

The information gap in corporate annual reports: Evidence from Vietnam

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ABSTRACT

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This study is an empirical research into the gap between disclosures in annual reports by listed companies and the needs of information by individual investors for investing decisions. The research uses some quantitative methods with the data collected from the annual reports of the top 30 non-financial listed companies having the high market capitalization and good liquidity on the Vietnam Stock Exchange. The authors compare 82 information disclosed by the corporates with the expectations of the investors by using SPSS 22. The results indicate that there is a discrepancy between the perception of individual investors and listed companies about the useful information in the corporate reports. In addition, both the mandatory and voluntary disclosures do not satisfy the requirements of the investors; however, the mandatory information is provided more than the voluntary one by the listed companies.

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1. Introduction

The disclosures in the annual reports is one of the most important information for stakeholders. In addition, the annual reports are required to provide the relevant and useful information for the decision making of the users, according to IAS1. Therefore, the reports need to be prepared according to the requirements of the external users (Chakroun, 2012; Ball et al., 2000). The accounting literature underlined that although the companies live in the illusion that their disclosures meet both criteria of usefulness and adequacy, users show dissatisfaction with the managerial publication. A discrepancy between the usefulness perception of the information and the degree of their disclosure in the annual reports seems to exist in the financial market. In recent years, Vietnam has been known as a country with an impressive economic growth rate compared to other countries in the Asia - Pacific. This brings both opportunities and challenges for Vietnam enterprises. Thanks to globalization, Vietnamese companies, especially the listed companies, have more opportunity to increase their capital through the investments not only of domestic investors but also from foreign ones. In addition, the trend of convergence and uniformity of Accounting Standards in the world has helped Vietnam accessing to Financial Reporting Standards Standards (IFRS) as well as the experience of some countries with similar economic conditions. However, one of the challenges is that the financial reports (FR) are required to provide more useful information to users, especially to outsiders (most of them are investors and analysts).

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In fact, the provided information by the listed companies in Vietnam Stock Market was “limited, poverty and lack of professionalism” (Nguyen Van Phong, 2009). He also emphasized that the publication of many listed companies was located in “extremely remote places” where shareholders were not easy to find; and some companies did not publish annual reports on their websites. According to some recent studies of Ngo Thu Giang (2011), Dang Thi Thuy Hang (2011, 2014), the published information of companies listed on Vietnam's stock market currently has not met the users’ needs. The number of listed companies having disclosure violations on Ho Chi Minh Stock Exchange (HOSE) has been increasing, for example, 24, 204 (8 times), and 153 companies in 2011, 2012 and 2013 respectively (As announced by HOSE, 2013a, 2013b). The published information of these companies usually too late, inaccurate or even non-disclosure. Additionally, the financial statements in Vietnam are prepared under the historical cost rather than the fair value principle. This is one of the barriers slowing down the listing progress of numbers of Vietnamese listed companies in abroad in order to increase in their capital when the domestic fund is limited. Another reason that prevents the companies attracting money from investors is the quality of financial reports, because there is a difference between these statements before and after to be audited. This situation makes investors losing their belief in what the companies present in their financial reports, and in turn, the Vietnamese stock market has a downtrend during a long time.

Therefore, research on *the information gap in corporate annual reports* of listed companies in the Vietnam stock market is really very necessary and meaningful in theory and practice. In theory, the study will enrich the theoretical frameworks of the providing published information of listed companies which are relevant, useful and reliable for the decision making of investors on the stock market in the emerging and transitional economy like Vietnam. In the practice, the results of the study to be expected to support the professional organizations in the promulgation of accounting standards, financial reporting standards and auditing standards; the State agencies in the promulgation of regulations related to the information disclosure of listed companies on the Stock Exchange; the listed companies in disclosing of useful information for investors. In addition, investors can also be based on the research results to make effective investment strategy.

2. Literature Review and Methodology

2.1. Literature review and Research design

The information from annual reports (Financial statements, Report of Chairman, Auditing report, etc.) of companies have been proved having significant influence on the decision of users including financial analysts, individual investors, institutional investors, bank credit staffs, securities brokers, etc. The information presented on annual reports is the official publication with the validity higher than that of other sources such as press, rumour, etc. Therefore, corporate disclosure is so important to users, especially external users who use the information to make financial decisions. According to Cooke (1989), the disclosure items on corporate annual reports are relevant and material to the decision-making of users who can't access the information sources as they wish; and if the relevant, material items are not disclosed, the user's decision will not be an optimal one. The useful disclosure is necessary for an effective capital market, and when the disclosure is transparent and accurate, the information disturbance can be minimized.

Annual reports are the most crucial information source for users when making a decision rather than the other sources like a rumour, meeting directly with the company's managers or visiting the company; press and magazine; pieces of advices from brokers, friends and relatives, and financial consultants; daily stock prices; stock index. These were examined by numbers of typical studies by Abu-Nassar and Rutherford (1996), Al-Ajmi (2009), Al-Razeen and Karbhari (2004, 2007), Al Sawalqa (2012) and Mirshekary and Saudagaran (2005). These studies were carried out in different countries like Jordan, Bahrain, Saudia Arabia, Iran. Annual reports are also supposed as one of the vital information resources for decision-making according to the studies of Anderson (1981), Buzby (1974), Naser, Nuseibeh and Al-Hussaini (2003). Although the annual reports have been recognized as the important information source having influence in the decision-making of users, the content in these reports has not met the requirements of them.

