*. Oxford University Press. 5(3). 313-349.
50. Warburton, Nigel. 2001. Philosophy: The Classics. 2nd Ed. Routledge NY, NY.
51. Winkler, Adam. 2004. "Corporate Law or the Law of Business? Stakeholders and Corporate Governance at the End of History." 67 *Law & Contemp. Probs.* p. 109.
52. Weinstein, Mark I. 2003. "Share Price Changes and the Arrival of Limited Liability in California." *The Journal of Legal Studies*. Vol. 32. 11.
53. _____. 2005. Limited Liability in California 1928–31: It's the Lawyers *American Law and Economics Review*, Volume 7, Issue 2, 1 October 2005, Pages 439–483.





GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: D
ACCOUNTING AND AUDITING
Volume 22 Issue 2 Version 1.0 Year 2022
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Human Resource Disclosure: A Case Study on Listed Banking Companies in Bangladesh

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Abstract- As human resources (HR) are considered a strategic capital and the success of an organization highly depends on skilled manpower, it is essential to investigate HR disclosure practices. Limited research on human resource disclosure from an accounting perspective in the developing country motivates this study. The study aims to evaluate the human resources disclosure practices in the Bangladeshi banking industry. Using content analysis, the disclosure data are collected from the annual reports of 30 listed banks on the Dhaka stock exchange (DSE). 40% of the sample banks disclose the HR practices within the range of 50%-60%, indicating that the banking sector has a wide scope to improve its HR practices. The average HR disclosure practice in the banking industry in Bangladesh is 59.25%. Of which, the highest disclosure is recorded by the HR development 91.25%, while the lowest is in the health and safety, documented by only 19.45%. the highest HR practices are recorded by Prime bank ltd. Therefore, the study suggests the banks' managers, regulatory bodies and academicians focus more on the HR disclosure issue to encourage more disclosure of information related to human resources and formulate relevant policies that might create a more favorable working environment for the HR.

GJMBR-D Classification: DC Code: 658.15226 LCC Code: HD4904.7



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Abstract- As human resources (HR) are considered a strategic capital and the success of an organization highly depends on skilled manpower, it is essential to investigate HR disclosure practices. Limited research on human resource disclosure from an accounting perspective in the developing country motivates this study. The study aims to evaluate the human resources disclosure practices in the Bangladeshi banking industry. Using content analysis, the disclosure data are collected from the annual reports of 30 listed banks on the Dhaka stock exchange (DSE). 40% of the sample banks disclose the HR practices within the range of 50%-60%, indicating that the banking sector has a wide scope to improve its HR practices. The average HR disclosure practice in the banking industry in Bangladesh is 59.25%. Of which, the highest disclosure is recorded by the HR development 91.25%, while the lowest is in the health and safety, documented by only 19.45%. the highest HR practices are recorded by Prime bank Ltd. Therefore, the study suggests the banks' managers, regulatory bodies and academicians focus more on the HR disclosure issue to encourage more disclosure of information related to human resources and formulate relevant policies that might create a more favorable working environment for the HR.

I. INTRODUCTION

Human Resources (HR) refers to core competencies, and knowledge creation and innovation and the creation of value above all material and financial resources. According to the resource-based as well as the existing theoretical knowledge, the success of contemporary organizations is no longer attributed extensively on physical capital but also to intangible assets such as human capital and therefore, human of capital is the driving force of basic sustainable competitive advantage.

In developed countries, it is very common that the parent companies to have a formal disclosure HR practice in their annual report. However, in developing countries such as Bangladesh, and disclosure of human resources side is a very new concept, and it is still in the stage of naive. Although this is not mandatory for the detection of human resources information in the annual report for companies in Bangladesh, it is making some disclosure of human resources voluntarily. There was a dearth of research on the detection of human resources in the context of emerging economies (Khan and Khan,

2010). Human resources is also considered strategic capital, and accounting aspects and reports have become critical to the success of the organization. So far concern far as we know, there have been no acts of careful research Reports on human resources in the annual report of the banking sector in Bangladesh. Thus, this study is trying to find the pattern and extent of disclosure of human resources in the listed banking companies in Bangladesh and to justify the impact of the bank properties over the detection of human resources.

a) Objective

The main objective of this study is to evaluate the human resources disclosure practices in the annual report of the listed banking companies in Bangladesh. To achieve the main objective, the specific objectives of the study are as follows:

1. To find out disclosure practices of human resources at the bank's annual report.
2. To determine the extent of human resource information reported in the annual report of the corporate banking

b) Methodology of the study

This study was conducted on the basis of secondary data. Secondary data was collected from the annual reports of the selected listed banking companies in Bangladesh. The study took 30 banking companies enlisted in the Dhaka Stock Exchange (DSE) as the sample, that is, the population was considered 100% of the study. The study was conducted in 2022 and hence data for this study was collected from annual report of 2021 to make study up to date.

II. LITERATURE REVIEW

It has been found disclosure of human resources to be supportive of the stakeholders to take appropriate investment decisions in an era of a knowledge-based economy (Sen 2008; Mamun 2009; Hussain Khan and YESMIN, 2004). HC reports that organizations can benefit by attracting and retaining the best talent and enjoy a competitive advantage (Adams2004; King 2002). As a result, it can be aspects of the preparation of external financial reports of human resources play an important role in facilitating the proper use of human resources in an organization (Mamun 2009). However, due to difficulties in measuring

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monetary value, it was not reported human resources in traditional financial statements of the organizations (Roslender and Dyson 1992). Therefore, voluntary reporting through annual reports is the best way to inform stakeholders about the value and practice of human resources. Non-disclosure of quantitative human resources may be due to the lack of a single agreed-upon method for measuring information and that only a few People in companies have enough knowledge to identify these statements (Abeysekera 2004; Goh and Li, 2004).

In 1973, American Accounting Association defined HRA as "the process of identifying and measuring data on human resources and communicate this information to the parties concerned" (AAA 1973). It provides information about human values and resource costs, and works to facilitate the decision-making process, and stimulates decision-makers to adopt the perspective of human resources (Sackman, Flamholtz and Bullen 1989). Companies through the progressive in the world now have realized that human resources practices and disclosure of human resources for the stakeholders have a significant effect on performance (nose, Niemark and Gilani in 2010, Delaney and Huselid 1996; Sing 2004; Wright and McMahan, 1992; Youndt et al. 1996). The study points to the Watson Wyatt (2001) on human capital index that superior human resources practices are not only linked with better financial returns, they are, in fact, a leading indicator of increasing shareholder value. It has gained significant benefits from better information about human resources (Sackman, Flamholtz and Pullen 1989). According to Guthrie (2001), these information resources to be allocated more effectively within organizations may allow increase has enabled the gaps in skills and capabilities to be identified more easily The study conducted by Khan and Khan (2010) on disclosure practices of HC in 32 largest manufacturing sector and services sectors listed in the Dhaka stock Exchange (DSE) found that the reporting

of human resources of the most important companies in Bangladesh practices were not as low as expected. The researchers found training, number of employees, career development, and employment policies as elements of human resources the most common.

III. FINDINGS AND ANALYSIS

This section focuses on methods of detection of human resources, and the location of the detection, measurement and analysis of the detection of human resources contained in the annual report of the banking companies listed in Bangladesh.

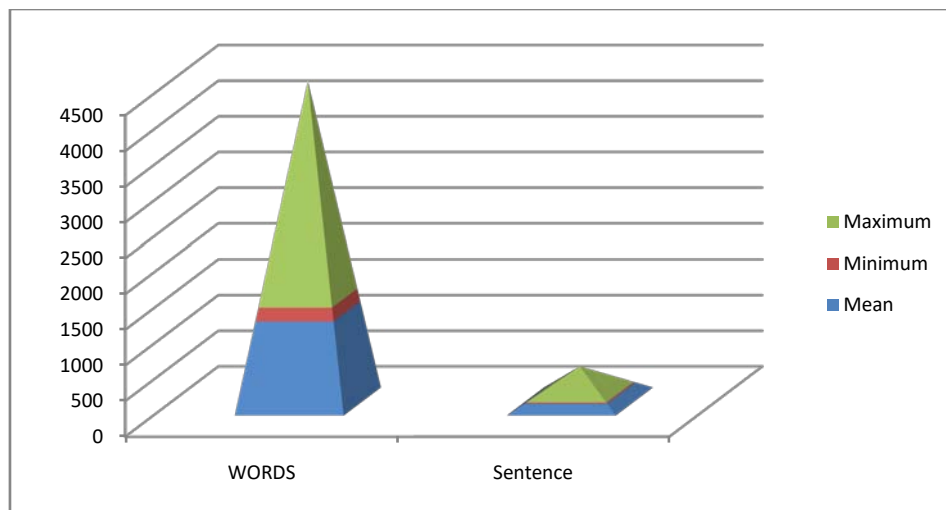
a) HR disclosure

The data in Table NO.1 discover that the banking companies in Bangladesh revealed human resources information using text, chart, graph, and image. In the content analysis it was observed that the average corporate banks use 1264.33 words, maximum 3034 words and a minimum of 187 words; the camel 79.17 average, maximum penalties of 363 and a minimum of sentences 11 in the detection of human resources information in its annual report in maximum 2014. 46.67 % of the sample banks used 500-1,000 words (Appendix 3) and, more specifically, Prime Bank Limited uses a greater number of words and Dhaka Bank Limited the largest number of sentences in this regard (Appendix 4).

Table 1: Words & Sentences for human resource disclosure

	Word	Sentence
Mean	1264.33	118.83
Minimum	187.00	11.00
Maximum	3034.00	363.00

Source: Developed by Authors based on analysis of annual report



Graph 1: Showing the total human resource disclosure word & sentence of the banking companies

b) Location of disclosure

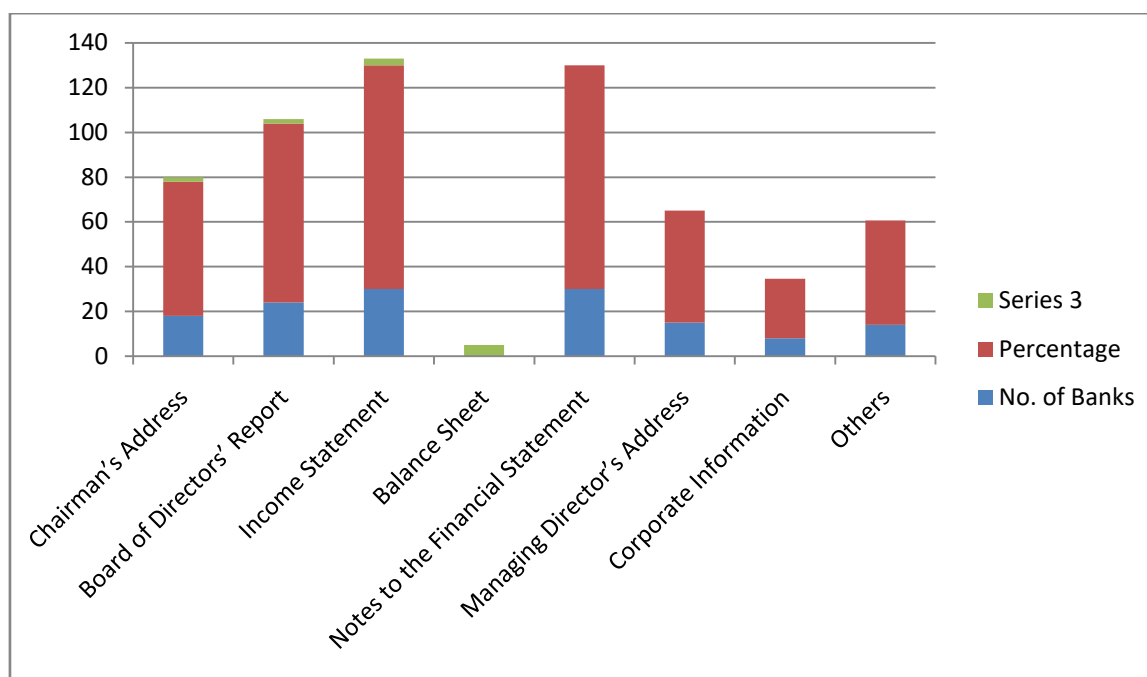
Analyze the detection of human resources information in the annual report for banking company in Bangladesh site, and found that the banking company discloses information on human resources in different locations or parts of the annual report. Table 2 shows that all (100%) banking companies revealed human resources information, which is, especially with respect to financial and human resources in the income

statement and the notes to the financial statements information. The use of banking companies also other important parts of the annual report, such as the president title (60.00%), Managing Director of the "address (50.00%), and members of the Board of Director's report (80%). In spite of 46.67% of the banks' sample used for other areas of human resources and information disclosure, but No bank disclose any information on human resources in the balance sheet.

