

The nexus between risk factor disclosures and short-run performance of IPOs – evidence from literature

Risk
disclosures in
IPO

907

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Abstract

Purpose – The main purpose of the present study is to stretch the theoretical framework of existing stock of literature with reference to Risk Disclosures in IPO Prospectus and IPO performance. The systematic literature review study endows easy and quick access to researchers as well as categorization of the available literature.

Design/methodology/approach – Fifty research papers, which has been published or presented from 2000 to 2019 and are related to IPO risk disclosures and IPO performance, have been finalized. Further, these research papers were categorized based upon the five different variables to identify the probable research gap in the selected topic.

Findings – This review provides a coherent summary of past studies related to topic and develop a comprehensive evidence on relationship between disclosure of risk factors and IPO underpricing in short run. It shows the existing research gap that needs to be fulfilled to expand the research horizon of future research studies.

Research limitations/implications – The sole limitation of the study is that being a systematic literature review study, it does not carry any empirical results.

Practical implications – The investors will be able to identify the key risk factors, disclosed in IPO prospectus, that may have probable dent on the short-term return from IPO. The findings will further help the investors and financial analyst to identify the degree of impact of risk disclosures that are listed in IPO prospectus.

Originality/value – The paper is a first of its kind to stretch the existing literature and develop theoretical framework in the context of risk factor disclosures in IPO prospectus and IPO performance with reference to India. The present study is an attempt to integrate the existing gap between empirical research and existing literature and suggest the techniques to the future practitioners to widen the horizon of their research.

Keywords India, Finance, Systematic literature review, IPO prospectus, IPO risk disclosures

Paper type Literature review

1. Introduction

Initial Public offer (IPO) has emerged as one of the core strategic fund-raising techniques embraced by cash starving companies. With a slew of IPOs hitting to the primary market, the uphill task for the companies is to assess the appropriate price of an IPO. IPO Underpricing and Overpricing depend largely on the information freely accessible to the investors. In recent times, investors chalk out their investment plans based on the information extracted from various resources. By keeping this in mind, it has become mandatory for the investors to go through the IPO prospectus minutely as the issuing companies are legally bound to abide by the facts and figures confesses in the IPO prospectus. It comprises of all the requisite information related to the company's past, its operations, ownership structure details and the investment and cash flow risk (Bhabra and Pettway, 2003). The IPO prospectus, therefore, serves as a legal document for the company, investors and underwriters, certifying that, under the guidelines structured by capital market regulatory bodies, all the appropriate and accurate information is provided to the potential investors. Greater comprehensive prospectus information helps in refining the price consistency as extensive prospectus reflects the higher bid price and minimize



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the scope of underpricing (Falconieri and Tastan, 2018). Risk disclosures in IPO prospectus, therefore, plays a pivotal role in formulating investment decisions by investors (Arnold et al., 2010). In addition to this, it also aids in mitigating the asymmetric information between internal stakeholders and potential peripheral investors. A prudent investigation of these risk disclosures likely assists in vitiating the risk choice of investors (McGuinness, 2019). The revelation of risk factors could affect the amount of discount on offer price and the IPO valuation. The underpricing phenomenon, associated with new seasoned issues listing, was reported by Ule (1937) in United States, who observed average underpricing 25.50% during the period 1934–1937. Reilly and Hatfield (1969) documented the first study concerned with the 53 IPOs, issued between 1963 and 1965, outperformed on average in United States (Evans, 1995). Later on, this phenomenon was presented by Logue (1973) and Ibbotson (1975). The underpricing of IPOs is frequently observed for various stock markets around the world from well-developed markets of the United States to developing markets in Asia and Africa for different periods at different times (Boon, 2014). However, the factor that influences IPO underpricing and its degree differ across countries at various issues (Loughran and Ritter, 2004). Studies from Bakar and Uzaki (2014), Torbira and Oki (2017) and Hawaldar et al. (2018) and many other earlier studies documented the existence of underpricing. In the present study, the research papers from 18 countries across the globe, representing the pattern of IPO's underpricing, are reviewed. Numerous rationales have been proposed by various researchers behind the presence of IPO underpricing and different theories have been propounded to explain the underpricing phenomenon over time such as Book building (Benveniste and Spindt, 1989); Behavioral Explanations (Welch, 1992); Bandwagon Hypothesis, Lawsuit Avoidance, Managerial Conflict Theory and Investment Bank Conflict Theory (Goldstein, 2012). The academicians and researcher scholars in similar literature use the term initial returns and underpricing interchangeably (Ritter and Welch, 2002). Studies of Bhabra and Pettway (2003), Crain et al. (2017) and Falconieri and Tastan (2018) portray the impact of prospectus information on the valuation of IPO shares. While researchers like Rasidah et al. (2017), Gumanti et al. (2017), Hussein et al. (2019) and Wasiuzzamm et al. (2018) have scrutinized the effect of unveiling of risk factors on IPO's short-run returns. Despite these above research explorations, quite scanty research has been conducted by researchers in IPO risk disclosures area, which have not been explored to deep insights. A substantial body of literature framework has been found which concentrated on determining the factors affecting short-run IPO return, but rare studies have been carried out to interrogate the influence of risk factor exposes in the red herring prospectus on its short-term results.