Almost of recent studies has indicated that the published annual reports were deficient in providing the required information by the different external users such as: investors (Joshi & Abdulla, 1994; Chatterjee, 2007), financial analysts (Stanga, 1976) and other stakeholders (Hooks Coy & Davey, 2002). Chatterjee (2007) found that Indian companies diverted the attention of annual report users to favourable information items in order to create a good public impression; however, they disregarded the disclosure of information items that were perceived to be significant by investors. In another study of Chatterjee et al. (2010), investigated whether the narrative section of Iranian companies' annual reports satisfies the information requirements of financial analysts employed by institutional investors. One of these research results is a general lack of information flow on the part of Iranian listed companies in meeting their stakeholders' information needs.

Moreover, with the sample of financial analysts, Stanga (1976) revealed that the published annual reports of large industrial firms were deficient in providing information items considered significant by those CFAs in their study sample. This study used the investigating 79 information items that were considered significant by CFAs in 80 companies from the 'Fortune 1,000' for 1972-1973 to check the gap information. Hooks et al. (2002) also report similar evidence in New Zealand where electricity companies that did not disclose those information items considered important by various stakeholders.

Futhermore, Abu-Nassar and Rutherford (1996) investigated that all of the user groups in the study agreed that the information disclosed by companies in Jordan was inadequate. Similarly, in the study of Mirshekary and Saudagaran (2005), most of the interviewees supposed that annual reports were the most important information source, but the reports had not provided enough the necessary information because it was not detail and delayed disclosure. However, this study found out the relationship between the disclosure in annual reports by companies and the expected information by users. The results indicated that the relationship was not significant, this means that the information requirements of the groups were not presented on annual reports in Iran. Nevertheless, this study had just investigated the present information but had not considered the analytical and predicted information that was always expected by users.

In summary, most studies showed that annual reports as the important source of information in the decision-making of users, and particularly investors. However, annual reports of companies were said to be confusing (Abu-Nassar & Rutherford, 1996; Al-Attar & Al-Khater, 2007), lacking the necessary information and delaying in disclosure (Mirshekary and Saudagaran, 2005). Therefore, investors had to focus on other sources of information to get the right investment decisions, such as: newspapers; state announcements; advices from friends, relatives, colleagues, brokers, consultants; and even from rumors (Al-Ajmi, 2009; Al-Razeen & Karbhari, 2004, 2007; Baker & Haslem, 1973; Mirshekary & Saudagaran, 2005); and in some cases, these sources were rated more important than annual reports.

In order to narrow the information gap in corporate annual reports of listed companies, based on the previous studies, the authors have developed a proposal research model as follows:

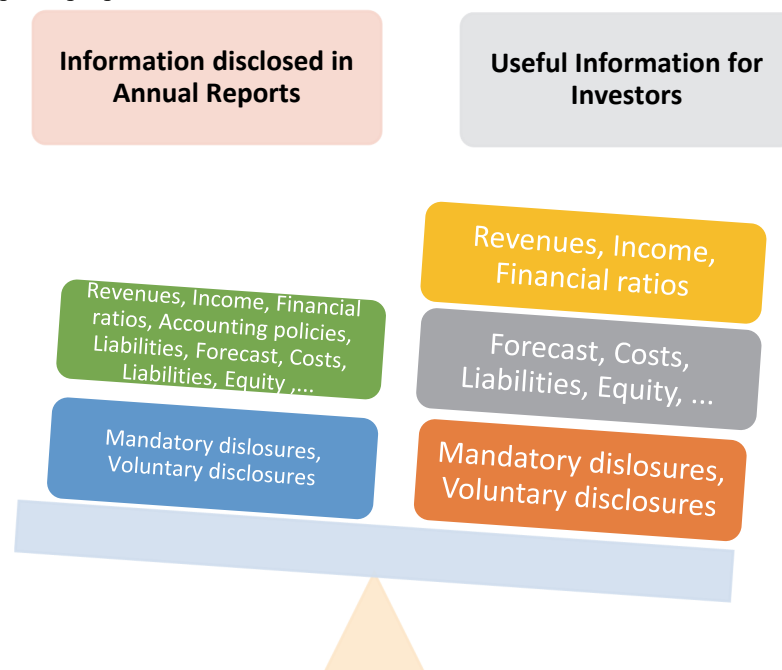


Fig. 1. Proposal research model

In the research model, all accounting information disclosed by listed companies are divided into 11 groups (factors) based on the general information presenting the annual reports of the companies. Each group is measured by the detailed information (items), there are 82 items. We have adopted all items tested in the past researchs (Dang Thi Thuy Hang et al., 2019). (See Appendix A). The information provided by listed companies in Vietnam Stock Exchange is compared with the required information of individual investors which like a benchmark. On the Vietnam stock exchange, the number of individual investors have been much more than that of institutional investors, so the demand of disclosure from these individual investors should be satisfied. In this way, we can measure the gap information in corporate annual reports and calculate the Disclosure Index, Mandatory Disclosure Index and Voluntary Disclosure Index for each company and the sample and all of listed companies in Vietnam. This is very useful not only for investors but also for other stakeholders when making decisions.