Table 2: Shows the locations of HR disclosure in annual reports of the sample banks

Location	No. of Banks	Percentage
Chairman's Address	18	60.00%
Board of Directors' Report	24	80.00%
Income Statement	30	100.00%
Balance Sheet	00	00%
Notes to the Financial Statement	30	100.00%
Managing Director's Address	15	50%
Corporate Information	8	26.66%
Others	14	46.67

Source: Developed by Authors based on analysis of annual report



Graph 1: Showing the total human resource disclosure in percentage & no. of banks of the banking companies

c) Heading-wise HR Disclosure

Total has been ranked detection of human resources in its annual report to eight different categories to analyze the best and a number of selected items under each category are not on an equal footing. As the number of items contained in the human resources, finance is a maximum 20 items, so, it was observed that the banking companies in Bangladesh revealed that the maximum amount of information that is considered in the framework of this area (Appendix 1),

but in percentage terms, the financial items HR- not in the highest position. Table 3 shows that the average banking companies detect 59.25% of the human resources information selected, where the average maximum disclosure in the case of human resources development (91.25%), followed by HR- policy (75.00%) and the average minimum detection it was in HR- health and safety areas (19.45%). Observed maximum between the maximum disclosures in human resource development (100%), followed by HR- relationship and

culture (92.31%) and items HR- policy (90.91%) and the minimum between the minimum disclosure observed in human resources in the field of health and safety (0%) items and items followed by basic human resources (5.85%), and other human resource (0%). There is a

maximum variation in the case of the other terms of human resources (SD = 20.74), followed by items of basic human resources (SD = 18.48) and the minimum difference is in the case of financial items- HR (SD = 9.32).

Table 3: Heading-wise HR Disclosure in annual report of the sample bank (Percentage)

	HR Policy	Basic HR	HR Fin.	HR Import	Health Safety	HR Develop	HR Relation	HR Other	Total Disclosure
Mean	75.00%	49.44%	66.00%	53.33%	19.45%	91.25%	60.27%	32.00%	59.25%
Minimum	45.46%	5.85%	45.00%	25.00%	0.00%	37.50%	23.08%	0.00%	47.50%
Maximum	90.91%	84.62%	80.00%	75.00%	50.00%	100%	92.31%	80.00%	78.75%

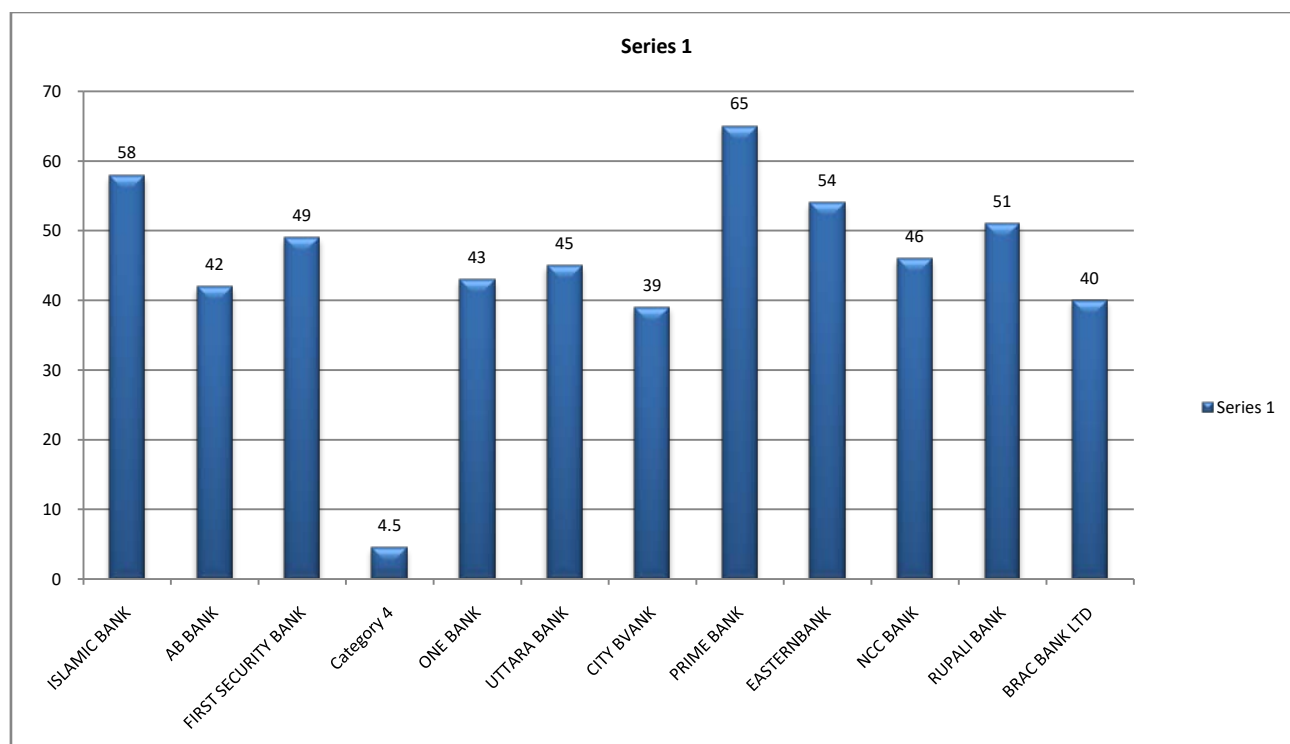
Source: Developed by Authors based on annual report of the sample banks

Table 4 the following chart 1 report the detection of human resources general corporate banking in Bangladesh in 2014. The position she found here that the Bank President, Ltd. has achieved the highest position by revealing the 65 (82.28%) of the specific elements of human resources in securing the annual report in 2014. the southern West Bank Limited

and Trust Co., the second and third place by revealing the 63 (79.75%) of the specific elements of human resources, respectively. On the other hand, import and Export Co., Ltd. Bank and Standard Bank Limited combed Last place and 20th by the disclosure of only 38 (48.10%) of the specific elements of human resource.

Table 4: Showing the ranking of sample banks based on total human resource disclosure score

Rank	Bank Name	Total score	Percentage	Rank	Bank Name	Total Score	Percentage
1	Prime Bank Ltd	65	82.28	12	Mercantile Bank	47	59.49
2	Southeast Bank Ltd	63	79.75	12	NCC Bank Ltd	46	58.23
3	Trust Bank Ltd	60	75.94	13	Uttara Bank Ltd	45	56.96
4	SJIBL Ltd	59	74.68	14	SIBL	44	55.70
5	Dhaka Bank Ltd	58	73.42	15	Bank Asia Ltd	43	54.43
6	IBBL	58	73.42	15	One Bank Ltd	43	54.43
7	Mutual Trust Bank	56	70.87	15	Pubali Bank Ltd	43	54.43
8	Eastern Bank Ltd	54	68.35	16	AB Bank Ltd	42	53.16
8	Jamuna Bank Ltd	53	67.09	16	IFIC Bank Ltd	42	53.16
9	Premier Bank Ltd	52	65.82	17	PUBLIC Bank	41	51.90
9	Rupali Bank Ltd	51	64.56	18	BRAC Bank Ltd	40	50.63
10	FSIB Ltd	49	62.03	19	City Bank Ltd	39	49.37
10	UCBL	49	62.03	19	ICB Islami Bank	39	49.37
11	JANATA BANK	48	60.76	20	EXIM Bank Ltd	38	48.10
12	Dutch -Bangla Bank	47	59.49	20	Standard Bank Ltd	38	48.10



Graph 1: Showing the total human resource disclosure score of the banking companies

d) *Comparative total Human Resource Disclosure*

From Table 4, it is revealed that the highest detection of human resources made by the President of the Bank, Ltd. was 82.28% and the lowest was detected by the bank, whether Exim Limited and Standard Bank Limited was 48.10%. Table 5 reveals that the following maximum 12 banks, i.e. 40.00% of the sample of banks revealed 50% - 60% of the specific elements of human resources included in the disclosure of human

resources index in this study. Not disclosed any bank less than 40% and more than 80% of selected information and human resources. Only 6 (20.00%) of the sample banks detect 70% -80% of the information in the annual report. Among a sample of banks, revealed that 56.67% of them less than 60% and 46.67% of the sample banks detect more than 60% of the specific elements of human resources.

Table 5: Showing comparative total human resource disclosure

Range of total human Resource disclosure	No. of Banks	Percentage of Sample
Less than 40%	0	00%
40% - 50%	5	16.67%
50% - 60%	12	40.00%
60% - 70%	7	23.33%
70% - 80%	6	20.00%
Total	30	100.00%

Source: Developed by Authors based on total HR disclosure score

If you compare the results of the current study with previous studies Imam (2000); Olsson (2001); Hussain Khan and Youndt (2004);, it can be said Huang, and Jusoff (2008) that the disclosure of human resources in the banking companies in Bangladesh is in a good position. Finally, voluntary disclosure, the position public disclosure of human resources corporate banking in Bangladesh can be considered to be satisfactory.

IV. RECOMANDATIONS

Among other things, the effects of the main process of this study are: management and accountants banking companies on human understanding is expected to disclose the real resources of this research position, it is expected to be the motive in the disclosure of information resources more human in its annual report to also improve its

image and attract more of promising workers for its banks. Researchers in the detection of human resources might be used beneficially issues raised in this article more comprehensive studies in the detection of human resources. It is expected to realize the real position of the detection of human resources corporate banking in Bangladesh, which will help them in the formulation of guidelines and laws in this regard to the disclosure of human resources in a certain framework, and to encourage banking companies in the detection of government regulators practices and other more information about resources Humanity.

V. CONCLUSION

The success of the organizations services geared primarily depends on the efficiency of human resources capabilities. Clients, borrowers, investors and other relevant parties of banking companies evaluate information related to human resources in the selection of a bank and valuable information on human resources of the organization are very important for decision-makers in the modern knowledge-based economy era. Although the disclosure of human resources in the banking companies can be said to be satisfactory level, but the framework of disclosure and the level of disclosure is not the same for all banks. Therefore, to achieve these disclosures in a certain framework, and to encourage more disclosure of information related to human resources, the government and other regulatory bodies should formulate relevant that might create a more favorable working environment provision Shum Resources in the banking companies in Bangladesh. Study some of the restrictions that will be considered in the use and interpretation of the results of the study. Home restrictions for this study include: The study used secondary data only. It is based on the listed banking companies choose deliberate Bangladesh used only and annual reports for one year to study. The study recommends the areas of detection of the following specific human resources for further research: Detection of human resources in the banking sector: the longitudinal evaluation. Comparative detection of human resources: study across the industry in Bangladesh.

REFERENCES RÉFÉRENCES REFERENCIAS

1. AAA 1973, 'Report of the committee on human resource accounting, American Accounting Association, Committee on Accounting Human Resources', The Accounting Review, Supplement to Vol. XLVIII, pp. 169-185
2. Abeysekera, I & Guthrie, J 2005, 'An empirical investigation of annual reporting trends of intellectual capital in Sri Lanka', Critical Perspectives on Accounting, Vol. 16, No. 3, pp. 151-163
3. Adams, CA 2004, 'The ethical, social and environmental reporting performance portrayal gap, Accounting Auditing, and Accountability Journal, Vol. 17, No. 5, pp. 731-757.
4. Bullen, ML 2007, 'Human resource accounting: A useful tool for measurement and management in organizations', Leadership and Organizational Management Journal, 2007 (4), pp. 85-103.
5. Delaney, JT & Huselid, MA 1996, 'The impact of human resource management practices on perception of organizational performance', Academy of Management Journal, Vol. 39, No.4, pp. 949-969.
6. Flamholtz, EG & Lacey, JM 1981, 'Personnel Management, HC Theory, and Human Resource Accounting', Industrial Relations Monograph Series, No. 27, p.19.
7. Flamholtz, EG & Main, ED 1999, 'Current issues, recent advancements and future directions in human resource accounting', Journal of Human Resource Costing and Accounting, Vol. 4, No.1, pp. 11-20
8. Goh, PC & Lim, KP 2004, 'disclosing intellectual capital in company annual reports: Evidence from Malaysia', Journal of Intellectual Capital, Vol. 5 No. 3, pp. 500-510.
9. Guthrie, J 2001, 'The management, measurement and the reporting of intellectual capital', Journal of Intellectual Capital, Vol. 2, No. 1, pp. 27-41.
10. Guthrie, J & Petty, R 2000, 'Intellectual capital: Australian annual reporting practices', Journal of Intellectual Capital, Vol. 1 No. 3, pp. 241-250.
11. Guthrie, J, Petty, R, Yongvanich, K & Ricceri, F 2004, 'Using content analysis as a research method to inquire into intellectual capital reporting', Journal of Intellectual Capital, Vol. 5, No. 2, pp. 282- 293.
12. Hossain, M 2001, 'The Disclosure of Information in the Annual Reports of Financial Companies in Developing Countries: the Case of Bangladesh', M. Phil thesis, The University of Manchester, UK.
13. Hossain, M 2008, 'The Extent of Disclosure in Annual Reports of Banking Companies: The Case of India', European Journal of Scientific Research, Vol. 23, No. 4, pp. 569-580.
14. Hossain, MA 1998, 'Disclosure of Financial Information in Developing Countries: A Comparative Study of Non-Financial Companies in India, Pakistan and Bangladesh', Ph.D. Dissertation, School of Accounting and Finance, Victoria University of Manchester, UK, July-1998.
15. Hossain, M., Tan, L. and Adams, M. (1994), 'Voluntary disclosure in an emerging capital market: some empirical evidence from companies listed on the Kuala Lumpur Stock Exchange', International Journal of Accounting, Vol. 29, No. 4, pp. 334-351.
16. Hossain, M, Khan, AR & Yasmin, I 2004, 'The Nature of Voluntary Disclosures on Human Resource in the Annual Reports of Bangladeshi Companies', Dhaka