Given the lack of omnibus framework, the time is relevant for the development of theoretical framework that may facilitate more progressive theory advancement. This paper contributes to stretch the existing literature on IPO risk disclosures. Keeping in view the confinements of existing empirical research works, the current literature review collates and critically explores the qualitative nature of studies, which may suggest the companies about addressing the issues of IPO underpricing with respect to risk disclosures in IPO Prospectus. The current systematic literature review study is an attempt to fill the existing gap, through integrating the current insights from prior research, by investigating the various risk categories exposes in IPO prospectus that may have probable impact on IPO performance especially in Indian Context.

The following objectives have been developed based on the existing literature:

- (1) To develop constructive theme-based framework under different new dimensions for future practitioners
- (2) To classify the prevalent gaps in context of risk disclosures in IPO prospectus and their performance

The remaining paper is structured as follows: In the next section, [Section 2](#) depicts the methodology, [Section 3](#) states the literature on risk disclosures and IPO underpricing and findings of paper have been discussed under [Section 4](#). [Section 5](#) portrays the concluding remarks; Implications and Direction for future scope have been discussed in [Section 6](#) and [Section 7](#) respectively.

2. Methodology

The paper is a sincere endeavor to review the prevailing literature relevant to the impact of IPO's risk factor disclosures on their short-run performance. These studies will be supportive in structuring the current paper from numerous sources like journals, indexed cooperation proceedings, working papers, websites and electronic databases between 2000 and 2019. Finally, 50 research papers were selected that signifies the actual population of existing literature for the defined period. The present paper is a stock of reviews of 50 research papers related to the study, published in various countries around the world. Out of these, 40 papers are from refereed journals, 3 papers are international conference papers, 1 Doctorate research work and 7 papers are collected from the online library and various websites covering a period of 20 years from 2000 to 2019. These research papers are tabulated in [Table 1](#) depict the appellation of the author, the time frame during the study, geographical location (country) where the previous research study was conducted, source of study, description of the sample taken under study, the methodology adopted and the key results of the study.

The content and textual analysis of 50 past research studies was scrutinized for clustering the relevant categorization. Firming on the ground of the review of existing literature relevant to the theme of the paper, the entire inventory of requisite literature-based data is systematically categorized as shown in [Figure 1](#).

The sample literature is classified in following categories:

The above figure shows the description of the various variables understudy in the present paper. In the methodology variable, the existing literature on the topic is categorized based on various statistical tools applied. In the second variable, the literature is structurally arranged based on number of studies per year in the topic of present per paper. The country base categorization of the exiting literature has been done in the third parameter. Fourth parameter categorizes the existing literature based on the no. of sample years for the study. The last parameter is designed to highlight the authenticity of the sources of literature. It indicates the journals, working papers and other sources from where the literature was extracted.

3. Critical review of selected literature

The present section elaborates the results of the meta-analysis depicted in [Table 1](#). The results are categorized based upon the variables mentioned in the previous section. The results of the literature review performed according to each variable are shown as under:

3.1 Methodology/ techniques used in studies

[Table 2](#) portrays the frequency of different statistical tools devised for analyzing the data in the previous research studies. After examine the data, it was noted that significant chunk of studies used regression analysis as a statistical technique accompanied by content analysis, Fama-Fench Industrial classification, ANOVA and Mann-Whitney *U* test. Logistic regression, Garch Model, Durbin Watson Test, etc. are the other statistical tools that were employed by previous researchers, to examine the short-run performance of IPO.

3.2 Year wise classification of studies

[Table 3](#) shows the distribution of existing literature year wise. It can be clearly observed that studies from each year starting from 2000 to 2019 are included in the present paper.