To date, a number of studies measured the distance from the corporate disclosure to the expectation of users. Buzby (1974) developed a list of 38 financial and non-financial items. The results of his study showed that many items, which are considered significant by the financial market, are not sufficiently disclosed by the companies of the sample; and there is no correlation between the importance attached by the financial market to the information and the level of their disclosure in the annual reports. On the other hand, Bukh (2003), Van Der Zahn and Singh (2005) and Béjar (2006) studied the extent of intellectual capital disclosure in the context of the IPO. Bukh (2003), using a sample of 68 IPOs carried out between 1999 and 2001 on the Copenhagen Stock Exchange, showed that the companies disclose on average 30 information about their intellectual capital in comparison to a set of 78 information previously selected in the literature (i.e. a disclosure score which equalizes 0.384). On the other hand, Van Der Zahn and Singh (2005), using a sample of 334 companies listed on the Singapore market over the period 1997-2004, concludes that companies disclose on average 28.9 of 81 selected information (i.e. a disclosure score of 0.356). Based on the proposal research model and the previous studies, the authors propose to test the following hypothesis:

H₁: *There is a information gap between corporate annual reports and the needs of individual investors.*

The information disclosure is classified into two groups according to the requirements of the state regulations and accounting standards. *Mandatory disclosure* is the information must be disclosed by law and regulations of state agencies, State Securities Commission (Adian & Ion, 2008). According to Owusu-Ansah (1998), mandatory disclosure is the information disclosure required by the provisions of the Companies Act, State Securities Commission and accounting standards. Mandatory publications have to be in accordance with the regulations, accounting standards, and the provisions of law relating to disclosure requirements of financial statements. The importance of mandatory publication is the root of the purpose of the financial statements, according to Omar and Simon (2011). In Vietnam, the publication is often presented in annual reports according to the regulations of State Securities Commission, stock exchanges, International Financial Reporting Standards, International Accounting Standards and Vietnamese Accounting Standards, corporate accounting regime issued by the Ministry of Finance.

In the issue of the mandatory publication, studies have generally shown that financial statements have provided the new and relevant information for investors (Kothari, 2001). However, the recent empirical research has shown a decline in the relevance of the items in financial statements over the past 20 years (Collins et al., 1997; Chang, 1999; Ely & Waymire, 1999; Francis & Schipper, 1999). These studies also have shown that the mandatory disclosure still plays a very important role in the decision-making process. According to Leuz and Verrecchia (2000), the better disclosure standards would reduce the cost of capital of the company, so it also provides more valuable information for investors. In the study, the second hypothesis is:

H₂: *The mandatory information disclosed by listed companies in Vietnam Stock Market does not satisfy the needs of individual investors.*

Recent years when more and more companies have fulfilled the mandatory disclosure, accounting literatures recorded the studies concentrating more on the voluntary disclosure. According to Adina and Ion (2008), *voluntary disclosure* is freedom to publish by companies, as the additional information to be published and encouraged to publish. Voluntary disclosures help companies to be more attractive for investors and reduce the turbulence of information. Chakroun (2012), using a sample of 24 companies listed on the Stock Exchange Securities of Tunisia, showed that the voluntary information of the annual reports does not meet the informational needs of the financial market. More specifically, the supply of 29 items in annual reports diverges completely with the financial market demand. Most of these items are voluntary disclosures and not closely linked to the mandatory ones. In South Africa, the study of Myburgh (2001) showed the existence of a discrepancy between the usefulness of voluntary information perceived by information's users and the degree of disclosure in the annual reports for 17 items out of the 49 items which disclosed voluntary by South African companies. The study of Béjar (2006) was conducted, using a sample of 107 IPOs with Euronext Paris, during the period 1996-2004. The result confirms the existence of a discrepancy between the perceptions of the users and those of the producers of the annual reports for 8 items out of the 19 items analyzed which are voluntarily disclosed in France. Sample firms obtain on average a disclosure score of 0.378 compared on a maximum score of 1. The authors want to verify this situation in Vietnam. So the third hypothesis is:

H₃: *The voluntary information disclosed by listed companies in Vietnam Stock Market does not satisfy the needs of individual investors.*

Companies are required to disclose mandatory information disclosure under the regulations of Law, besides, they may choose to publish voluntary information disclosure if they feel is beneficial (Omar & Simon, 2011). However, voluntary publication also has a number of issues such as disclosing the relevant information for users, avoiding too much information leading to the confusion; the relationship between costs and benefits for the company. Voluntary disclosure is often considered to be disclosed or not depending on the costs - benefits principle (Omar & Simon, 2011). Therefore, the authors suppose the fourth hypothesis as follow:

H₄: *The mandatory information is disclosed more than the voluntary information by listed companies in Vietnam Stock Market.*

2.2. Relevant Theories

The investment decision in the stock market is a complex decision and explained by a number of different theories. However, the following theories are the main theories helping explain the relationship between information disclosure and the needs to make decisions of investors in the stock market.