- University Journal of Business Studies, Vol. 25, No. 1, pp. 221-231.
17. Hossain, MS 2010, 'Financial Reporting Practices of Listed Pharmaceuticals Companies in Bangladesh', PhD Dissertation, National University, Bangladesh.
 18. Huang, CC, Abidin, ZZ & Jusoff, K 2008, 'External Reporting of Human Capital in Malaysia', Asian Social Sciences, Vol. 4, No. 8, pp. 3-10
 19. Huselid, M 1995, 'The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance', the Academy of Management Journal, Vol. 38, No. 3, pp. 635-672.
 20. Ismail, TH 2002, an Empirical Investigation of Factors Influencing Voluntary Disclosure of Financial Information on the Internet in the GCC Countries, Working Paper Series, Social Sciences Research Network, July 2002
 21. Khan, MH & Khan, MR 2010, 'Human capital disclosure practices of top Bangladeshi companies', Journal of Human Resource Costing & Accounting, Vol. 14, No. 4, pp. 329 – 349.
 22. King, A 2002, 'How to get started in corporate social responsibility', Financial Management, October
 23. Li, J, Pike, R & Haniiffa, R 2006, 'Intellectual Capital Disclosures in Corporate Annual Reports: A European Comparison', Working Paper No. 06/24, School of Management, Bradford University, July 2006.
 24. Mamun, SAA 2009, 'Human Resource Accounting (HRA) Disclosure of Bangladeshi Companies and Its Association with Corporate Characteristics', BRAC University Journal, Vol. V1, No. 1, pp. 35-43.
 25. Niemark, MK 1995, The hidden dimensions of annual reports, sixty years of social conflict at General Motors, Markus Weiner Publishing, Princeton, New Jersey.
 26. Olsson, B 2001, 'Annual reporting practices: information about human resources in corporate annual reports in major Swedish companies', Journal of Human Resource Costing and Accounting, Vol. 6 No. 1, pp. 39-52.
 27. Roslender, R & Dyson, JR 1992, 'Accounting for the worth of employees: a new look at an old problem', British Accounting Review, Vol. 24, No. 4, pp. 311-329.
 28. Sackman, S, Flamholtz, E, & Bullen, M 1989, 'Human resource accounting: a state of art review', Journal of Accounting Literature, 8, 235-64.
 29. Singh, K 2004, 'Impact of HR practices on perceived firm performance in India', Asia Pacific Journal of Human Resources, Vol. 42, No. 3, pp. 301-317.
 30. Williams, SM 2001, 'Is a company's intellectual capital performance and intellectual capital disclosure practices related: evidence from public listed companies from the FTSE 100?', Paper presented at the Fourth World Congress on IC, Hamilton.
 31. Youndt, MA, Snell, SA, Dean, LW & Lepak, C, 1996, 'Human Resource management, manufacturing strategy and firm performance', Academy of Management Journal, Vol. 39, No.4, pp. 836-866.
 - 32.

Appendix #1: Total HR Disclosure score classified into 8 classes

	Bank Names	HR Disclosure Classes								Total
		HR Policies	Basic HR Information	Financial Information on HR	HR Importance to Organization	Health & Safety at Work	HR Development	HR Relationship & Culture	Employee Others Factor	
1	ABBANK	5	7	9	3	1	8	8	2	42
2	ALARABANK	8	5	11	2	1	8	5	2	32
3	BANKASIA	9	11	12	3	1	6	7	1	29
4	BRACBANK	7	5	13	2	1	5	8	1	30
5	CITYBANK	6	3	12	2	1	6	9	0	39
6	DHAKABANK	9	9	12	3	3	8	9	2	56
7	DUTCHBANGL	8	7	14	2	1	8	7	1	46
8	EBL	5	9	14	3	1	8	7	2	51
9	EXIMBANK	10	6	11	2	0	7	6	0	38
10	FIRSTSBANK	8	5	16	2	1	8	6	1	48
11	ICBIBANK	7	3	11	2	1	5	8	2	39
12	IFIC	6	4	15	1	1	3	7	2	42

13	ISLAMIBANK	10	9	15	2	1	8	8	3	55
14	JAMUNABANK	6	7	15	2	1	8	10	2	51
15	MERCANBANK	6	6	16	2	1	8	7	0	46
16	MTBL	9	9	13	1	1	8	10	1	52
17	NBL	9	6	13	2	1	5	9	2	47
18	NCCBANK	6	7	15	2	1	8	8	2	46
19	ONEBANKLTD	6	6	13	1	1	8	7	2	43
20	PREMIERBAN	7	8	13	2	1	8	9	2	50
21	PRIMEBANK	10	11	16	3	3	8	12	4	63
22	PUBALIBANK	7	5	13	2	1	8	6	1	43
23	RUPALIBANK	7	6	14	3	1	8	9	2	50
24	SHAHJABANK	10	11	15	2	1	8	8	2	57
25	SIBL	6	7	10	2	1	8	9	2	44
26	SOUTHEASTB	8	10	13	2	3	8	10	4	60
27	STANDBANKL	7	7	12	2	1	6	3	0	38
28	TRUSTBANK	8	11	16	2	1	8	8	3	59
29	UCBL	9	8	12	3	1	8	8	2	40
30	UTTARABANK	7	6	12	2	1	8	7	1	33

Appendix #2: Total HR Disclosure score in percentage

	Banks names	HR disclosure classes							
		HR Policies	Basic HR information	Financial information On HR	HR important To organization	Health & safety at works	HR Development	HR relationship & culture	Employee other factor
		%	%	%	%	%	%	%	%
1	AB BANK	45.45	53.84	55.00	75.00	16.67	100	61.54	20.00
2	PUBLIC BANK	72.73	38.46	55.00	50.00	16.67	100	38.46	40.00
3	BANK ASIA	81.81	84.62	60.00	75.00	16.67	75.00	53.89	20.00
4	BRAC BANK	63.64	27.08	65.00	50.00	16.67	62.50	61.54	20.00
5	CITY BANK	54.55	69.23	60.00	50.00	16.67	75.00	69.23	00.00
6	DHAKA BANK	81.81	46.15	60.00	75.00	50.00	100	69.23	40.00
7	DUTCH BANGLA	72.72	38.46	70.00	50.00	16.67	100	53.89	20.00
8	EBL	45.45	69.23	70.00	75.00	16.67	100	53.89	40.00
9	EXIM BANK	91.91	46.15	55.00	50.00	16.67	87.50	46.15	20.00
10	FIRST S BANK	72.73	38.46	75.00	75.00	16.67	100	46.15	00.00
11	ICBI BANK	63.63	27.08	75.00	50.00	16.67	37.50	61.54	20.00
12	IFIC	54.54	30.77	80.00	50.00	16.67	62.50	76.92	40.00
13	ISLAMIC BANK	91.91	69.23	65.00	50.00	16.67	100	61.54	60.00
14	JAMUNA BANK	54.54	53.84	65.00	25.00	16.67	100	53.89	40.00
15	MERCABANK	54.54	46.15	75.00	50.00	16.67	100	76.91	40.00
16	MTB BANK	54.54	69.23	65.00	50.00	16.67	100	69.23	00.00
17	SHAHJALAL BANK	81.81	46.15	65.00	50.00	16.67	62.50	69.23	20.00
18	NCC BANK	54.54	53.84	65.00	25.00	00.00	100	61.54	40.00
19	ONE BANK	54.54	46.15	80.00	50.00	16.67	100	53.89	40.00
20	PREMIERBANK	91.92	61.54	65.00	50.00	16.67	100	53.89	20.00
21	PRIME BANK	72.72	84.61	70.00	25.00	16.67	100	69.23	40.00
22	PUBALI BANK	63.63	38.46	65.00	50.00	16.67	100	61.54	80.00
23	RUPALI BANK	63.63	46.15	75.00	75.00	50.00	100	69.23	20.00
24	SIBL	54.54	84.62	50.00	50.00	16.67	100	61.54	40.00
25	SOUTHEASTBANK	72.72	53.84	65.00	50.00	16.67	100	69.23	40.00

26	STANDBANK	63.63	85.85	60.00	50.00	16.67	100	76.92	40.00
27	TRUST BANK	72.72	54.85	80.00	50.00	16.67	75.00	23.08	80.00
28	JANATA BANK	81.81	61.54	60.00	50.00	16.67	100	61.54	00.00
29	UCBL	81.81	46.15	60.00	75.00	16.67	100	61.54	60.00
30	UTTARABANK	63.63	46.15	60.00	50.00	16.67	100	53.89	20.00

Appendix #3: List of expected HR Information Disclosure in Annual Report

HR POLICIES 1. Policy of compensation 2. Policy of reward 3. Policy of recruitment 4. Policy of safety 5. Policy of communication 6. Policy of training 7. Policy towards sexual equality 8. policy towards Racial Equality 9. Policy towards Equal opportunities 10. Policy towards Employment of disabled persons 11. Policy related to Human resource development	Basic HR Information: 1. Statutory number of employees by category 2. General Education 3. Vocational qualification 4. work-related knowledge 5. Employee age 6. Employee diversity 7. employee capabilities 8. Geographical distribution of employee 9. categories of employees by sex 10. number of employees for 2 or more years 11. Employment reports 12. Special know skill
Financial information of HR 1. Provident fund 2. Medical facilities 3. Employee life insurance 4. Executive compensation 5. Workers fund 6. Managerial remuneration 7. Cost of safety measures 8. Human resource development fund 9. Superannuation fund 10. Awards & Rewards for good performance 11. Loans & advances to HR 12. Pension & social security cost 13. Amount spent of training 14. Statutory wages 15. Employees fringes benefits, Early retirement 16. provision for employees benefits 17. Amount spent on recruitment & selection 18. Retirement benefits & gratuity paid 19. Profit sharing & employment share option plans. 20. Increasing employee financial & economic awareness.	HR Importance to organization 1. Employee participation in decision making 2. Action with respect to informing employee , consulting employees, encouraging (and engaging in) employee participation and communication 3. performance recognition 4. Recognizing human resource an important resource of the organization HR Development 1. Employee career development 2. training program 3. Employee productivity 4. Nature of training 5. Employee motivation 6. Number of employees trained 7. Future plan of Human resource development
Health and safety at work 1. Health and safety at work 2. Toxic hazards (e.g.) to employees and the public 3. any reference to health and safety law and or inspection 4. Information to employees, training in health and safety issues 5. Accidents and injuries 6. Data on accidents	Employees other factors 1. Entrepreneurial spirit of HR 2. Employee involvement with community 3. Separate HRA statement (HR value) 4. management succession plan 5. Job environment
HR Relationship & culture 1. Union activity 2. Employee behavior 3. Employee commitment 4. Employee to employee relationship 5. management - employee relationship	6. Welfare information 7. Industrial relationship 8. cultural Environment 9. Sports activities 10. Annual picnic/traveling 11. Employee teamwork 12. Punishment to HR Employee turnover 13. Cultural function

Appendix #4: Ways of Disclosure

Rank	Name	WORDS	Sentence
1	Exim Bank	1008	146
2	AB Bank	567	89
3	One Bank	486	57
4	SIBL Bank	863	88
5	SHAHJALAL Bank	224	32
6	Union Bank	379	77
7	Janata Bank	3034	264
8	Prime Bank	267	30
9	South East Bank	1728	99
10	Bank Asia	2267	363
11	IFIC Bank	1134	131
12	Agrani Bank	981	84
13	UCB Bank	187	12
14	MBL Bank	2470	196
15	Uttara Bank	407	36
16	Public Bank	2252	128
17	City Bank	1294	147
18	Basic Bank	193	11
19	Dhaka Bank	3225	250
20	Jamuna Bank	619	52
21	Standard Bank	694	57
22	Commercial Bank	3713	312
23	Trust Bank	1635	141
24	Dutch -Bangla Bank Ltd.	335	37
25	Islamic Bank	2664	186
26	Mutual Trust Bank	1123	98
27	Premier Bank	781	88
28	ICB Islamic Bank	556	41
29	BRAC Bank	1456	155
30	EBL Bank	1403	158



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: D
ACCOUNTING AND AUDITING
Volume 22 Issue 2 Version 1.0 Year 2022
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Institutional Logic, Dilemma and Suggestions of Open Source Innovation: A Case Study of Blockchain

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Abstract- Open-source software has made a breakthrough in the traditional intellectual property theory from the aspects of Copyright, patent right, and trademark right, and it has created a new property rights form in the form of license. Taking blockchain as an example, this paper analyzes bitcoin and Ethereum and their open-source licensing strategies. At the same time, it explores the problems encountered in the property rights of open-source blockchain and three possible solutions to this dilemma: The industry-standard licensing plan, blockchain open-source licensing scheme, and open patent scheme. This research will be significant for expanding and enriching the theoretical and practical analysis of blockchain open source in the field of intellectual property.

Keywords: open source; blockchain; intellectual property rights; dilemmas; suggestions.

GJMBR-D Classification: DDC Code: 332.178 LCC Code: HG1710



INSTITUTIONAL LOGIC | DILEMMA AND SUGGESTIONS OF OPEN SOURCE INNOVATION | A CASE STUDY OF BLOCKCHAIN

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I. INTRODUCTION

For a long time, intellectual property rights have been synonymous with encouraging knowledge production and protecting and promoting technological innovation. In particular, for enterprises and producers, applying for patents has become a powerful weapon to protect their legitimate rights and interests from infringement. However, with the arrival of the digital economy, the development of the Internet makes technology innovation more diverse and more complicated. The philosophy of "freedom, sharing and free" in open-source software makes people feel more and more doubt: Are there no drawbacks to intellectual property? When open-source software pursuing knowledge sharing meets intellectual property, can it protect the rights and interests of the original knowledge producers? This philosophical myth has attracted a lot of discussion and thinking in academia and industry.