Sr No	Author(s), year and country of the study	Sample size	Time frame (no. of years of study)	Theories/Hypothesis	Methodology and techniques used for analysis
1	Aggarwal et al. (2002) USA	681	1994–1999	Information Momentum	OLS Regression Analysis
2	Lowry and Shu (2002) USA	1,881	1988–1995	Symmetric Information – Litigation Risk Avoidance	Multiple Regression Equations and descriptive statistics
3	Bhabra and Pettway (2003) Canada	242	1987–1991	Symmetric Information – Prospectus Information	Matched-firm approach, Logistic regressions and Descriptive statistics
4	Loughran and Ritter (2004) USA	6,391	1980–2003	Changing Risk Composition, Objective Function Hypothesis and Internet Bubble	Multiple Regression Equations and descriptive statistics
5	Cassia et al. (2004) Italy	185	1985–2001	Changing pricing strategies and Information theory	Multiple Regression Equations and descriptive statistics
6	Cheng et al. (2004) Hong Kong	159	1995–1998	Information Asymmetry – the intraday behavior of the IPOs	Descriptive statistics
7	Li et al. (2005) USA	1,726	1995–2000	Information Asymmetry – adverse selection	Multiple Regression Equations and descriptive statistics
8	Aggarwal et al. (2002) Hong Kong	256	1993–1996	The Fads Hypothesis – over-optimistic or over-pessimistic reactions	Multiple Regression Equations and descriptive statistics
9	Aussenegg (2006) Austria	67	1984–1996	Cross-sectional differences in the Ownership structure	Regression Analysis
10	Abdou and Dicle (2007) USA	595	1996–2000	Symmetric Information – Risk factors Disclosure	Multiple Regression Equations and descriptive statistics and tests
11	Leone et al. (2007) USA	787	1993–94	Symmetric Information – Voluntary Disclosure	Multiple Regression Equations and descriptive statistics
12	Cazavan and Jeanjean (2007) France	82	2000–2002	Symmetric Information – Voluntary Disclosure	Logit Regression, Descriptive Statistics and Mann–Whitney test
13	Shi et al. (2007) USA	6,025	1995–2002	Mandatory Disclosure and Information Asymmetry	Multiple Regression Equations and descriptive statistics
14	Nam et al. (2008) USA	162	2001–2003	Symmetric Information	Oblique rotation method, hierarchical regression analysis
15	Deumes (2008) Netherlands	90	1997–2005	Symmetric Information – Narrative Risk Disclosures	Content analysis and Regression Analysis
16	Hanley and Hoberg (2008) USA	2,043	1996–2005	Liability Risk	Text character vector, frequency vector, Content Analysis and regression analysis

Table 1.
An overview of the IPO literature published since 2000

(continued)

Sr No	Author(s), year and country of the study	Sample size	Time frame (no. of years of study)	Theories/Hypothesis	Methodology and techniques used for analysis
17	Chahine and Filatotchev (2008) France	140	1996–2000	Symmetric Information – strategic information disclosure	Text recognition test, Regression analysis, descriptive statistics and <i>F</i> -test
18	Kothari <i>et al.</i> (2009) USA	889	1996–2001	Risk factors as Proxies	Descriptive statistics, Fama–French three-factor model and Fama–MacBeth regressions
19	Spindler (2009) USA	628	1998–2005	Symmetric Information-Litigation risks	Content Analysis Word counts, Fama–French five industry effects and descriptive statistics
20	Arnold <i>et al.</i> (2010) USA	1,398	1998–2005	Ambiguous Information	Fama and French alpha estimates, regression model
21	Engelen and Essen (2010) Belgium	2,920	2000–2005	Firm, issue and country-specific information asymmetry	One-Way ANOVA model and tests
22	Islam <i>et al.</i> (2010) Bangladesh	191	1995–2005	Institutional pricing and country-specific features asymmetry	Regression analysis
23	Bartov (2011) USA	1,242	1997–2005	Qualitative Earnings Information	Textual analysis
24	Huang <i>et al.</i> (2011) China	154	2004–2011	Disclosure of risk factor Information, litigation risk avoidance	Descriptive Statistics, Regression Analysis, Durbin–Watson stat. <i>t</i> and <i>F</i> -statistics
25	Kravet and Muslu (2011) USA	4,315	1994–2007	Symmetric Information – investors' risk perceptions	OLS Regression model and Descriptive statistics
26	Semenenko (2012) USA	5,679	1984–2005	Asymmetry in Underpricing between small and large issues.	Cross-sectional Regression Model
27	Agathee <i>et al.</i> (2012) Mauritius	44	1989–2010	Information Asymmetry- <i>ex ante</i> uncertainty	Altman Z-score Model, multiple regression analysis and descriptive statistics
28	Campbell <i>et al.</i> (2014) USA	9,076	2005–2008	Information Asymmetry	Descriptive statistics and Multiple Regression Analysis
29	Loughran and McDonald (2013) USA	1,887	1997–2010	Book-building, and prospect theory	Regression Analysis and descriptive statistics
30	Bakar and Uzaki (2014) Malaysia	476	2000–2011	Information asymmetry – Underwriter Reputation and Risk Factors	Multiple Linear Regression Analysis and descriptive statistics
31	Mousa <i>et al.</i> (2014) USA	172	2001–2005	Information Asymmetry – Signaling Theory	Regression Analysis and Descriptive Statistics

(continued)

Table 1.