2.2.1. Agency Theory

Agency Theory has been applied by a lot of scholars in various fields of study including accounting. The theory was developed by many researchers, but the core essence of the theory is to consider the relationship between the two groups (principal - agent) opposing interests. This relationship is always a conflict because of the related issues such as benefits, costs, information asymmetry. To minimize this asymmetry problem, this research will focus on the information disclosure that is interested by investors; thereby helping companies develop appropriate solutions to provide the information matching with the needs of investors.

2.2.2. Legitimacy Theory

Accounting researchers generally tend to consider voluntary disclosure as a legitimisation tool to convince the stakeholder that the business is pursuing the right objectives as perceived by society (Meyer & Rowan, 1977). Another theory that is able to explain the provision of voluntary information by firms is the legitimacy theory. The theory argues that every firm exists only if it is perceived by society to be satisfying people's needs according to social contests and activities (Lindblom, 1994; O'Donovan, 2002; Sethi, 1978). If there is an incongruence between a firm's actions and the community's expectation, the so-called "legitimacy gap" is established (Sethi, 1978). In order to fill the gap and transmit a good perception to society, maintain legitimacy; it is important to influence external users' opinions about the company. In this process, disclosure can play a crucial role. To match the firm's action and society's expectation, strategic action should be conducted and the most important of which is to reinforce communication with the stakeholder.

2.2.3. Decision Theory

Decision Theory is the theory of decision-making. According to the Decision Theory, the decision-making process involves several sequential steps. Of them, the collection and evaluation of information are important steps in the process. For external users, including individual investors, it is very difficult to access the information from inside listed companies. Therefore, they usually make their economic decisions based on the information presented in the corporate annual reports. Thus, to achieve an optimal decision, the more accurate information they have, the better decision they get. By this way, the annual reports should disclose the useful information for users.

2.3. Research Methodology

The authors apply quantitative method in study on the information gap in corporate annual reports in Vietnam Stock Exchange. Two groups graded independently the information disclosed in annual reports of the top 30 biggest listed non-financial companies (Appendix B) in Vietnam Stock Exchange for fiscal years: 2016, 2017, according to the information required by individual investors in the previous researches. It is reasonable to use the 82 detailed disclosures that are grouped into 11 groups of general disclosures from Dang Thi Thuy Hang et. al (2019) as the required information system (Appendix A). Because this study used items from the past studies and passed the test of reliability of items. Moreover, the research was implemented in Vietnam. We collected 60- grade papers, each company had 2 papers for 2 fiscal year 2016 and 2017. Each detail information (82 items) was found from corporate annual reports and rated from 0 to 100 points compared with the benchmark (equal 100 points for each items). There were 60 observations processed by SPSS 22 to analyze the sample and test for the whole population.

3. Results and discussion

3.1. The information gap in corporate annual reports

3.1.1. What is the extent of disclosure in corporate annual reports?

Analytical results via the SPSS 22 software on the sample survey showed that the average level of disclosure of each general accounting information is different (Table 1).

Table 1

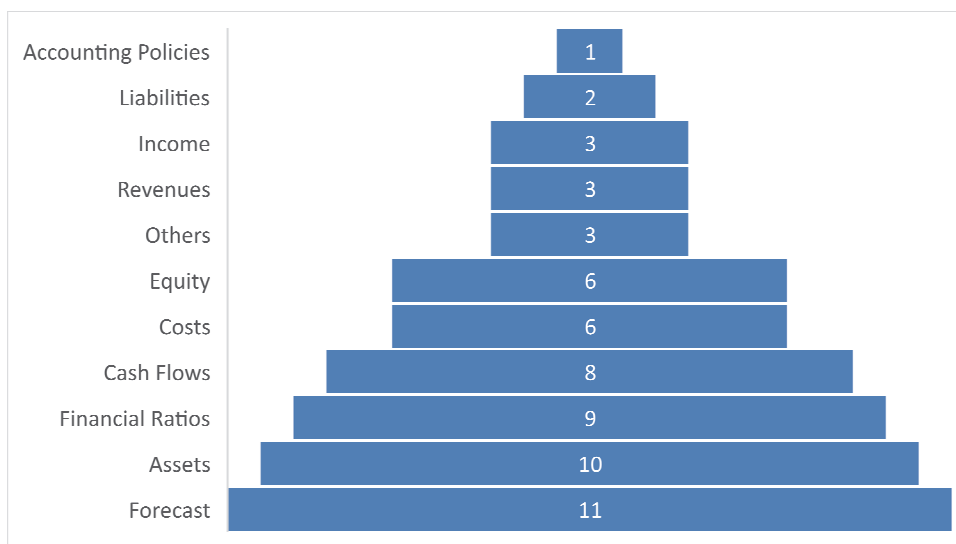
The disclosure level of listed companies in the sample

	N	Range	Minimum	Maximum	Mean	Rank	Std. Deviation
Accounting Policies	60	25	75	100	91.02	1	9.401
Liabilities	60	50	50	100	87.29	2	15.273
Income	60	40	60	100	79.60	3	12.314
Revenues	60	45	55	100	78.33	4	13.981
Others	60	72	28	100	76.44	5	14.493
Equity	60	63	25	88	71.33	6	14.417
Costs	60	40	43	83	71.29	7	10.401
Cash Flows	60	40	45	85	57.67	8	12.194
Financial Ratios	60	83	0	83	51.15	9	17.896
Assets	60	29	34	63	45.28	10	5.848
Forecast	60	71	0	71	27.25	11	21.728

According to the above table, the information of Accounting Policies is shown in annual reports nearly the same as the needs of investors with 91/100. The second one belongs to Liabilities information, more than 87/100. The information of income, revenues, other information, equity and costs is prepared around 70% what the expectation of investors. In the sample, the 30 companies provided only 50% of the requirement of individual investors about cash flows, financial ratios. And the information about assets and forecast satisfied below 50% of the need of investors.