Lawrence Lessig, a Stanford Law School professor, is a staunch opponent of the "Fundamentals of Intellectual Property Rights," arguing that by copying the systems of Property Protection that exist in the real world, the Internet will undoubtedly change from open to closed. Hence, it will hinder the progress of human civilization and the prosperity and innovation of culture [1]. The United States Public Patent Foundation has gradually realized that the abuse of patent rights may

also hinder technological innovation in the opposite direction, so the organization was established to prevent and combat patent misapplication[2]. Of course, open-source science and technology workers engaged in emerging industry forms and philosophical thinking even raised such doubts. If the original innovator who believed in open-source spirit did not apply for patents, but the secondary innovator who was the second innovation applied for patents, whether it would still promote technological innovation without any adverse effects.

Based on the theoretical and practical questions, this paper puts forward the following research questions:(1) What are the breakthroughs in intellectual property theory with the emergence of open-source software? What is the property protection system of open source itself? (2) When open-source software encounters intellectual property rights, is there a dilemma reflected in what aspects? (3) How to solve the property rights dilemma of open-source software, and what are the suggested solutions? Due to many open-source software projects, this paper will take the emerging open-source form of blockchain as a case study. Based on the literature review, this paper will analyze the open-source strategy of blockchain, the intellectual property dilemma encountered, and suggested solutions. Hopefully, it will contribute to the research and practice of open-source software in the field of intellectual property.

II. THE BREAKTHROUGH OF OPEN SOURCE TO INTELLECTUAL PROPERTY AND ITS SYSTEM LOGIC

a) *The breakthrough of open-source software to traditional intellectual property*

Open-source software is the opposite of closed-source software. The former has the typical representative of Linux, and the latter has the typical representative of Windows. Richard Stallman, the founder of the Free Software Movement, a precursor to open-source software, opposed the commercialization of software in the form of closed source code, arguing that it was unethical to prevent users from learning and helping others. He proposed that intellectual property encourages knowledge production by establishing

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private property rights but restricts knowledge sharing by conditional use. On the other hand, open-source software prevents private ownership in the form of shared property rights. The specific approach is to protect the right of anyone to use, modify, and distribute the work and its derivatives. The only premise is to distribute under a Copyleft license. That is to say, open-source must be shared and held accountable if privatized, and knowledge must be shared and held accountable if privatized. The breakthrough of open-source software to traditional intellectual property theory is mainly reflected in the following three aspects.

i. Copyright

Copyright, also known as Copyright, is adopted by most countries to protect the intellectual property rights of computer software. The software includes closed source commercial software and open-source free software. The former uses the traditional Copyright (Copyright, also known as right Copyright) to protect the author's exclusive property right to the product. The latter uses Copyleft (also known as left Copyright) to preserve the co-ownership of the owner[3].

Although both use licenses to constrain related rights, there are essential differences in institutional constraints before and after. Commercial software uses software proprietary license to protect the interests of the right holder. Other people acquire the right to use the product in payment, restricting users to modify and spread the software. Open-source software uses left Copyright licenses to protect the freedom and rights of users to the greatest extent. Anyone can change and republish the source code under the license, which fully embodies the characteristics of open-source software "free, open, cooperative and shared". As the GPL license authors said, Where as commercial software developers use Copyright to take away our freedom to share software, open-source enthusiasts can also use Copy left to create a new release. We give everyone the freedom to use the source code we provide[4].

ii. Patent rights

Patents, whose legal value lies in adding profit to the fire of genius, are often used as a shorthand for "monopoly" instead of the free sharing that open-source software emphasizes. The patent crisis faced by open-source software inevitably falls into patent disputes because it does not apply to patents. Specifically, patents have priority. For example, suppose the original author of open-source software does not apply for a patent, but a third party not bound by the license applies for a patent. In that case, it is difficult for the original author to escape from patent infringement even if he developed the software earlier [5]. A typical case is as follows: SCO prosecuted IBM patent infringement case in 2003. Linux was confronted with an intellectual property lawsuit that shocked the world. Unlicensed use of closed source commercial UNIX code for free, open-

source Linux, accused SCO of violating intellectual property rights and trade secrets and demanded up to \$1 billion in damages. After a year, the case ended in a settlement. Still, it has become a powerful weapon and strategy for commercial software to attack and bring down open-source software in the form of patent litigation. It also warns open-source software developers and companies to pay attention to patent issues and protect their legitimate rights and interests.

The idea that open-source software can be freely shared does not mean that it cannot be patented or that open source is not patentable. In fact, open-source software patents belong to defensive patents, that is, the original author gets priority in the form of patent, and the software can still be freely distributed after application. Thus, on the one hand, the freedom of knowledge sharing of open-source software can be maintained. On the other hand, it can also obtain legal protection and avoid falling into patent disputes. Blockchain, for example, is a better case for the combination of open-source software and an application for a patent. Association of patent protection in China released the 2020 global authorized patent report blockchain field, pay treasure to 212 authorized patents digital blockchain column first in the world, and blockchain is based on open-source software projects.

iii. Trademark rights

Trademark is a critical way to protect computer software earlier than Copyright. To make their products different from other software, software developers often use words, graphics, and other special symbols to put trademarks on the outer packaging of software or embedded in the program to make it displayed during running. As the well-known trademark in the software field has a certain appeal to consumers, counterfeit trademarks and other pirated software will appear. The specific manifestations are: pirated software developers put the trademark of genuine software in the product packaging or embedded in the software program, or limited to the technical means is not strong, only delete the name of the original software author, but still cannot remove the original software trademark in the process of program display, that is, trademark infringement.

To protect the rights and interests of Open-source software developers, the Open Source Initiative applied for OSI (Open Source Initiative) as a trademark, specifically "OSI Certified" as the symbol, to protect identified Open Source software. The criteria are to examine whether the software is distributed in compliance with the open-source software license and if it is approved, OSIA grants certification marks to the software. A typical case in this regard was My SQL AB prosecuted Progress Software Corp., NUSPHERE Corp. in 2002. NUSPHERE Corp. is a classic example of open-source software using trademark law to protect its rights. The NuSphere MySQL Advantage closed source

software issued by the defendant contains both MySQL open-source software based on the GPL and its closed source software (Gemini), but the installed software will display the icon of My SQLD program. MySQL AB accuses the defendant of violating GPL rules by forcing the defendant to open the Gemini source code required by the GPL.

b) Open-source software license system

Software License refers to the contract signed by the software publisher and user to guide and regulate how software is used. It is the property rights protection system of the software itself. Traditional intellectual property rights protect the exclusive property rights of individuals to the fruits of labor by law. Anyone needs to obtain the right to use the products in a conditional license, such as payment. A comparison is made between commercial software with proprietary property rights and open-source software with joint property rights (Table 1), which contains the following core hypothesis. In the mode of private supply, any leakage

of personal knowledge results will lead to the decline of its income. Therefore, most private suppliers will try to reduce knowledge sharing and protect individual proprietary property rights of products in the form of intellectual property rights[6].

Open-source software in the form of license, so that anyone can use, modify and release source code software free of charge, product rights are entirely open to the outside world, shared property rights. The licensing system breaks the traditional intellectual property misconception that open-source software owned by common ownership does not need copyright protection, which is wrong. Licenses protect open-source software copyright in such a way as to avoid private ownership of shared knowledge products effectively. The lack of motivation is overcome because developers are motivated to volunteer because they have certain stable expectations of participating in contributions.

Table 1: Comparison of property right structure between commercial software and open-source software

Software type	Commercial software (proprietary)	Open-Source software (shared ownership)
rights of possession	Private possession	Open to all, not to any personal possession
right to use	Subject to a conditional license, the licensee is free to use it	Anyone can use, modify and distribute the software for free
usufruct	On a possession basis, the copyright holder earns revenue by selling the software	On a usufruct basis, producers earn revenue by using the software
right of disposition	Producers are free to license or transfer software	Producers must open licenses, and there is no transfer of software

At present, there are 63 kinds of open-source licenses certified and published by the OSI official organization, which can be divided into three types according to the severity of the requirements for open source distribution. The first type is the most strict and can best reflect the spirit of free software, which is the fundamental driving force for developing open-source software, and is represented by GPL and LGPL licenses. The second category is the traditional commercial software companies actively engaged in the open-source software world, represented by the MPL license. Finally, the third category is the most comprehensive open-source in the world of open-source software. Open-source code can be freely combined with proprietary commercial software source code, and it is the most typical business-friendly license, represented by a BSD license [7]. The prevailing open-source software licensing rules are shown in Table 2.

Table 2: Classification of mainstream Open source software Licenses [5]

Similarities	1. Obligation to distribute -- redistribute the source code acquired; 2. Requirements for distributed source code -- integrity and disclosure of source code must be guaranteed; 3. Allow modification - Work can be developed and performed based on the source code obtained					
Contrast of points	Whether it can be mixed with other non-open source software code	Whether changes to source code can be kept secret	Whether the patent license is specified	Whether a "LEGAL" indication is required regarding the intellectual property rights that may exist in the obtained source code	Whether it is clear that infringement actions result in termination of the license agreement	Whether the source code can only be distributed under this license
GPL license	×	×	×	×	×	✓
LGPL license	✓	×	×	×	×	×
BSD license	✓	✓	×	×	×	×
NPL license	✓	✓	×	×	×	×
MPL license	✓	✓	×	×	×	×
Apache license	✓	✓	×	×	×	×
QPL license	✓	✓	×	×	×	×
QNCL license	×	✓	×	×	×	×
Ricoh license	✓	✓	✓	✓	✓	★ ¹
SISSL license	✓	×	✓	×	✓	★
SPL license	✓	✓	×	✓	×	×
Jabber license	✓	✓	×	✓	✓	×
MOTOSOTO license	✓	✓	×	✓	✓	×
NOKOS license	✓	✓	✓	✓	✓	★
OGTS license	✓	✓	×	×	×	×
AFL license	✓	✓	✓	×	✓	×
Artistic License	✓	✓	✓	×	✓	×
APSL license	✓	✓	✓	×	✓	×
Common License	✓	✓	✓	×	✓	×
IBM license	✓	✓	✓	×	✓	×

¹★, Means that the original source code and the modified source code must be distributed under this license and subsequent versions of this License, but the source code and the modified source code may be distributed as a new product in combination with other types of code not subject to this License. As long as the source code obtained under this license and the modified source code are distributed as required by this license.

III. BLOCKCHAIN AND ITS OPEN-SOURCE STRATEGY

Blockchain and open-source software have similar underlying technical architecture and governance logic, which both emphasize mobilizing all parties' enthusiasm in a decentralized way, thus promoting distributed and open innovation. Furthermore, both are the results of fostering collective action or collaboration in the face of dispersed individuals without administrative orders[8]. The development of blockchain technology has gone through three stages. The first stage is Bitcoin, which solves the centralization problem in digital transactions and successfully realizes the possibility of anonymous transactions[9]. The second stage of development is Ethereum, which proposes innovative contract technology to run in the blockchain network. It enables users to develop decentralized program applications in Ethereum freely, thus significantly improving the technological innovation level of blockchain and enhancing and expanding application scenarios[10]. Next is the third phase, which will facilitate the integration of blockchain with various technologies and application scenarios to build trust networks similar to those within open-source software and communities.

a) *Bitcoin and its open-source strategy*

In 2008, Satoshi Nakamoto published Bitcoin: Peer-to-peer Electronic Cash System[11], which is the world's first introduction of bitcoin proper names and peer-to-peer cryptocurrencies[12] and is widely recognized as the white paper of Bitcoin. On January 3, 2009, Nakamoto released the first version of the blockchain, bitcoin 1.0, using the open-source C++ programming language for Windows only.

Bitcoin is currently the most important digital currency, allowing users to conduct online transactions and payments without a financial intermediary. Bitcoin is called cryptocurrency mainly because it is protected by complex encryption technology[13]. Blockchain as the underlying technology of COINS, every user currency blockchain ACTS as connected nodes, and through a password Hash as a public key (Hash)² [14]. When the user starts a new node, each node will store the public and private keys automatically generated by the Bitcoin blockchain system [15]. The user with bitcoin can send it to another user through the recipient's public key signature and the hash of the previous transaction.

Blockchain is a decentralized network structure where each node can display or obtain any information

and transaction records [16]. In general, blockchains operate like "proof of work" or "proof of stake"[17]. When information or transactions are sent to nodes in the blockchain, Computers at each node (commonly known as "miners") compute mathematical functions in a competitive manner ("mining"). Miners repeatedly add the input data and the hash value of each calculation until the hash value is below the difficulty target set by the Bitcoin blockchain. Miners who complete the calculation first have the right to send the information and transaction records to the nearest new block[18] and will be rewarded with new bitcoins automatically generated by the blockchain[19].

Because each block contains its ID and the last block's ID, all blocks can be linked without a central server, making it possible for people to keep track of everything on the blockchain and keep their jobs safe. Furthermore, information can be encrypted by hash functions before being directed to the blockchain since hash functions are one-way functions, so the hash values generated by hash functions and stored in the blockchain are not reverted to the original information [20]. Based on this, identity information pointing to the blockchain can be verified by repeatedly manipulating the hash function to see if it generates the same hash value to maintain confidentiality. In this case, the transparency, immutability, and non-repudiation of information will all be verified. Therefore, blockchain technology can be used as a sound "proof of existence" in electronic documents.