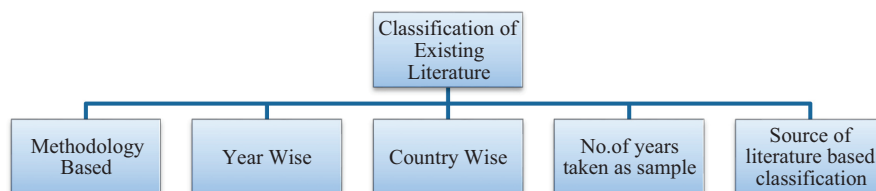
Sr No	Author(s), year and country of the study	Sample size	Time frame (no. of years of study)	Theories/Hypothesis	Methodology and techniques used for analysis
32	Wyatt (2014) Australia	241	1994.5–2000	Voluntary Disclosure	Regression Analysis, Marginal probability analysis and descriptive Statistics
33	Jeribi <i>et al.</i> (2014) Tunisia	33	1994–2012	Signaling Theory	OLS regression analysis and descriptive statistics
34	Fishe <i>et al.</i> (2015) USA	1,391	1998–2005	Textual Information – Comprehensive Sentiment Words Lists	Benjamini FDR method, Fama–French 48-industry factors and Regression Analysis
35	Bottazzi (2015) Australia		2003–2013	Voluntary disclosure	Textual Analysis, Regression Analysis
36	Ding (2016), Australia	1,661	1996–2007	Qualitative Information disclosure	Textual analysis, word vectors, regression analysis and descriptive statistics
37	Komenkul <i>et al.</i> (2016) Thailand	245	2001–2012 (12 Years)	Ex-Ante Uncertainty and Signaling Hypotheses	Regression Analysis and descriptive statistics
38	Brau <i>et al.</i> (2016) USA	2,298	1996–2008	Soft Strategic information	5-point Likert response scale, regression analysis and descriptive statistics
39	Hope <i>et al.</i> (2016) USA	627	2006–2011	Symmetric Information – Specific Risk Factor Disclosures	NER technique, Fama–French 17 industry classification, regression analysis
40	Filzen <i>et al.</i> (2016) USA	52,955	2006–2014	Information Asymmetry – Risk Factor Information Disclosure	descriptive statistics Go Programming Language, Fama–French 17 industry classification, OLS regression,
41	Torbira and Oki (2017) UK	341	2003–2007 2009–2013	Underpricing determinants	descriptive statistics Multivariate regression analysis. econometric tests
42	Rasidah <i>et al.</i> (2017), Malaysia	374	2000–2014	Information Asymmetry – Signaling Theory	Regression analysis and descriptive statistics
43	Gumanti <i>et al.</i> (2017), Indonesia	290	1989–2005 (17 Years)	Symmetric Information	Regression analysis and descriptive statistics
44	Crain <i>et al.</i> (2017) USA	2,336	1996–2013	Information Asymmetry, Book-building	Fama–French, multiple regression analysis and descriptive statistics
45	Gaulin (2017) USA	51,249 firm years	2005–2015	Disclosure of risk factor Information, litigation risk avoidance	Ratcliff and Metzener Gestalt Pattern Match algorithm, Latent Dirichlet allocation technique, Regression analysis
46	Jain and Vasudeva (2018) India	249	2011–2016	Symmetric Information	Regression analysis and descriptive statistics

Table 1.

(continued)

Table 1.

Sr No	Author(s), year and country of the study	Sample size	Time frame (no. of years of study)	Theories/Hypothesis	Methodology and techniques used for analysis
47	Falconieri and Tastan (2018) UK	312	2004–2012	Symmetric Information – information content	Content analysis Regression analysis
48	Wasiuzzamn <i>et al.</i> (2018) Malaysia	96	2009–2013	<i>ex ante</i> Uncertainty	Multiple regression equations and descriptive statistics and tests
49	Hussein <i>et al.</i> (2019) China	355	2009–2012	Symmetric Information – information content	GARCH-M model with an ARMA (1,1) Process and Regression Analysis
50	McGuinness (2019) Hong Kong	269	2005–2009	Symmetric Information – Voluntary Disclosure	Two-Stage Least Squares analysis and Descriptive Statistics

Figure 1.
Classification of existing literature

Statistical tool	Papers
Regression	40
Content Analysis	6
Logistic Regression	1
Durbin–Watson test	2
Fama–Fench Industrial classification	1
ANOVA	1
GARCH model	1
Source(s): Author's compilation	

Table 2.
Frequency of statistical tools used in studies

The existing literature exhibits the pattern of publishing literature of IPO underpricing that has been considered in the current research. During the early 2000s, the researchers did not turn up their heads toward this research area. In the year 2016 and 2017 an upsurge in the research studies was witnessed when most researchers tried to explore the IPO performance and IPO Risk disclosures.