The outputs from using One sample T-test indicated that the same results for the population at the significant level at 5%. It means that the listed companies in Vietnam Stock Exchange have not provided the expected information in general; however, they nearly satisfied the needs of investors. In particular, there are 7 of 11 general information disclosed more than 70% what the requirement of investors in Vietnam, the other two general information presented at more than 50%, and the last two information published below 50%. The forecast information is presented in corporate annual reports only 27% of what the investors want to know. Therefore, H_1 is proved.

By comparing the disclosure average level (mean) of each pair of accounting disclosures (Paired samples T-test) (Appendix C), the authors have ranked the level of disclosure of 11 general accounting information. In general, the ranking result for the population is the same with that of the sample. The accounting policies are disclosed by listed companies with the highest level. The next position is liabilities, and the third one belongs to income, revenues and other information. The disclosure of equity and costs in the next group. And the last group includes cash flows, financial ratios, assets and forecast information. (Fig.2)

**Fig. 2.** The ranking of disclosure level of listed companies in Vietnam

3.1.2. What is the information gap in corporate annual reports?

According to the above analysis and the perception of individual investors about the important extent of disclosure in corporate annual reports (Dang Thi Thuy Hang, 2016) (Appendix D), we summarized the research results in Table 2.

Table 2

The comparison between the supply and demand information ranking

Items	Supply Rank	Demand Rank	Difference
<i>A</i>	(1)	(2)	(3) = (1) - (2)
Accounting Policies	1	11	-10
Liabilities	2	9	-7
Income	3	1	+2
Revenues	3	2	+1
Others	3	3	0
Equity	6	3	+3
Costs	6	8	-2
Cash Flows	8	7	+1
Financial Ratios	9	3	+6
Assets	10	10	0
Forecast	11	3	+8

From the results presented in Table 2, there is a discrepancy between the perception of individual investors about the usefulness of information and the degree of their disclosure in the annual reports of listed companies in Vietnam. It means that there is a gap between what are the disclose and what are required by individual investors. The information disclosures are different in most cases (9 out of 11 general information). There are only two disclosures provided by listed firms which can satisfy the need of investors, namely: assets and others. Listed companies in Vietnam have disclosed the information that individual investors have not thought they are important for making decisions. This can be explained by Agency theory. The companies had to concern about the relationship between benefits and costs when publishing the information. Moreover, the companies must care about the disclosure because of the competition from other companies in the same industry. It is unhideable that the opposite benefits usually exist between the principal and the agency.

The information about accounting policies, liabilities, equity, financial ratios, forecast have a big gap. The listed corporates concentrate to publish the company accounting policies, liabilities while investors do not care about that. In contrast, the investors willing to know more about financial ratios, equity and forecast information but the companies do not provide enough. On the other hand, the gap in the disclosure of income, revenues, cash flows and costs are small. Except for the information of costs is not meet the requirement of investors, the other disclosures nearly reach the need of investors.

In conclusion, the information disclosed in annual reports of listed companies in Vietnam is not in line with the expectation of investors. So, the Hypothesis 1 is approved. This result is similar to the previous empirical researches.

3.2. Disclosure Index

3.2.1. The General Disclosure Index

In order to find out the information gap in annual report of listed companies in Vietnam and measure this gap, we have used these formulas to calculate the disclosure index for the whole sample and each company.

$$DI = \sum_{j=1}^{11} R_j \times G_j \quad (1)$$

$$G_j = \frac{\sum_{i=1}^{30} G_{ji}}{60} \quad (2)$$

$$G_{ji} = \frac{\sum_{k=1}^k S_{ki}}{k} \quad (3)$$

In the formula (1):

- ✓ DI is the total disclosure index that measures the level of disclosure of the listed companies;
- ✓ R_j is the weight given to the information category j ;
- ✓ G_j is the information category j ;

In the formula (2):

- ✓ G_{ji} is the general information category j assign to the company i ;
- ✓ i is the number of the company i , each company in the sample have 2 fiscal years were graded and each year is one observation, that why we have 30 companies but the number of observations is 60;

In the formula (3):

- ✓ Ski is the detailed information in the group G_{ji} ;
- ✓ k is the detailed information in the general information category j .

The data analysis indicates that the general disclosure index is 68.7028 or 68.7% (DI = 68.7028 or 68.7%) for the sample. This means that the listed companies have prepared annual reports which presented nearly 69% of the required information by investors. In other words, these companies are false to satisfy the needs of investors in the Vietnam Stock Exchange for making decision. According to test results (One-Sample T-Test), in addition, listed companies in Vietnam provide 67% the required information of investors with statistical significance level of less than 5%. Once again, it is undeniable that Hypothesis 1 is proved correctly.