Regarding Bitcoin's open-source strategy, its official website Bitcoin.org provides users with a free link to download "Bitcoin Core", an open-source software-driven by the Bitcoin community and licensed under the MIT license. According to the OFFICIAL OSI (Open Source Initiative) website, all copies or most of the software under the MIT license shall display the following copyright notice: "Anyone may obtain the Software and related documentation free of charge and process the Software without restriction, including, but not limited to, using, copying, modifying, merging, distributing, sublicense and/or selling copies of the Software and the right to permit those providing the software to do so [21]. "Thus, any blockchain developer can download the "Bitcoin Core" and its associated documentation for free to use or modify the Bitcoin blockchain to develop and distribute their applications. For example, the Machine Learning Laboratory of the Massachusetts Institute of Technology (MIT) released an open-source project on January 8, 2016, aiming to build an ecosystem of creating, sharing, and verifying educational certificates based on blockchain technology. The project's source code was published on Github in an MIT license[22].

² Hash (Hash), refers to the Hash function, is the input of arbitrary length by Hash algorithm into fixed length of the output, the output is the Hash value. Hash is an algorithm, but also an idea, using hash can effectively improve the utilization of storage space, improve the efficiency of data query, but also can do digital signature to ensure the security of data transfer.

b) *Ethereum and its open-source strategy*

Since the scripting language of the Bitcoin blockchain is incomplete, it has minimal programming capabilities. Until it is widely accepted as legal tender by governments worldwide, the commercial use of Bitcoin is still very limited. In this case, the second stage of the blockchain, Ethereum, has been ushered in.

In 1997, Nick Szabo published an article entitled *The Idea of Smart Contracts*, defining intelligent contracts as "the form of embedding contracts into various valuable properties through digital intelligence" [23]. In 2013, the idea of smart contracts was realized by a 19-year-old computer genius named Vitalik Buterin, who publicly identified Ethereum as another peer-to-peer decentralized blockchain. However, due to Bitcoin's incomplete blockchain and limited scripting capabilities, Ethereum blockchain uses a more sophisticated scripting language that allows users to write and deploy smart contracts and other applications.

Ethereum blockchain has two types of accounts, including external accounts and contract accounts. External accounts are for ordinary users only. When a user creates an external account, they are asked to enter a password. The Ethereum blockchain then generates a pair of public and private keys for the external account, represented by the address of a sequence of numbers generated by the account's public key. There is no concept of an account name on the Ethereum blockchain. The address of an external account is independent of the user's identity, as the blockchain system does not require users to register under their real names. Hence, users are anonymous on the Ethereum blockchain[24].

The contract account stores the smart contract code, and its address mainly comes from some information related to the smart contract, such as the address of the creator and the number of transactions. Smart contracts in the Ethereum blockchain are treated as autonomous scripts. Ethereum writes a programming language for users to develop smart contracts. An Ethereum Virtual Machine (EVM) was also created to deploy and execute smart contracts in the Ethereum blockchain. The server allows users to write smart contracts and translate actual contracts into programming code, compiled them into EVM bytecode, and deployed them to the Ethereum blockchain for execution.

Once deployed to the blockchain, smart contracts cannot be modified and are automatically executed once the conditions of the agreement are met without human intervention. Therefore, smart contracts can solve problems in real life and significantly reduce labor costs, administrative expenses, and time costs[25].

Ethereum provides a command interface called Geth to run a complete Ethereum node in terms of

open-source strategy. Ethereum's official website states that the Ethereum core license is licensed under the GNU LGPL and runs all front-end client software. On the other hand, Geth is licensed under the GNU GPL general public license, a free copyright license issued by the free software foundation that guarantees all users of software four freedoms. (1) Any user can use it for any purpose; (2) Users have the freedom to change the software at any time according to their own needs; (3) Freedom to share software with the user's neighbors and friends; (4) The freedom to share any changes made by users.

The current version of the GNU GPL is GNU GPLv3, which was released on June 29, 2007. Under GNU GPLv3, the Ethereum blockchain should expose the source code of each software program so that users can access and use it freely. Furthermore, to ensure that users are free to use all software versions, GNU GPLv3 acknowledges that all users are free to run, modify, and distribute copyrighted software under the GNU GPLv3 license without restriction. However, to achieve the goal of free access and sharing software, GNU GPLv3 does not allow users to use or modify open-source software published by others, nor does it allow others to use or distribute modified versions of the software.

IV. BLOCKCHAIN OPEN SOURCE IN INTELLECTUAL PROPERTY DILEMMA AND SUGGESTED MEASURES

a) *Blockchain open source in the intellectual property dilemma*

Most initial blockchain developers are believers in open-source software, setting up the core blockchain program, development interface, and application software as open-source, making it freely available to all developers or hobbyists. In recognition of the open-source culture, the original developers did not intend to collect licensing fees or royalties from other blockchain developers or users and therefore did not apply for patents.

However, subsequent application developers have filed so many patents that the original blockchain developers have begun worrying whether patent applications could hinder or jeopardize the next blockchain innovation. Blockchain inventions usually involve many technical features, not just abstract ideas like software or e-commerce. These patent applications were initially based on the earliest blockchain developers, but some modifications have to be made due to the rapid iterative nature of the software and the need for continuous improvement. Furthermore, when subsequent developers build on what the original developer developed and patent the product, those applications are often quickly approved. In this case, many of the initial blockchain developers may not

continue to improve and develop the product because of subsequent patent applications by other developers.

Therefore, the dilemma of blockchain open source in the field of intellectual property is particularly obvious and anxious: Early blockchain developers, because of open source culture, will choose to share and not apply for a patent, but late developer and protect own intellectual property rights, choose to apply for a patent, instead of the initial and subsequent caused sure open-source developers, this contains the open-source philosophy of speculative behavior for the concern of technology innovation is certainly worth attention.

b) *A proposed solution to the blockchain open-source dilemma*

i. *Industry standard licensing program*

As technology advances and product complexity increases, much new technology research and product development are often not done by a single company. When different companies carry out collaborative innovation, there will be compatibility and interoperability problems between various components. Therefore, the establishment of a unified industry standard is an effective measure to improve product compatibility.

Australia is one of the fastest countries to promote blockchain industry standards. In April 2016, the Australian Standards Body proposed a new initiative for the International Organization for Standardization (ISO) to develop a blockchain standard to support technology development. According to the proposal, some of the most severe problems facing blockchain open-source are data sovereignty, privacy, and lack of consensus, creating issues for policymakers and regulators alike. In April 2017, The Australian Standards Body, in collaboration with the International Organization for Standardization ("ISO"), hosted the first International Blockchain Standards Conference, which was attended by many countries, including China, the United States, Germany, the United Kingdom, Japan, Russia, France, And Singapore. As a result, ISO issued "Blockchain and Distributed Ledger Technology (ISO/TC307)" as one of the standards under development, and the rest of the ongoing standards include reference, architecture, governance, compatibility, security, privacy, identity, smart contracts, distributed ledger technology and more than ten other standards[26]. Currently, the Committee has 37 Member States and 14 observer states. While this international collaboration is a work in progress and its effectiveness remains to be seen, it at least shows that industry standards are a trend.

ii. *Blockchain open-source license scheme*

Traditional blockchain did not resolve for downstream users to modify the terms of the license source code and submit an application for a patent, intellectual property rights. Whether the currency to the

MIT license, the etheric fang core protocol LGPL, or etheric fang Geth command to the GNU GPL license, even if the subsequent developers don't make any programming code, it's still patentable.

The third edition of the GPL license is expected to help solve this problem. The GPLv3 license defines a "contributor" and proposes the copyright owner use its program under the license, called a "contributor version." Each Contributor shall grant a non-exclusive, free-to-use patent license to others under this license to enable Users to make, use, sell or otherwise run, modify and disseminate versions of participants in their content. This, to a large extent, solves the situation that original blockchain developers are "isolated" because they do not apply for patents. In addition, it can better solve the problem that "contributors" who apply for patents still have the freedom to participate, contribute and share after submitting patent protection, and their concerns about technological innovation can be well solved.

iii. *Disclose the patent scheme*

An Open Patent, also known as the Patent Pledge [27] or Patent Commons [28], is a public commitment made by the Patent holder at their will. The patent holder does not claim all or part of his patent rights against any person or a particular group.

IBM was the first advocate of open patents. In order to promote technological innovation in the information industry and express its support for open-source software, IBM listed 500 patents held by IBM and related foreign patents on its official website in 2005 and promised that the open-source community could freely use this patented technology and would not claim patent infringement under any circumstances. IBM also announced that its commitment not to Sue the open-source community is legally binding. IBM's open patent movement includes the user interface, data storage and management and operation of a multifunctional application, data processing, man-machine interface, image processing technology, the Internet management, compression and encryption technology, as well as the method of electronic commerce essential technologies, such as the public for open source in solving problems of intellectual property rights, which has a fundamental enlightening significance. In addition to IBM, Google made the same move in 2013, promising to open up 200 patents to the open-source community and promising not to Sue for patent infringement. Tesla also announced in 2014 that, in the spirit of the open-source movement, to promote the progress of electric vehicle technology, Tesla Motors would disclose its patents to the outside world and would not Sue for patent infringement.

Studies have shown that opening patents positively encourages participation and contribution and promotes technological innovation[29]. Thus, not only will it benefit the industry as a whole, but it will also help

guide participants to open technologies and markets built by patent owners, thus making strong network effects.

V. RESEARCH CONCLUSIONS AND PROSPECTS

The breakthrough of open-source software on intellectual property theory is reflected in three aspects: copyright, patent, and trademark rights. It has its own property rights system constraints in the form of license, requiring joint ownership of property rights. Product rights are entirely open to the outside world, and anyone can use, modify and release source code software free of charge.

As a product of rapid technological innovation in today's society, blockchain plays an essential role in many financial and non-financial industries. The first generation of Bitcoin takes MIT license's open strategy, and the second generation of Ethereum takes GNU GPL, which can't solve the innovation difficulties. The original blockchain developers made everything open for free based on the recognition of open-source culture. However, neither individuals nor enterprises can prevent many subsequent blockchain developers from applying the core program for further development and filing many patent applications. It will cause the original blockchain developers to worry whether these patents will slow down or even endanger blockchain technology innovation.

According to the dilemma mentioned in the article, this paper tentatively proposes three possible solutions: industry-standard license plan, blockchain open-source license plan, and open patent plan. First, an industry-standard licensing program, aimed at resolving from different companies, different projects, different communities, and even different countries encountered in open source software collaborative innovation problems, is helpful to improve compatibility between open source components, improve joint operation, to reduce the system transformation between time cost and workforce cost, promote the further incremental innovation and open innovation. Second, whether the MIT license of Bitcoin or GNU GPL of Ethereum cannot solve the problems that some developers can apply for patent successfully even without code contribution. The emergence of the GPLv3.0 license with the "contributor" and "contributor version" would help original innovators freely participate and contribute. This can alleviate the concerns raised by open-source believers that patent protection could hinder technological innovation. Third, open patent scheme, that is, the legal commitment of the patent holder to disclose patent information and allow external participants to use it, and not to file patent litigation. Advanced technology companies such as IBM, Google, and Tesla have all made attempts. Studies have shown

that the disclosure of patents can guide the construction of the technology and market of the disclosed patent holders and help establish network effects.

Taking blockchain and its open-source strategy as an example, this paper puts forward the intellectual property dilemma encountered by open-source software. Its suggests solutions, which are of great significance for filling the research space in this field and expanding the theoretical research on open source intellectual property. The next step will be a valuable attempt to deepen the effects of different schemes further and explore their detailed mechanism of action.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Audretsch D. B., Stephan P. E. Knowledge spillovers in biotechnology: sources and incentives [J]. *Journal of Evolutionary Economics*, 1999, 9 (1):97-107.
2. Blockcerts [EB/OL]. GITHUB, <https://github.com/block-chain-certificates>.
3. Christopher C.M. The bridging model: exploring the roles of trust and enforcement in banking, bitcoin, and the blockchain [J]. *Nev. L.J.*, 2016, 139-143.
4. Contreras J.L. Patent pledges: between the public domain and market exclusivity [J]. *Michigan. State Law Review*, 2015, 2:787.
5. Crosby M., Pattanayak P., Verma S. & Kalyanaraman V. Blockchain technology: beyond bitcoin[J]. *Applied Innovation*, 2016, 2:71.
6. Fargo S. It's bitcoin's birthday: whitepaper released 8 years ago today [EB/OL]. BITCOIN.COM. <https://news.bitcoin.com/bitcoin-birthday-whitepaper.2016-10-31>.
7. Hammad A. Secure anonymous transaction apparatuses, methods and systems: U.S Patent 9,773,212[P].2017-9-26.
8. Herbert J., Litchfield A. A novel method for decentralized peer-to-peer software license validation using crypto currency blockchain technology [J]. *Proceedings 38th Australasian Computer Science Conference*, 2015:27-35.
9. Jia K. Development of blockchain should attach importance to open source governance experience [N]. *21st Century Business Herald*2019-11-07.
10. Jones P. Interview: public patent foundation's dan ravicher[EB/OL].IWN.NET.<https://lwn.net/Articles/64378>.2003-12-23.
11. Koulou R. Blockchains and online dispute resolution: smart contracts as an alternative to enforcement[J]. *A Journal of Law, Technology & Society*, 2016, 13(1):1-30.
12. Lessig L. The future of ideas: the fate of the commons in a connected world [M]. Knopf Doubleday Publishing Group, 2002.
13. Mougayar W. The Business blockchain: promise, practice, and application of the next Internet