3.3 Country-wise distribution of studies

The country-wise distribution of research studies selected for sample of present paper is shown in Table 4.

The statistics depicted in Table 2 indicates that countries from where the studies were conducted. The statistics indicate that studies are from United States, three studies are conducted each from Hong-Kong, Malaysia and Australia. Two each are selected from China,

Table 3.
Year- wise
classification of studies

Year	No. of studies
2000	1
2001	1
2002	1
2003	1
2004	3
2005	1
2006	2
2007	4
2008	4
2009	2
2010	3
2011	3
2012	2
2013	2
2014	4
2015	2
2016	5
2017	5
2018	3
2019	2
Total	50

Source(s): Author's compilation from sample studies**Table 4.**
Country-wise
classification of studies

S. No	Country	No. of studies
1	USA	24
2	Canada	01
3	France	02
4	Australia	03
5	Malaysia	03
6	China	02
7	India	01
8	Hong-Kong	03
9	UK	02
10	The Netherlands	01
11	Belgium	01
12	Bangladesh	01
13	Thailand	01
14	Indonesia	01
15	Italy	01
16	Austria	01
17	Mauritius	01
18	Tunisia	01
	<i>Total</i>	50

France and UK. One study each from Canada, Indonesia, Thailand, Bangladesh, Italy, Netherlands, Austria, Belgium, Tunisia, Mauritius and India are included in the sample.

3.4 Number of sample years taken in the compiled literature

The data shown in [Table 5](#) infers that major segment of previous studies have considered the study duration of 6–10 years. Out of 50, 19 research studies undergo similar time duration

data set; 14 studies fall within time frame of 1–5 years. There are 10 studies which have data set of 11–15 years. Remaining four studies are conducted for 16–20 years data set and three studies lie in 21–25 class interval.

3.5 Source from where the papers are collected

The sources from where the compiled literature is extracted are labeled in [Table 5](#).

After analyzing the statistics presented in [Table 6](#) it is observed that major chunk (80 % of the compiled literature) on the given perspectives are extracted from refereed journals, whereas 14% of the extracted literature is compiled from other several e-sources. The national and international conferences contribute 6% to the total are considered for the present study.

4. Findings

The present study has compiled and examined 50 relevant research papers to the theme. This review paper indicates a significant development over a period of time on revealing the risk factors and their impact on short term performance of IPO. The findings of the present paper are summarized in [Table 7](#).

The above findings show the impact of risk disclosures on IPO underpricing. The results of the previous studies are not conclusive because one section of previous studies ([Wasiuzzamn et al., 2018](#); [Hussein et al., 2019](#); [McGuinness, 2019](#); [Gaulin, 2017](#)) found the positive impact of risk disclosures on IPO underpricing, whereas the other one ([Falconieri and Tastan, 2018](#); [Ding, 2016](#); [Mousa et al., 2014](#); [Campbell et al., 2014](#)) found the negative impact of risk disclosures on IPO performance. This means no clear evidence has been found in the previous studies done over the period of time across various contexts. The inconsistent results also indicate that the risk disclosures in IPO prospectus are not able to predict the future stock price fluctuation. The reasons of inconsistent of results might be different regulation related to stock market across the countries.

5. Conclusion

The present literature-based study has investigated several research papers to examine the extensive literature associated with IPO risk disclosures and IPO performance. The findings of the paper concluded that no significant endeavors have been made in the available research literature to shed a light on the influence of disclosing various risks in IPO prospectus on their performance. It also shows the scarcity of relevant risk categories disclosed to the public through IPO risk disclosures. Lack of consistency is found in the major section of extant literature in terms of results. The findings further implied the availability of mixed responses in previous studies as well. Some studies have found a positive influence of the risk disclosures on IPO performance, whereas others have illustrated the negative aspects

Years	Frequency of studies
1–5	14
6–10	19
11–15	10
16–20	04
21–25	03
Total	50

Source(s): Compiled from various studies

Table 5.
Number of sample
years taken in
compiled literature

Table 6.