3.2.2. The Disclosure Index of each company

Moreover, the authors also calculated the disclosure index for each company in the sample. The formulas are below:

$$DI_i = \sum_{j=1}^{11} R_j \times G_{ji} \tag{4}$$

In the formula (4):

- ✓ DI_i is the disclosure index that measures the level of disclosure of the listed companies i .

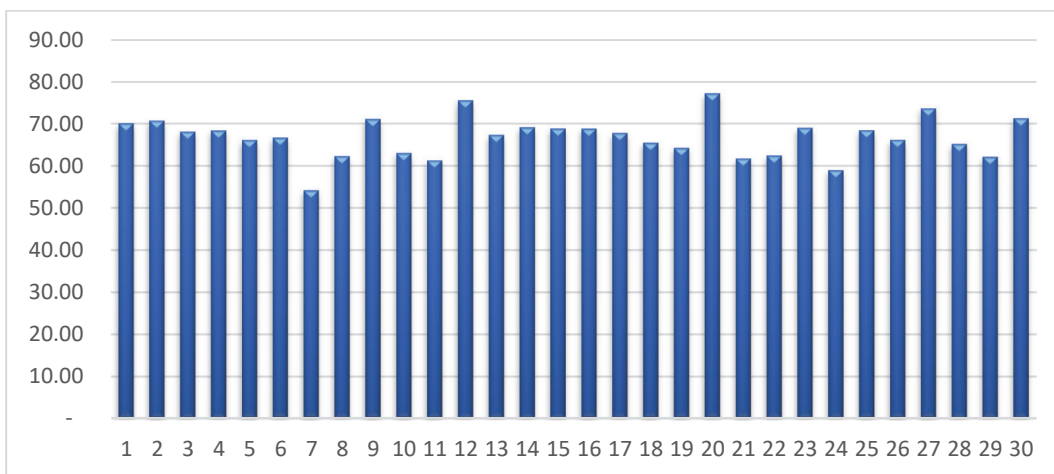


Fig. 3. The comparison of Disclosure Index of listed companies

Fig. 3 shows the level of disclosure of each company in the sample. In general, there is a difference in the disclosure index of the 30 listed companies. Only 5 firms have provided higher than 70% of the required disclosure from investors in Vietnam, and the best company is Thanh Thanh Cong - Bien Hoa Joint Stock Company (Check in Appendix B). Almost firms presented from 60% to 70% (23/30 companies). Still have 2 companies disclosed less than 50%, with the worst disclosure company is Mobile World Investment Corporation. This situation approves that the Hypothesis 1 is right.

3.2.3. The mandatory disclosure index and voluntary disclosure index

The authors applied the same method as above to measure the mandatory disclosure index (MDI) and voluntary disclosure index (VDI).

Table 3
The level of mandatory and voluntary disclosure for the sample

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Mandatory Disclosure	60	20	69	89	81.50	4.941
Voluntary Disclosure	60	47	14	61	44.95	10.284

We adopted the items that used to measure the mandatory and voluntary disclosure from the study of Dang Thi Thuy Hang et al. (2016) (Appendix A). It is clear to see that the mandatory information is presented in annual reports of 30 listed companies much more than that of the voluntary disclosure, 81.5% compared to 45%. And the degree of both mandatory and voluntary disclosure is lower than the expected by investors.

The T-test result also indicated that the same result for the population of all listed companies in Vietnam Stock Exchange, at the significant level 5%. Therefore, Hypothesis 2, Hypothesis 3 and Hypothesis 4 are examined. These results are explained by Legitimacy theory and Agency theory. The result indicates that there is a gap between the information disclosed (both mandatory and voluntary disclosure) by the listed companies and the required information of individual investors in Vietnam. Moreover, the mandatory disclosure in annual reports of listed companies in Vietnam is twice compared the voluntary disclosure, while the voluntary disclosure is more important than the mandatory disclosure when making investment decision of investors according to Dang Thi Thuy Hang (2016). This statement also is supported by mandatory disclosure index and voluntary disclosure index.

$$MDI = MD \times Hmd \quad (5) \qquad VDI = VD \times Hvd \quad (8)$$

$$MD = \frac{\sum_{i=1}^{30} MDi}{60} \quad (6) \qquad VD = \frac{\sum_{i=1}^{30} VDi}{60} \quad (9)$$

$$MDi = \frac{\sum_{m=1}^m Smi}{m} \quad (7) \qquad VDi = \frac{\sum_{n=1}^n Sni}{n} \quad (10)$$

In the formula from (5) to (10):

- ✓ MDI/VDI is the mandatory disclosure index/the voluntary disclosure index that measures the level of mandatory/voluntary disclosure of the listed companies;
- ✓ Hmd/Hvd is the weight given to the mandatory/voluntary disclosure category;
- ✓ MDi/VDi is the mandatory/ voluntary disclosure category assign to the company i ;
- ✓ Smi is the detailed information assign to the company i ;
- ✓ m is the detailed information in the mandatory/voluntary disclosure category.