- technology [M]. Audible Studios on Brilliance Audio, 2017.
14. Nakamoto S. Bitcoin: A Peer-to-Peer Electronic Cash System [J/OL], <https://bitcoin.org/bitcoin.pdf>. 2008-05-29.
15. Narayanan A., Bonneau J., Felten E., Miller A. & Goldfeder S. Bitcoin and Crypto currency technologies: a comprehensive introduction[M]. Association of American Publishers, 2016.
16. Rosen L. Open source licensing: software freedom and intellectual property law [M]. Prentice Hall PTR, 2005.
17. Stallman R. M. The free software foundation management [EB/OL]. Free Software Foundation. <https://www.fsf.org/about/www.fsf.org/about/leadership>.
18. Standards by ISO/TC 307, blockchain and distributed ledger technologies [EB/OL], International Organization For Standardization, <https://www.iso.org/committee/6266604/x/catalogue/p/0/u/1/w/0/d/0>
19. Sundaresan S., Jena D. & Nerkar A. Open(ing) IP: the effects of patent non-assertion on innovation [J]. SSRN-ID3075251, 2017.
20. Swan M. Blockchain: blueprint for a new economy [M]. O'Reilly Media Inc, 2015.
21. Szabo N. The idea of smart contracts [EB/OL]. <http://www.fon.hum.uva.nl/rob/Courses/InformationnSpeech/CDROM/Literature/LOTwinterschool2006/szabo.best.vwh.net/idea.html>.1997.
22. The MIT License [EB/OL].OPEN SOURCE INITIATIVE, <https://opensource.org/licenses/mit-license.php>.
23. Walker G. Financial technology law—a new beginning and a new future [J]. International Lawyer, 2017, 50(78):137-215.
24. Wang Y., Liao X., Xiao D. & Wong K.W. One-way hash function construction based on 2D coupled map lattices [J]. Information Sciences, 2008, 178:1391-1406.
25. Weber I., Xu X., Riveret R., Governatori G., Ponomarev A. & Mendling J. Untrusted business process monitoring and execution using blockchain[J], In: La Rosa M., Loos P., Pastor O. (eds) Business Process Management. BPM 2016. Lecture Notes in Computer Science, 2016.
26. Wen W., Forman C. Do patent commons and standards-setting organizations help navigate patent thickets? [J]. Communications of the ACM, 2015, 59(5):42-43.
27. Wood G. Ethereum: A secure decentralized generalized transaction ledger [J], Ethereum Project Yellow Paper, 2014, 151:1-32.
28. Yangon S.L. Research on legal Issues and Countermeasures of Open Source Software and License [M]. Beijing: Patent Literature Press, 2004.
29. Zhang P. Ma X. Sharing Wisdom: Analysis on Intellectual Property of Open Source Software [M]. Peking University Press2005.

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

Volume 22 Issue 2 Version 1.0 Year 2022

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals

Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Lessons Learned from European Sovereign Debt Crisis

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Abstract- The sovereign debt crisis has severely affected countries within the Eurozone. The widespread consequences of the crisis include economic recession and financial markets downturn. The following essay provides a detailed overview of the debt crisis and its major impacts on financial markets and institutions, and presents lessons learned following the crisis. The results presented by this essay comprise the strong interconnection within the Eurozone and the lack of efficient regulations.

GJMBR-D Classification: DC Code: 368.973 LCC Code: KF1215



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Lessons Learned from European Sovereign Debt Crisis

Afzal Ahmad

Abstract- The sovereign debt crisis has severely affected countries within the Eurozone. The widespread consequences of the crisis include economic recession and financial markets downturn. The following essay provides a detailed overview of the debt crisis and its major impacts on financial markets and institutions, and presents lessons learned following the crisis. The results presented by this essay comprise the strong interconnection within the Eurozone and the lack of efficient regulations.

I. INTRODUCTION

A sovereign default is defined as the failure of a government to meet payments on its debt obligations to domestic and external creditors (Nelson, 2013). The default risk of several European countries increased excessively after the 2007/2008 financial crisis, when indebted nations extended their borrowings to recover from recession. Consequently, by 2010 they were facing severe budget deficits. The European sovereign debt crisis evolved into the biggest challenge of the Eurozone as it threatened the stability of the Economic and Monetary Union, financial markets and banking systems.

The purpose of this essay is to provide an in-depth analysis of the causes and effects of the European sovereign debt crisis as well as the measures taken to respond to the crisis.

The essay is organised in six parts. It will first explain the main causes of the crisis. Secondly, it will present the consequences on financial markets and institutions. Thirdly, the effectiveness of the measures implemented to solve the crisis will be evaluated. Finally, the essay discusses the aftermaths of the crisis, including its effects on the financial landscape, the new trends emerging, and the lessons to be learned.

II. MAIN CAUSES OF THE EUROPEAN SOVEREIGN DEBT CRISIS

The European debt crisis was triggered in 2009 by negative macroeconomic and financial shocks involving governments, banks, and inefficient regulations. Firstly, it is essential to recount the Eurozone's establishment to understand the debt crisis. The European Economic and Monetary Union (EMU) is an agreement between the European Union's member

states, to establish a common monetary policy and a single currency, the euro (Eurozone Portal, 2014). The EMU is described in the Maastricht Treaty of 1992, and purposed to facilitate capital and commercial flows and enhance economic growth. To be part of the Eurozone, the member states have to meet strict requirements in terms of price stability, public finance, interest rates and currency exchange rates. As an integral part of the EMU, the European Central Bank was established in 1998 to regulate the monetary policy in the Eurozone. In January 1st 1999, the euro was officially instituted as the common currency of eleven members of the EU. As of today, the Eurozone consists of eighteen countries (Eurozone Portal, 2014).

Even though the Stability and Growth Pact (SGP) was established in 1997 to control EMU members' budget balances (limiting budget deficit at 3 % of GDP and total debt at 60 % of GDP), a fiscal union and a banking union were missing in the euro area. When they joined the Eurozone, governments were now able to access credit markets easily and benefit from low interest rates without being monitored (Lane, 2012, pp. 49-67). Portugal, Ireland, Italy, Greece, and Spain, commonly referred to as the PIIGS, are at the centre of the sovereign debt crisis. Indeed, the favourable access to capital markets resulted in excessive borrowing and government spending by the PIIGS. Figure 1 emphasises the fact that the PIIGS' budget deficit was higher than the 3% allowed by SGP when they joined the Eurozone.

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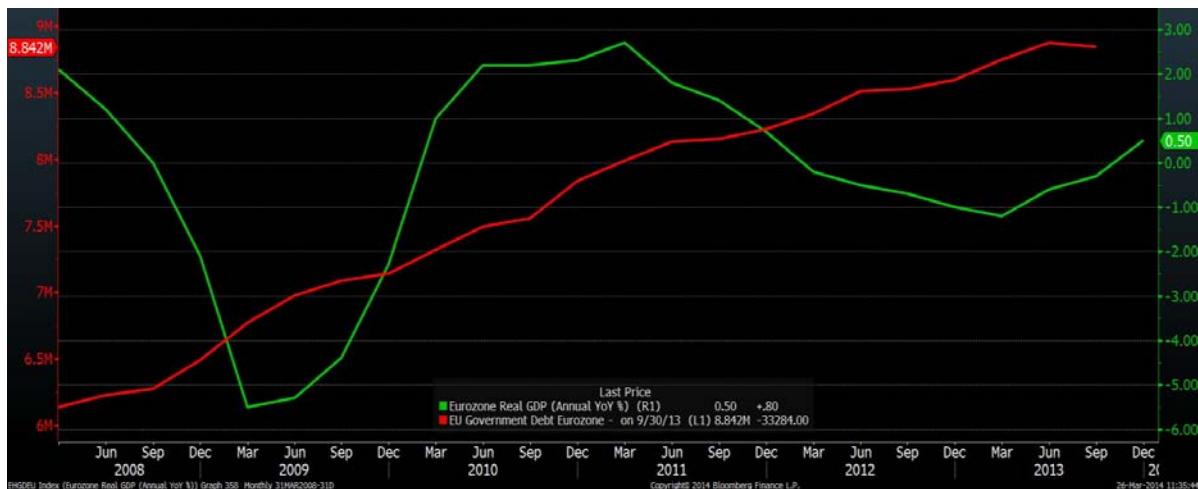


Source: Bloomberg, 2014

Figure 1: Budget Deficit 1991-2014

Beside the macroeconomic challenges within the Eurozone, the financial crisis which started in the US in 2007 had significant impacts on Europe. The bankruptcy of Lehman Brothers, the biggest securitisation provider in the US, led to soaring investor uncertainty and difficult cross-border access to liquidity between banks. Likewise, due to high exposure of European financial institutions to losses in the US, EMU countries' banking system faced serious problems. Hence, governments had to support domestic financial institutions. For instance, Ireland's banks were

destroyed so the government provided two-year liability guarantee to banks in Ireland. Additionally, governments set up subsidies, such as the "Abwrackprämie" in Germany for the automotive sector, to boost growth and prevent economic recession (BAFA, Bundesamt für Wirtschaft und Ausfuhrkontrolle, 2014). However, as the Eurozone's economy slowed down (GDP fell to -5.5% in the first quarter of 2009) and countries continued their intensive borrowing, their total debt increased even more as shown in Figure 2.



Source: Bloomberg, 2014

Figure 2: Eurozone: Real GDP vs. Government Debt

The culminating event of the sovereign debt crisis happened in October 2009 when Greece announced a much higher than expected annual deficit to GDP forecast (Lane, 2012, pp. 49-67). The country had changed political legislation, and revised its forecast from 6 % to 12.7%. Although in the past

European economies' high budget deficits did not result in negative reaction from the markets, Greece's official announcement increased concerns about the fiscal irresponsibility of peripheral countries (Bernoth and Von Hagen et al., 2012, pp. 975-995).

III. IMPACT ON THE BOND MARKET AND ITS IMPLICATIONS ON OTHER MARKETS

The European debt crisis reached its first peak in the first half of 2011 after Greece, Ireland and Portugal officially requested financial assistance. According to Bernoth and Von Hagen (2012), “government bond yields include risk premiums; increasing indebtedness

may cause bond yields to go up, thus raising the cost of borrowing and imposing discipline on governments.” Governments issue debt almost every week to roll their outstanding bonds. Therefore, the risk of not being able to borrow rose (Bernoth and Von Hagen et al., 2012, pp. 975-995).



Source: Bloomberg, 2014

Figure 3: PIIGS 10-year Government Spread to Germany

Figure 3 emphasises the deteriorating situation of bond markets by observing the widening spreads of ten-year bond yields of the PIIGS countries. The second peak of the yield can be examined in May 2012 when Greece faced default risk once again. However this time, the second rescue package of €130 billion from the IMF and the EU was granted under the condition that a debt swap be concluded. Private investors such as banks,

insurance companies and investment funds had to accept a haircut on their Greek bonds' face value. Due to the financial restructuring of Greece, the fear about contagion effect on other Eurozone countries increased (DW.de, 2014). Consequently, credit rating agencies had to adjust their ratings of the PIIGS' sovereign debt (Table 1).

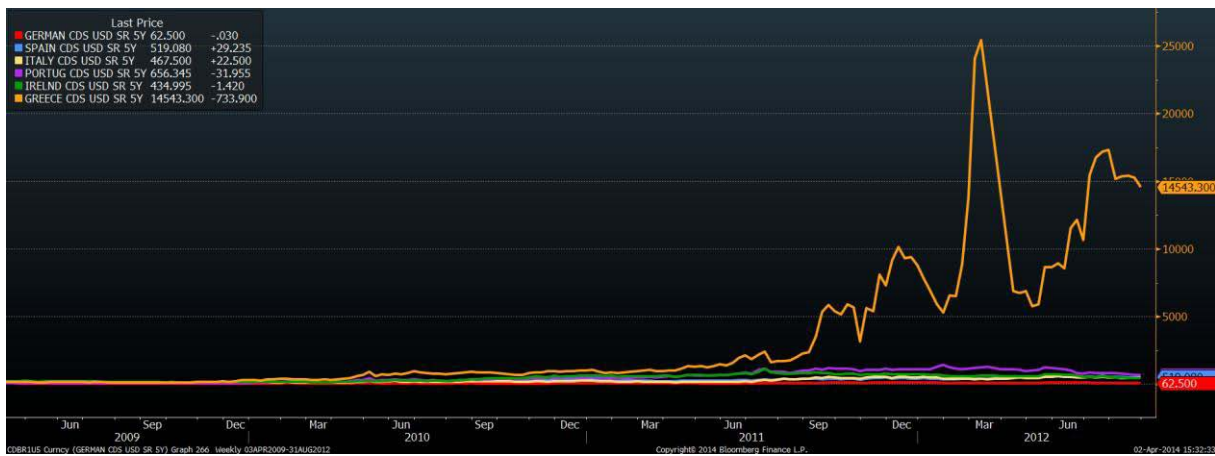
Table 1: Sovereign Debt Ratings

	Germany	Italy	Spain	Ireland	Greece	Portugal
Moody's	Aaa	Baa2	Baa2	Baa3	Caa3	Ba3
S&P	AAAu	BBBu	BBB-	BBB+	B-	BBu
Fitch	AAA	BBB+	BBB	BBB+	B-	BB+

Source: Bloomberg, 2014

In parallel, prices for derivative instruments used by financial institutions to hedge against sovereign default risk soared. Credit default swap (CDS) spreads are valuable indicators to measure sovereign risk as they are usually traded as an insurance against sovereign bond default (Alloway, 2013). Hence, tighter spreads represent lower risk and wider spreads such as shown by Figure 4 suggest a higher event-risk. Figure 4 depicts a dramatic increase in March 2012 which indicates a high default probability of Greece. Additionally, at a spread of 2500 bps, Greece's CDS contracts were too expensive to be traded (Arghyrou,

Kontonikas et al., 2012, pp. 658-677; Lucas and Schwaab et al., 2013). Figure 5 emphasises the uncertainty and the contagion risk to other peripheral countries.