Source from where the
compiled literature is
extracted

Sr No	Source of existing compiled literature	Number of papers
1	<i>Journals</i>	
	Applied Financial Economics	01
	Accounting Research Journal	01
	Accounting and Finance	01
	Financial Management	02
	Contemporary Accounting Research	01
	Economics Letters	01
	Frontiers of Entrepreneurship Research	01
	Global Business and Management Research: An International Journal	01
	Investment Management and Financial Innovations	01
	International Journal of Economics and Finance	01
	International Financial Markets, Institution and Money	01
	International Review of Finance	01
	Journal of Accounting Research	01
	Journal of Business Finance and Accounting	01
	Journal of Behavioral Finance	01
	Journal of Banking and Finance	01
	Journal of Economic and Financial Studies	01
	Journal of Islamic Accounting and Business Research	01
	Journal of Management and Organization	01
	Journal of Modern Management and Entrepreneurship	01
	Journal of Financial Regulation and Compliance	01
	Journal of Business Communication	02
	Journal of Financial Economics	01
	Journal of Small Business Management	01
	Journal of Applied Finance and Banking	01
	Review of Accounting and Finance	01
	Research in International Business and Finance	01
	Research Journal of Finance and Accounting	01
	Research Journal of Accounting and Finance	01
	Review of Accounting Studies	02
	Review of Quantitative Finance and Accounting	01
	Verslas: Teorija ir Praktika / Business: Theory and Practice	01
	The Accounting Review	01
	The Financial Review	02
	The European Journal of Finance	01
	The IAFOR Journal of Business and Management	01
	The Journal of Financial Economics	01
2	<i>International Conference Paper</i>	
	4th Annual Conference on Empirical Legal Studies, November 2009	01
	International conference on electronics communications and control, Sept. 2011	01
	2011 AAA FARS conference, 2010, University of Texas	01
3	<i>Others</i>	06
	<i>Total</i>	50

of revealing numerous risk related factors on IPO's short-run performance. The findings showed that the extant literature concentrated their research on developed economies (Falconieri and Tastan, 2018; Crain *et al.*, 2017; Filzen *et al.*, 2016; Hope *et al.*, 2016). The present paper contributes towards examine the existing gap in risk factor disclosures in the red herring prospectus for short-run. Furthermore, this may help the scholars and readers to develop the framework on this research theme.

Table 7.
Summary of findings

Authors	Disclosure of risk factors / Risk proxies	Impact on underpricing in short run
Lowry and Shu (2002)	Litigation risk	Positive
Bhabra and Pettway (2003)	Prospectus Information	Positive
Abdou and Dicle (2007)	Risk factors mentioned in prospectus	Some risk factor Positive
Leone <i>et al.</i> (2007)	Specific use of proceeds/Vague disclosure	Negative/Positive
Shi <i>et al.</i> (2007)	Disclosure regulations	Negative
Nam <i>et al.</i> (2008)	Information disclosures	Positive
Hanley and Hoberg (2008)	Detailed Risk Factor Section	Positive
Chahine and Filatotchev (2008)	Strategic disclosure	Positive
Spindler (2009)	More negative information in risk factors	Negative
Arnold <i>et al.</i> (2010)	Soft information on risk	Positive
Bartov (2011)	Negative earnings information	Negative
Campbell <i>et al.</i> (2014)	Risk Factors	Negative
Bakar and Uzaki (2014)	Risk factors	Positive
Mousa <i>et al.</i> (2014)	Legal liability and market risks	Negative
Wyatt (2014)	Use of proceeds for growth investment	Positive
Ding (2016)	Informative risk disclosure	Negative
Komenkul <i>et al.</i> (2016)	Transparent intended use of-proceeds	Positive
Brau <i>et al.</i> (2016)	Strategic tone of disclosure	Positive
Hope <i>et al.</i> (2016)	Higher degree of specificity Information	Positive
Gumanti <i>et al.</i> (2017)	Risk factors disclosure	Positive
Gaulin (2017)	Prospectus information	Positive
Jain and Vasudeva (2018)	Risk factors	No impact
Falconieri and Tastan (2018)	More information in IPO prospectus	Negative
Wasiuzzamm <i>et al.</i> (2018)	Risk factors	Positive
Hussein <i>et al.</i> (2019)	Litigation risks	Positive
McGuinness (2019)	Use of proceeds for investment	Positive

6. Implications

IPO prospectus is an vital tool for the communication between companies and potential investors. The study reveals that the risk disclosures act as catalysts in developing requisite due diligence that are further required for making investment decisions by investors. Policymakers must emphasize on the expediency of risk disclosures through inculcating strict regulations. Policymakers may introduce incentives or enhance grading of companies that bring more transparency, readability, reducing uncertainty and less complexity across various categories of risk. The policymakers may establish homogeneous global standards for risk disclosures in IPO prospectus followed by all listed companies across countries. It can also help the global investors in developing their international portfolio for diversified investment.

7. Directions for future scope

The present study has focused on the “what” types of risk categories are disclosed. The future research should be emphasized on “how” these risk categories should be disclosed? The further studies may focus on the narrative form about the nature and extent of contents used in risk disclosures. Besides, the scholars may introduce the various industry segments into their research and consider the industry-wise effect on IPO performance of risk disclosures in IPO prospectus. The future researchers may also use the information displayed in company

official websites, sustainability reports and integrated reports along with the annual reports to expand the information horizon for risk disclosures.