Table 4

The mandatory and voluntary disclosure indexes

	Mean	The weight ratio	MD Index	VD Index
Mandatory Disclosure	81.50	0.479211	39.05808	
Voluntary Disclosure	44.95	0.520789		23.40993
		1.000000		

As be shown in the Table 4, the mandatory disclosure index is higher than the voluntary disclosure index. The Paired sample T-test also approved this result with the significant level at 5%. (Hypothesis 4 is correct). The figures in the above table show that the MDI and VDI contribute to the DI with 39% and 23.4% respectively.

In summary, the results of our research are the same as the previous studies. However, this research output is more reliable than the before researches. Since, the past researchers measured the level of disclosure based on only 2 degree: 0 if the information is not disclosed and 1 if the information is disclosed in annual reports; However, in this study, two groups of students (each group includes 4 students) graded each disclosure presented in annual reports from 0 to 100 points. The students who are the last year Accounting and Auditing students and trained how to grade with a benchmark. Additionally, two student groups discussed to have unbiased grades and created the unique data. Moreover, all the statistics results of the sample also tested for the whole population (all listed companies in Vietnam Stock Exchange Market).

4. Conclusion

This research has studied the gap of the information disclosure on annual reports of listed companies in Vietnam. The authors carried out a quantitative research with the statistical analysis techniques such as F-test, T-test. The main findings include: *firstly*, there is a discrepancy between the perception of individual investors about the usefulness information and the degree of the disclosure in the annual reports; *secondly*, the mandatory and voluntary information disclosed by listed companies in Vietnam Stock Market does not satisfy the needs of individual investors; *thirdly*, the mandatory information is disclosed more than the voluntary information by listed companies in Vietnam Stock Market. The results may help individual investors as well as other users in recognizing the gap information and making decisions. In addition, findings found in the research can be used for the listed companies and let all accounting disclosures met with investors' expectation. The research ended suggests some relevant areas studying in the future, especially, the concentration on particular users like bankers, creditors, bondholders.

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Appendix

Appendix A: Grading Paper

Table 5

Grade information disclosure by listed companies

GRADE INFORMATION DISCLOSURE BY LISTED COMPANIES

Name:

Code:

Year:

No	Items	Code	MD	VD	Points
1.	Total fixed assets and breakdown at cost.	A1	√		
2.	Total intangible assets and breakdown at cost.	A2	√		
3.	Breakdown of fixed assets at fair value.	A3		√	
4.	Breakdown of intangible assets at fair value.	A4		√	
5.	Detail of capitalized expenditures - 5 years.	A5		√	
6.	Breakdown of annual depreciation and accumulated depreciation.	A6	√		
7.	Detail of capital/financial leases.	A7	√		
8.	Detail of investment property at fair value.	A8		√	
9.	Total of inventories and breakdown at cost.	A9	√		
10.	Market value of inventories.	A10		√	
11.	Ages of accounts receivables that account for 10% or more of total accounts receivables.	A11	√		
12.	Detail of doubtful debt allowances.	A12	√		
13.	Cost and market value of trade securities breakdown.	A13	√		
14.	Cost and market value of investments breakdown.	A14	√		
15.	Compare total assets with the weighted average of industry.	A15		√	
16.	Ages of account payables that account for 10% or more of total account payables.	L3	√		
17.	Detail of capital lease debts.	L4	√		
18.	Income tax payables.	L5	√		

No	Items	Code	MD	VD	Points
19.	Deferred income tax.	L6	√		
20.	Detail of amount and book value of stocks (common stocks and preferred stocks).	E4	√		
21.	Detail of treasury stocks: purchase price, market price.	E5		√	
22.	Methods of dividend payment (by cash or stocks).	E6	√		
23.	Proportion distribution of net income.	E7		√	
24.	Total revenues/sales.	R1	√		
25.	Breakdown of sales by product line/ customer served.	R2	√		
26.	Sales growth rate 5 years.	R3		√	
27.	Important sales contracts is being implemented.	R4		√	
28.	Total and breakdown of COGS by product line/ customer served.	C1	√		
29.	Structure of manufacturing cost.	C2	√		
30.	Current year and plan advertising expenses.	C3		√	
31.	Income tax expense.	C4	√		
32.	Breakdown of financial expenses.	C5	√		
33.	Extraordinary expenses.	C6	√		
34.	R & D expenditures 5 years.	C7		√	
35.	Net income from operations.	I1	√		
36.	Income before income tax.	I2	√		
37.	Income after income tax.	I3	√		
38.	Income after income tax growth rate 5 years.	I4		√	
39.	Basic EPS	I5	√		
40.	Diluted EPS	I6	√		
41.	EPS growth rate 5 years.	I7		√	
42.	Detail of cash flows from operating activities.	CF1	√		
43.	Detail of cash flows from investing activities.	CF2	√		
44.	Detail of cash flows from financing activities.	CF3	√		
45.	Non-cash transactions influence in cash flows in the future (Purchase assets on account,	CF4	√		
46.	Cash restriction.	CF5	√		
47.	Return on assets – ROA.	FR1		√	
48.	Return on equity – ROE.	FR2		√	
49.	Earnings margin (Net income/ Net sales).	FR3		√	
50.	PB ratio (Price/Book value).	FR4		√	
51.	PE ratio (Price/Earnings)	FR5		√	
52.	Dividend Yield	FR6		√	
53.	Total debt/Total assets.	FR7		√	
54.	Long-term debt/Owners' equity.	FR8		√	
55.	Total liabilities/Shareholders' equity.	FR9		√	
56.	Current assets/Current liabilities.	FR10		√	
57.	Net sales/Total weighted average assets.	FR11		√	
58.	Dividend rate 5 years.	FR12		√	
59.	Revenue recognition principle.	P1	√		
60.	Foreign currencies translation method.	P2	√		
61.	Expenses recognition principle.	P3	√		
62.	Investment recognition principle.	P4	√		
63.	Method of depreciation.	P5	√		
64.	Inventory valuation methods.	P6	√		
65.	Inventory accounting methods (Perpetual method or Periodical method).	P7	√		
66.	Allowance valuation methods.	P8	√		
67.	Changes in accounting methods.	P9	√		
68.	Sales forecast for next year.	F1		√	
69.	Profit forecast for next year.	F2		√	