Source: Bloomberg, 2014

Figure 4: 5y-Credit Default Swap Greece



Source: Bloomberg, 2014

Figure 5: 5y-Credit Default Swap PIIS compared to Germany

Beside the bond market, these circumstances weakened the Eurozone and its common currency the euro. The whole system of the EMU was questioned and

as a sign of increased concerns about the future instability of the Eurozone, the Euro to US-Dollar exchange rate depreciated massively (Figure 6).



Source: Bloomberg, 2014

Figure 6: Euro/Dollar Fluctuation

The European stock markets also experienced a downward trend as a result of the financial crisis. According to Figure 7, stock markets remained volatile between 2008 and the beginning of 2012 because of the political and economic uncertainty. However, when the newly appointed ECB President, Mario Draghi, pledged

“to do whatever it takes to preserve the euro” in July 2012, the German and British equity markets improved (Randow, 2012). In addition, as the federal funds rate was kept at the historical low of 0.25%, investors shifted to equities as they were more lucrative investments.



Source: Bloomberg, 2014

Figure 7: Most liquid European Stock Markets

Consequently, risk averse investors sought safer asset classes such as gold. Figure 8 depicts the upward trend of gold price since 2009. Gold price

started to decrease in September 2012 when the European economy seemed to recover.



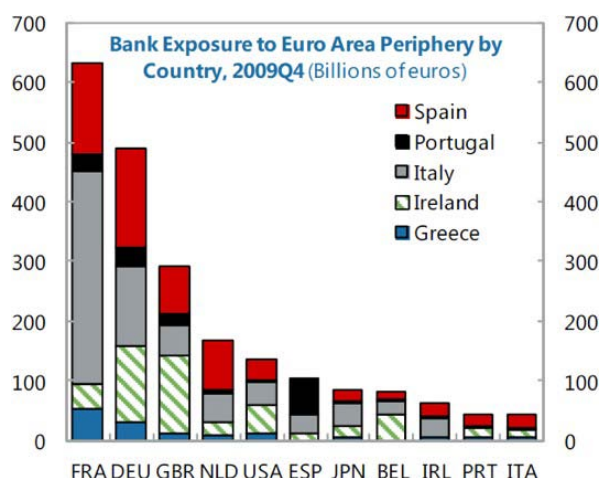
Source: Bloomberg, 2014

Figure 8: Gold Price Increases in Uncertain Time Periods, 2007-2014

IV. IMPACT ON FINANCIAL INSTITUTIONS

The main effects of the debt crisis on financial institutions, such as commercial banks, investment banks and insurance companies were lower profitability and rising insolvency risk. In the last quarter of 2009, foreign and European banks had a debt exposure of € 560 Billion to the PIIGS's debts. Figure 9 illustrates banks' exposure to PIIGS' debts. Europe financing systems are interconnected so even though the PIIGS

are relatively small countries their risk of default caused a threat to the whole banking system (Bloomberg, 2013).



Source: Bank for International Settlement, 2010

Figure 9: European and Foreign Banks Debt Exposure to PIIGS

Therefore, as commercial banks worried about each other's solvency and exposure level to sovereign debt default, counterparty risk increased. Interbank

lending slowed down following a dramatic increase of the interbank interest rates within the Eurozone from March 2010 as shown in Figure 10.



Source: Bloomberg, 2014

Figure 10: EURIBOR vs. EONIA, 2009-2014

In addition, consumers' concerns about insolvency increased, thus deposits were withdrawn from banks from countries where the banking system was perceived as risky (Allen and Moessner, 2012, pp. 1-26). As shown in Table 2, the growth of deposits from clients and banks slowed down within the euro area

(Allen and Moessner, 2012, pp. 1-26). The table also depicts a downward trend in inter-commercial banks loans. Between July 2008 and June 2011, it decreased by €593 billion which highlights the serious loss of confidence among euro area commercial banks.

Table 2: Combined Balance Sheet of Euro Area Commercial Banks, 2007–2012

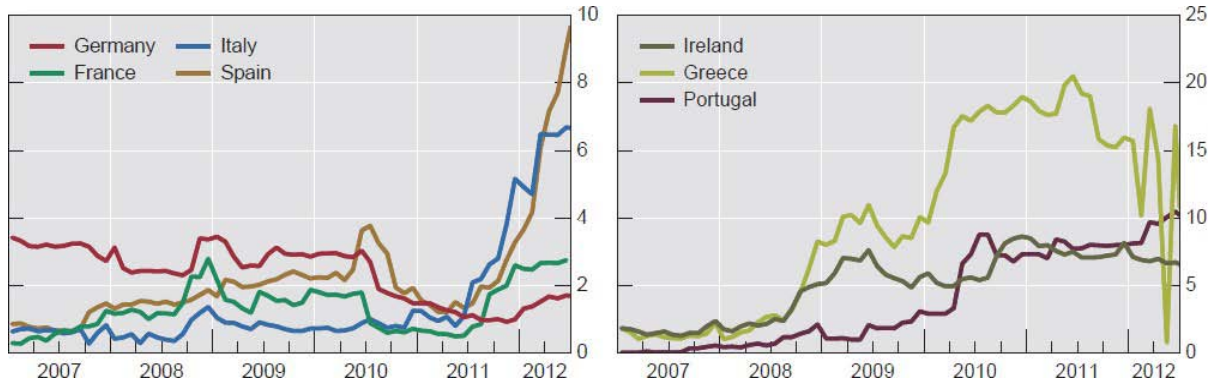
Changes	ASSETS (€Billion)		LIABILITIES (€Billion)	
	Loans to domestic households and businesses	Loans to commercial banks	Deposits from households and businesses	Deposits from commercial banks
Jul 07–Jun 08	961	713	1,009	717
Jul 08–Jun 10	339	-106	969	275

Jul 10–Jun 11	235	–487	362	–851
Jul–Dec 11	–62	294	92	665
Jan–Jun 12	27	–276	86	252

Source: ECB, 2012

Central banks became the lender of last resort for commercial banks. The Eurosystem, an institution comprised of the national central banks of Eurozone members, played a key role in the banking system crisis. Central banks from countries with surplus deposited their funds in the Eurosystem, and central

banks from countries with deficit borrowed from the Eurosystem, to provide their commercial banks with funds (Allen and Moessner, 2012, pp. 1-26). As shown in Figure, from 2009 the PIIGS' commercial banks significantly increased their borrowings from the Eurosystem.

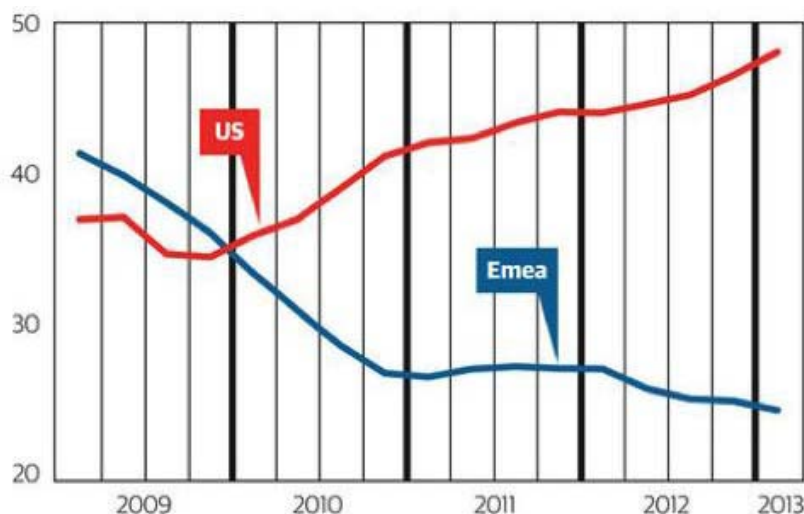


Source: Datastream; national data

Figure 11: Commercial Banks Loans through the Eurosystem

The weaker economic environment in Europe also impacted on investment banks. As the sovereign-debt crisis weighed on stock markets and investors lost confidence, initial public offerings, trading and merger and acquisitions activities were severely affected.

Europe was hit hard by the slowdown in financial markets, with investment banking fees in the region so far falling to the lowest level in ten years in 2012, according to Thomas Reuters (Sakoui, 2012).



Source: Dealogic

Figure 12: US vs. EMEA Global Share of Investment Banking Fees (%)

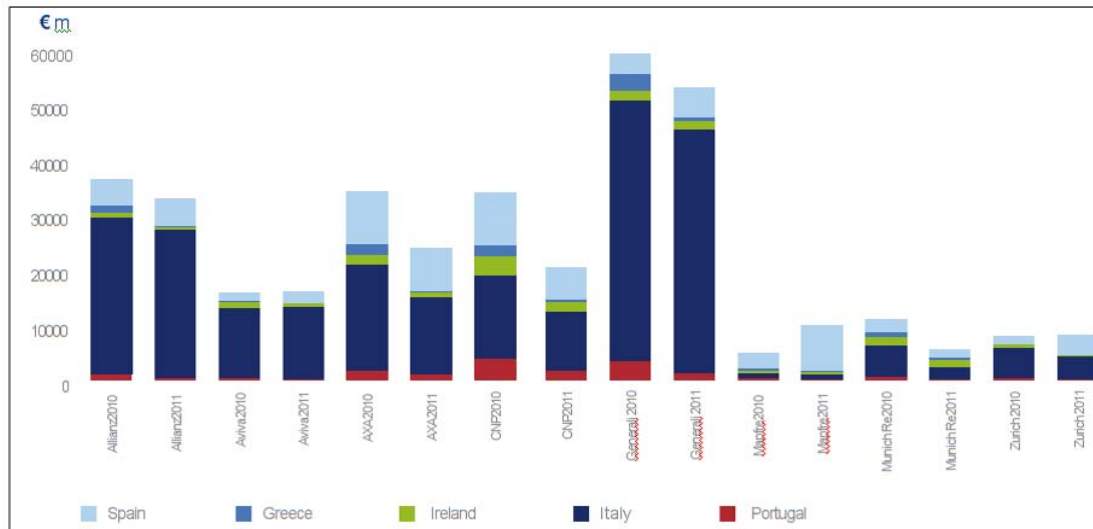
In addition, fixed-income revenue for the 10 largest global investment banks, which include European banks Barclays, Deutsche Bank, Credit Suisse and UBS, dropped at least 25 % between 2009

and 2012 (Ewing, 2012). This downturn in the investment banking industry resulted in more than 120,000 job cuts between 2011 and 2012 (Ewing, 2012). Banks scaled down their investment banking division to

concentrate on expanding services to consumers and businesses to improve their profitability and sustainability.

The European debt crisis impact on insurance companies was due to their debt exposure to European sovereign bonds. Indeed, insurers invest heavily in financial markets and primarily allocate their assets in bonds; therefore they are highly sensitive to interest

rates fluctuations. Declining interest rates on the PIIGS sovereign debts resulted in lower investment returns and impacted insurers' profitability (Willis Market Security, 2011, pp. 2-7). As shown in Figure 13, the major companies' debt exposure to Italy sovereign debt was the highest, approximately € 200 billion in 2010 and 2011.



Source: KPMG

Figure 13: Main Insurance Companies Exposure to Sovereign Debt, 2010 and 2011

V. EFFECTIVENESS OF POLICIES AND MEASURES

Several measures have been implemented by financial institutions and European policy makers to respond to the ongoing crisis. The first set of measures relates to government bailouts. Greece was the first country to seek official financial assistance. During 2010 and 2012, emergency loans of over €240 billion were provided to Greece by the EU, the IMF and the ECB. The bailout's objectives were to enable Greece to restructure its debt and meet its budget targets. Subsequently, two temporary facilities were established in 2010 to provide financial assistance to distressed economies through loans and bond purchases: The European Financial Stabilisation Mechanism (EFSM) and European Financial Stability Facility (EFSF) (Papadimas, 2010). Portugal and Ireland were respectively granted loans of €67.5 billion and €78 billion through the EFSM and the EFSF. The European Stability Mechanism (ESM) was set up in 2012 as a permanent replacement for the EFSF and EFSM (ECB wp, M. D. Paries, R. Santis, 2013).

In parallel, the ECB set up conventional and unconventional measures to increase the liquidity, reduce credit risk and restore confidence on financial markets. The ECB first decreased the key interest rate in April 2010 from 1 % to 0.25 % to lower borrowing costs and boost investments. The unconventional measure

was to intervene in the financial markets by launching the Securities Market Programme (SMP). The SMP enabled the ECB to purchase securities and aimed at stabilizing the transmission mechanism of monetary policy.

As a result of the measures implemented by the European policymakers and financial institutions, Figure 14 shows the bond market regained ground starting from 2013, as the borrowing costs of the PIIGS have fallen to pre-crisis levels (Alderman, 2014).



Source: Bloomberg, 2014

Figure 14: PIIGS 10-year Bond Yields, 2009-2014

Greece 10-year bond yield IS currently trading at 6.84%, down 50% from last year, and Ireland trading at 3% compared to 14% at the peak of the crisis (Alderman, 2014). Furthermore, Figures 15 and 16

emphasise the decrease in CDS trading as financial assistance provided by the bailout programmes reduced the PIIGS' default risk.