References

- Abdou, K. and Dicle, M.F. (2007), "Do risk factors matter in the IPO valuation?", *Journal of Financial Regulation and Compliance*, Vol. 15 No. 1, pp. 63-89.
- Agathee, U.S., Sannassee, R.V. and Brooks, C. (2012), "The underpricing of IPOs on the stock exchange of Mauritius", *Research in International Business and Finance*, Vol. 26 No. 2, pp. 281-303, doi: [10.1016/j.ribaf.2012.01.001](https://doi.org/10.1016/j.ribaf.2012.01.001).
- Aggarwal, R.K., Krigman, L. and Womack, K.L. (2002), "Strategic IPO underpricing, information momentum, and lockup expiration selling", *Journal of Financial Economics*, Vol. 66, pp. 105-137, doi: [10.1016/S0304-405X\(02\)00152-6](https://doi.org/10.1016/S0304-405X(02)00152-6).
- Arnold, T., Fische, R.P.H. and North, D. (2010), "The effects of ambiguous information on initial and subsequent IPO returns", *Financial Management*, Vol. 39 No. 4, pp. 1497-1519, doi: [10.1111/j.1755-053X.2010.01120.x](https://doi.org/10.1111/j.1755-053X.2010.01120.x).
- Aussenegg, W. (2006), "Underpricing and the aftermarket performance of initial public offerings: the case of Austria", *Initial Public Offerings (IPO)- An International Prospective Elsevier-Ist Edition Chapter-13*, p. 187213, doi: [10.1016/B978-075067975-6.50016-5](https://doi.org/10.1016/B978-075067975-6.50016-5).
- Bakar, N.B.A. and Uzaki, K. (2014), "The impact of underwriter reputation and risk factors on the degree of initial public offering underpricing: evidence from shariah-compliant companies", *The IAFOR Journal of Business and Management*, Vol. 1 No. 1, pp. 1-16.
- Bartov, E. (2011), "Analysts' use of qualitative earnings information: evidence from the IPO prospectus' risk factors section", available at: <https://www.researchgate.net/publication/228968901>.
- Benveniste, L.M. and Spindt, P.A. (1989), "How investment bankers determine the offer price and allocation of new issues", *Journal of Financial Economics*, Vol. 24 No. 2, pp. 343-361.
- Bhabra, H.S. and Pettway, R.H. (2003), "IPO prospectus information and subsequent performance", *The Financial Review*, Vol. 38 No. 3, pp. 369-397.
- Boon, R. (2014), *Underpricing in the IPO Market*, Master Thesis, Tilburg University, Tilburg University, available at: <http://arno.uvt.nl/show.cgi?fid=135892>.
- Bottazzi, L. (2015), "Underpricing and voluntary disclosure: the case of mining IPOs in Australia", *Journal of Economic and Financial Studies*, Vol. 3 No. 2, pp. 18-29.
- Brau, J.C., Cicon, J. and McQueen, G. (2016), "Soft strategic information and IPO underpricing", *The Journal of Behavioral Finance*, Vol. 17 No. 1, pp. 1-17, doi: [10.1080/15427560.2016.1133619](https://doi.org/10.1080/15427560.2016.1133619).
- Campbell, J.L., Chen, H., Dhaliwal, D.S., Lu, H.M. and Steele, L.B. (2014), "The information content of mandatory risk factor disclosures in corporate filings", *Review of Accounting Studies*, Vol. 19 No. 1, pp. 396-455.
- Cassia, L., Giudici, G., Paleari, S. and Redondi, R. (2004), "IPO underpricing in Italy", *Applied Financial Economics*, Vol. 14 No. 3, pp. 179-194.
- Cazavan, A. and Jeanjean, J.T. (2007), "Levels of voluntary disclosure in IPO prospectuses: an empirical analysis", *Review of Accounting and Finance*, Vol. 6 No. 2, pp. 131-149.
- Chahine, S. and Filatotchev, I. (2008), "The effects of information disclosure and board independence on IPO discount", *Journal of Small Business Management*, Vol. 46 No. 2, pp. 219-241, doi: [10.1111/j.1540-627X.2008.00241.x](https://doi.org/10.1111/j.1540-627X.2008.00241.x).
- Cheng, W.Y., Cheung, Y.L. and Po, K.K. (2004), "A note on the intraday patterns of initial public offerings: evidence from Hong Kong", *Journal of Business Finance and Accounting*, Vol. 31 No. 5, pp. 837-860.
- Crain, N., Parrino, R. and Srinivasan, R. (2017), *Uncertainty, Prospectus Content and the Pricing of Initial Public Offering*, Electronic copy at: pp. 1-35, available at: <https://ssrn.com/3082429>.