No	Items	Code	MD	VD	Points
70.	Outputs forecast for next year.	F3		√	
71.	Goods sold forecast for next year.	F4		√	
72.	Financial risk forecast for next year.	F5		√	
73.	R & D expenditures forecast for next year.	F6		√	
74.	Cash flows forecast for next year.	F7		√	
75.	Information about the projects are and will be implemented.	D1		√	
76.	Information on the production and business plans in the next year.	D2		√	
77.	Events after the Balance sheet date.	D3	√		
78.	Assets analysis.	D4		√	
79.	Stockholders's analysis.	D5		√	
80.	Sales analysis.	D6		√	
81.	Profit analysis.	D7		√	
82.	Stock option plan.	D8		√	

Appendix B: The sample of listed companies in Vietnam

Table 6

The list of listed companies in the sample

No.	Company Name	Code	Market Capital Value (VND billions)
1	- Vietnam National Petroleum Group	PLX	71,771
2	- HOA SEN Group	HSG	3,433
3	- FLC Group Joint Stock Company	FLC	3,209
4	- Vingroup Joint Stock Company	VIC	359,696
5	- PetroVietNam Drilling and Well Services Joint Stock Company	PVD	7,753
6	- Masan Group Corporation	MSN	101,776
7	- Mobile World Investment Corporation	MWG	37,650
8	- Vincom Retail Joint Stock Company	VRE	82,324
9	- No Va Land Investment Group Corporation	NVL	54,338
10	- Phu Nhuan Jewelry Joint Stock Company	PNJ	16,784
11	- Kido Group Corporation	KDC	4,144
12	- Refrigeration Electrical Engineering Corporation	REE	9,953
13	- FPT Corporation	FPT	19,572
14	- PetroVietNam Gas Joint Stock Corporation	GAS	206,515
15	- Cotecons Construction Joint Stock Company	CTD	8,952
16	- Petrovietnam Fertilizer and Chemical Corporation	DPM	7,005
17	- TNG Investment and Trading Joint Stock Company	TNG	1,119
18	- Gemadept Corporation	GMD	7,735
19	- FAROS Construction Corporation	ROS	17,085
20	- Thanh Thanh Cong - Bien Hoa Joint Stock Company	SBT	9,269
21	- PetroVietnam Power NhonTrach 2 Joint Stock Company	NT2	7,729
22	- HAGL Joint Stock Company	HAG	4,730
23	- Ho Chi Minh City Infrastructure Investment Joint Stock Company	CIH	5,772
24	- VIETJET Aviation Joint Stock Company	VJC	62,502
25	- Saigon Beer – Alcohol – Beverage Corporation	SAB	159,038
26	- Hoa Phat Group Joint Stock Company	HPG	69,770

No.	Company Name	Code	Market Capital Value (VND billions)
27	- DHG Pharmaceutical Joint – Stock Company	DHG	15,428
28	- Vietnam Dairy Products Joint Stock Company	VNM	226,555
29	- Binh Minh Plastics Joint-stock Company	BMP	3,659
30	- Dat Xanh Group Joint Stock Company	DXG	6,734

Appendix C: Paired-Sample T-test

Table 7

The comparison between the disclosure degree of each pair of information

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Accounting Policies - Liabilities	3.727	17.376	2.243	-.762	8.215	1.661	59	.102**
Pair 2	Liabilities - Income	7.696	21.315	2.752	2.190	13.203	2.797	59	.007***
Pair 3	Income - Revenues	1.262	14.992	1.935	-2.611	5.135	.652	59	.517
Pair 4	Revenues - Others	1.896	16.994	2.194	-2.494	6.286	.864	59	.391
Pair 5	Others - Equity	5.104	20.642	2.665	-.228	10.437	1.915	59	.060***
Pair 6	Equity - Costs	.048	16.120	2.081	-4.117	4.212	.023	59	.982
Pair 7	Costs - Cash Flows	13.619	15.667	2.023	9.572	17.666	6.734	59	.000***
Pair 8	Cash Flows - Financial Ratios	6.521	20.257	2.615	1.288	11.754	2.493	59	.015***
Pair 9	Financial Ratios - Assets	5.870	17.119	2.210	1.448	10.293	2.656	59	.010***
Pair 10	Assets - Forecast	18.025	22.993	2.968	12.086	23.965	6.072	59	.000***

Notes: *** (sig. < 5%), ** (sig. = 5%)



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