Source: Bloomberg, 2014

Figure 15: Stabilised 5year-CDS Greece



Source: Bloomberg, 2014

Figure 16: Current 5year-CDS PIIS compared to Germany, 2014

Ireland and Spain become the first countries to exit the bailout program respectively in 2013 and 2014 (McDonald, 2013). They will no longer have access to bailout loans, but can issue bonds again.

Despite the positive effects on the financial markets, providing financial assistance did not address the budget deficit issue effectively. The bailouts were granted under the condition that the countries implement tough austerity measures to achieve budget

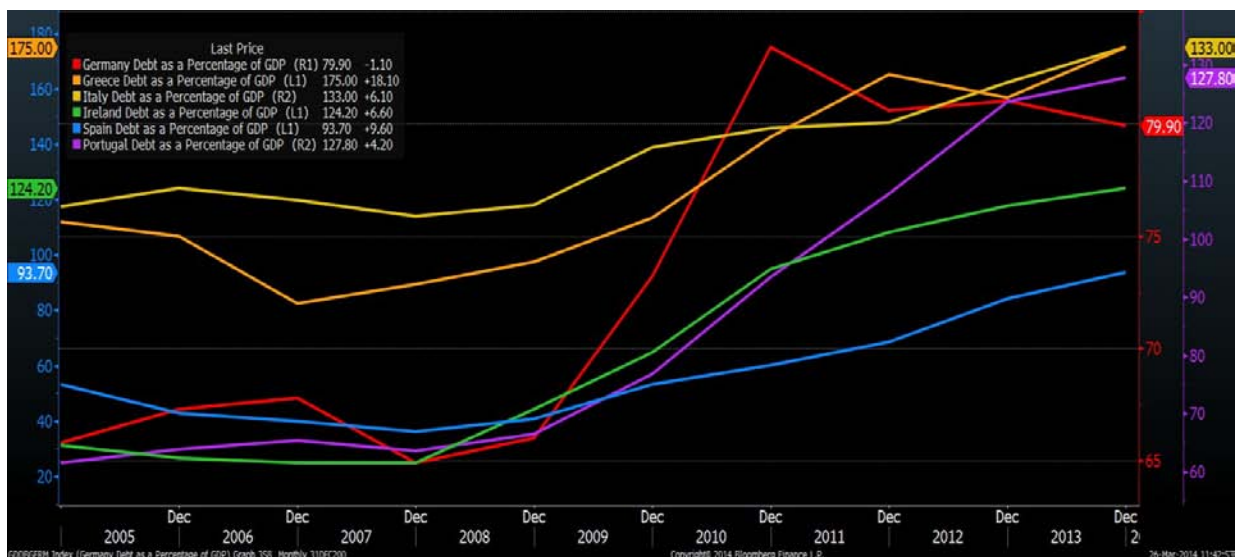
stability; however policymakers underestimated the effects of these measures as the countries' economic growth remain slow (Spiegel Online, 2013).

Unemployment in the Eurozone has reached record highs; Greece and Spain are the most severely hit countries with rates currently above 26% as shown in Figure 17. In addition, as shown in Figure 18, the countries' debts as a percentage of GDP are currently higher than ever.



Source: Bloomberg, 2014

Figure 17: Germany and PIIGS Unemployment Rate



Source: Bloomberg, 2014

Figure 18: PIIGS Debt as a Percentage of GDP

Another critical aspect is the unconventional intervention of the ECB in the European sovereign bond market. Firstly, by buying government securities, the ECB is impacting the valuation of sovereign debt which is inconsistent with the main goals of monetary policy. ECB's high level of influence in operational financial market activities could lead to the deformation of the markets over a medium or long period of time.

Furthermore, the ECB is expanding the size of its balance sheet which endangers its independency (Procedia Economics and Finance 3 (2012) 763 – 768, A. Romana, I. Bilana).

VI. EFFECTS ON THE FINANCIAL LANDSCAPE, LESSONS LEARNED AND NEW TRENDS

The debt crisis revealed several structural problems within the EU framework and within European economies. An important lesson to be taken from these recent events is that a currency union should also result in a fiscal union (Dombret, 2013). This understanding has led to the revisions of several EMU policies: Policymakers have introduced new packages of legislation, such as the “two-pack” for Eurozone members in 2013 to prevent excessive levels of debt and ensure fiscal stability (Eurozone Portal, 2014). The “two-pack” strengthens the existing SGP by imposing a budgetary coordination, and stricter economic and financial surveillance in the euro area. The member states budgetary plans will be assessed by the European Commission prior to their adoption and members experiencing financial instabilities will be monitored closely (Eurozone Portal, 2014).

Severe weaknesses in the banking sector were also revealed by the debt crisis, reminding that banking crises have the strong potential of slowing down the global economy (Nowotny, 2012). European governments are working towards setting up supervisory authorities in the banking sector to enhance financial stability. A key pillar of the future banking union, the Capital Requirements Directive, which sets stronger capital requirements for banks, was adopted in January 2014 additionally to Basel III. The Single Supervisory Mechanism should enter in force in autumn 2014, creating a supervision system for banks within the EU (ECB, 2014). A banking union should lead to better supervision of the sector and ensure that immediate action is taken when weaknesses are detected. It should also reduce the interdependence of financial institutions and governments (Dombret, 2013).

Following the crisis, the financial landscape was transformed and new trends have emerged. European central banks and governments have become more involved in the financial markets to reduce the probability of longer recessions (El-Rian, 2011). The sovereign debt crisis has clearly revealed banks' inefficiency to identify and measure the various types of risk they face. Therefore, the financial institutions have been working on strengthening their risk management divisions to respond appropriately to future crises (Dombret, 2013). Moreover, several banks have downsized their investment banking divisions to concentrate on their core operations. Their lending standards have increased to comply with the new regulations, making it more difficult for individuals and companies to access credit. Consequently, private equity firms, which comply with softer regulatory requirements, have been entering the lending market (Tett, 2014).

VII. CONCLUSION

This essay identified inefficient regulations, budget deficits, and vulnerable banking systems as the main causes of the European sovereign debt crisis, which initially erupted when it became public knowledge that Greece faced default. The crisis led to soaring volatility within the financial markets and contributed to the revaluation of risks. Moreover, financial institutions faced liquidity issues and the need of financial restructuring. In response to the crisis, several measures were implemented to stabilize the weakening Eurozone economy. As a result, confidence could be restored; however there are still some economic and fiscal challenges. EU member states have increased their policy coordination after understanding that tougher preventive measures to control budget deficit and bank failures are essential to avoid a repetition of the debt crisis. Furthermore, alternative financial institutions have emerged.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Alderman, L. 2014. Banks Take On European Debt, Despite Underlying Problems. [online] Available at: <http://www.nytimes.com/2014/01/22/business/banks-take-on-european-debt-despite-underlying-problems.html> [Accessed: 18 Mar 2014].
2. Allen, W. A. and Moessner, R. 2012. The liquidity consequences of the euro area sovereign crisis. BIS Working Papers. [report] Bank of International Settlements, pp. 1-26.
3. Alloway, T. 2013. Credit default swaps run out of road. [online] Available at: <http://www.ft.com/cms/s/0/03cbf666-34e7-11e3-8148-00144feab7de.html#axzz2vQJftDkn> [Accessed: 2 Apr 2014].
4. Arghyrou, M. G., Kontonikas, A. and Ros. 2012. The EMU sovereign-debt crisis: Fundamentals, expectations and contagion. *Journal of International Financial Markets, Institutions and Money*, 22 (4), pp. 658--677.
5. BAFA, B. 2014. Bundesamt für Wirtschaft und Ausfuhrkontrolle: Umweltprämie. [online] Available at: <http://www.bafa.de/bafa/de/wirtschaftsfoerderung/umweltpraemie/index.html> [Accessed: 2 Apr 2014].
6. BBC News. 2011. Leaders reach Eurozone debt deal after late-night talks. [online] Available at: <http://www.bbc.co.uk/news/world-europe-15472547> [Accessed: 18 Mar 2014].
7. Bernoth, K., Von Hagen, J. and Schuknecht, L. 2012. Sovereign risk premiums in the European government bond market. *Journal of International Money and Finance*, 31 (5), pp. 975--995.
8. Choudhury, A., Logutenkova, E. and Kirchfeld, A. 2012. Investment Bankers Face Termination as Europe Fees Fall. [online]

9. Available at: <http://www.businessweek.com/news/2012-07-09/investment-bankers-face-termination-as-europe-fees-fall#p1> [Accessed: 18 Mar 2014].
10. Dombret, A. 2013. How regulation and crisis management will change the world's financial landscape. [online] Available at: http://www.bundesbank.de/Redaktion/EN/Reden/2013/2013_03_19_dombret_ffs.html [Accessed: 25 Mar 2014].
11. DW.de, 2014. Greek creditors receive official 'haircut' notification | Business | DW.DE | 24.02.2012. [online] Available at: <http://www.dw.de/greek-creditors-receive-official-haircut-notification/a-15767530> [Accessed: 22 Mar 2014].
12. ECB.2014. ECB: Banking Supervision. [online] Available at: <http://www.ecb.europa.eu/ssm/html/index.en.html> [Accessed: 1 Apr 2014].
13. El-Rian, M. 2011. Prepare for a different financial landscape. [online] Available at: <http://blogs.reuters.com/mohamed-el-erian/2011/12/05/prepare-for-a-different-financial-landscape/> [Accessed: 25 Mar 2014].
14. Eurozone Portal. 2014. The EU's response to the crisis. [online] Available at: <http://www.eurozone.europa.eu/euro-area/topics/the-eus-response-to-the-crisis/> [Accessed: 25 Mar 2014].
15. Ewing, J. 2012. Deutsche Bank Profit Falls on European Debt Crisis. [online] Available at: http://dealbook.nytimes.com/2012/02/02/deutsche-banks-profits-fall-on-european-debt-crisis/?_php=true&_type=blogs&_r=0 [Accessed: 18 Mar 2014].
16. IMF. 2007. The IMF & the European Economic and Monetary Union. [online] Available at: <https://www.imf.org/external/np/exr/facts/emu.htm> [Accessed: 18 Mar 2014].
17. Lane, P. R. 2012. The European sovereign debt crisis. *The Journal of Economic Perspectives*, 26 (3), pp. 49-67.
18. Lucas, A., Schwaab, B. and Zhang, X. 2013. Conditional euro area sovereign default risk. *Journal of Business & Economic Statistics*, pp. 1-30.
19. McDonald, H. 2013. Ireland becomes first country to exit Eurozone bailout programme. [online] Available at: <http://www.theguardian.com/business/2013/dec/13/ireland-first-country-exit-Eurozone-bailout> [Accessed: 18 Mar 2014].
20. Nelson, R. 2013 "Sovereign Debt in Advanced Economies: Overview and Issues for Congress". CRS Report for Congress. [report] Congressional Research Service.
21. Nowotny, E. 2012. "European Monetary Union – lessons from the debt crisis". 40th Economics Conference of the Central Bank of the Republic of Austria Vienna, 10 May 2012
22. Papadimas, L. 2010. EU, IMF agree \$147 billion bailout for Greece. [online] Available at: <http://www.reuters.com/article/2010/05/02/us-Eurozone-idUSTR E6400PJ20100502> [Accessed: 18 Mar 2014].
23. Spiegel Online. 2013. 'Notable Failures': IMF Admits Major Mistakes on Greek Bailout - [online] Available at: <http://www.spiegel.de/international/europe/the-imf-admits-serious-mistakes-on-greek-bailout-a-904093.html> [Accessed: 18 Mar 2014].
24. Randow, J. 2012. Draghi Says ECB Will Do What's Needed to Preserve Euro: Economy. [online] Available at: <http://www.bloomberg.com/news/2012-07-26/draghi-says-ecb-to-do-whatever-needed-as-yields-threaten-europe.html> [Accessed: 22 Mar 2014].
25. Tett, G. 2014. The real titans of finance are no longer in the banks. [online] Available at: <http://www.ft.com/cms/s/0/28a6bcb0-93e6-11e3-a0e1-00144feab7de.html#axzz2wzrlsYgd> [Accessed: 25 Mar 2014].
26. The Economist. 2014. What Angela isn't saying. [online] Available at: <http://www.economist.com/news/finance-and-economics/21583257-euro-zone-rescues-have-left-sovereign-debt-too-high-be-sustainable-what-angela> [Accessed: 18 Mar 2014].
27. Willis Market Security. 2011. Impact of the Eurozone Debt Crisis on Insurer Solvency. [report] London: Willis Market Security, pp. 2-7.

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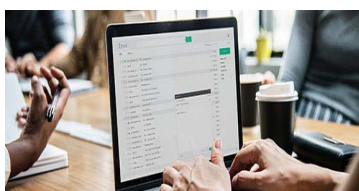
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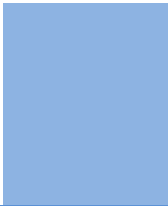
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Acknowledgments

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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.



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

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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.

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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.



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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.

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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.

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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.

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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 grunt 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.

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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 matter 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:

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- Submitting a manuscript with pages out of sequence.
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- 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.
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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.

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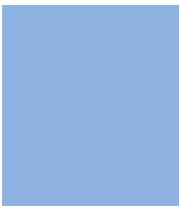


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<i>Methods and Procedures</i>	Clear and to the point with well arranged paragraph, precision and accuracy of facts and figures, well organized subheads	Difficult to comprehend with embarrassed text, too much explanation but completed	Incorrect and unorganized structure with hazy meaning
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<i>References</i>	Complete and correct format, well organized	Beside the point, Incomplete	Wrong format and structuring





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ISSN 9755853



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