- Deumes, R. (2008), "Corporate risk reporting: a content analysis of narrative risk disclosures in prospectuses", *Journal of Business Communication*, Vol. 45 No. 2, pp. 120-157, doi: [10.1177/0021943607313992](https://doi.org/10.1177/0021943607313992).
- Ding, R. (2016), "Disclosure of downside risk and investors' use of qualitative information: evidence from the IPO prospectus's risk factor section", *International Review of Finance*, Vol. 16 No. 1, pp. 73-126.
- Engelen, P.J. and Essen, M. (2010), "Underpricing of IPOs: firm-, issue- and country-specific characteristics", *Journal of Banking and Finance*, Vol. 34 No. 8, pp. 1958-1969, doi: [10.1016/j.jbankfin.2010.01.002](https://doi.org/10.1016/j.jbankfin.2010.01.002).
- Evans, M.D. (1995), "The Determinants of underpricing for initial public offerings of shares in privatised companies", (December, 1995), The University of Adelaide, available at: <https://digital.library.adelaide.edu.au/bitstream/>.
- Falconieri, S. and Tastan, M. (2018), "The role of admission documents on the pricing of UK fixed priced IPOs", *Economics Letters*, Vol. 173 No. C, pp. 44-46, doi: [10.1016/j.econlet.2018.09.007](https://doi.org/10.1016/j.econlet.2018.09.007).
- Filzen, J.J., McBrayer, G.A. and Shannon, K. (2016), "Risk factor disclosures: do managers and markets speak the same language?", *Electronic Copy SSRN Id. 2863414*. doi: [10.2139/ssrn.2863414](https://doi.org/10.2139/ssrn.2863414).
- Fishe, R.P.H., North, D.S. and Smith, A. (2015), *Prospectus Words, Parts of Speech, and Uncertainty in IPO Pricing*, available at: <https://arefiles.ucdavis.edu>.
- Gaulin, M. (2017), *Risk Fact or Fiction: The Information Content of Risk Factor Disclosures*, Doctor of Philosophy Accounting Thesis, Jones Graduate School of Business, Rice University, Houston, Texas.
- Goldstein, M. (2012), "Analysis of IPOs", *Financial Markets and Instruments*, Babson College, Wellesley, Massachusetts, available at: faculty.babson.edu/2012_group_projects.
- Gumanti, T.A., Lestari, A.R. and Mannan, S.S.A. (2017), "Underpricing and number of risk factors of initial public offerings in Indonesia", *Verslas: Teorija ir Praktika/Business: Theory and Practice*, ISSN 1648-0627/eISSN 1822-4202, pp. 178-185, available at: <https://journals.vgtu.lt/BTP/article/download/8170/707>.
- Hanley, K.W. and Hoberg, G. (2008), "Strategic disclosure and the underpricing of initial public offerings", *Journal of Financial Economics*, Vol. 103 No. 2, pp. 235-254, doi: [10.1016/j.jfineco.2011.09.006](https://doi.org/10.1016/j.jfineco.2011.09.006).
- Hawaladar, I.T., Kumar, N. and Thathaiah, M. (2018), "Pricing and performance of IPOs: evidence from Indian stock market", *Cogent Economics and Finance*, Vol. 6 No. 1420350, pp. 1-20.
- Hope, O.K., Hu, D. and Lu, H. (2016), "The benefits of specific risk-factor disclosures", *Review of Accounting Studies*, Vol. 21 No. 4, pp. 1005-1045, doi: [10.1007/s11142-016-9371-1](https://doi.org/10.1007/s11142-016-9371-1).
- Huang, F., Li, Y., Li, Y. and Wang, W. (2011), "Initial public offering underpricing-analysis from a risk disclosure perspective", *International Conference on Electronics Communications and Control*, Sept. 2011, pp. 3214-3217.
- Hussein, M., Zhou, Z. and Deng, Q. (2019), "Does risk disclosure in prospectus matter in ChiNext IPOs' initial underpricing?", *Review of Quantitative Finance and Accounting*, Springer, Vol. 54 No. 3, pp. 957-979, doi: [10.1007/s11156-019-00812-9](https://doi.org/10.1007/s11156-019-00812-9).
- Ibbotson, R. (1975), "Price performance of common stock new issues", *Journal of Financial Economics*, Vol. 2 No. 3, pp. 235-272.
- Islam, M.A., Ali, R. and Ahmad, Z. (2010), "An empirical investigation into the underpricing of initial public offerings in the Chittagong stock exchange", *International Journal of Economics and Finance*, Vol. 2 No. 4, pp. 36-46, doi: [10.5539/ijef.v2n4p36](https://doi.org/10.5539/ijef.v2n4p36).
- Jain, H.C. and Vasudeva, S. (2018), "Impact of disclosure of risk factors on the short term underpricing of shares", *Journal of Modern Management and Entrepreneurship*, Vol. 8 No. 1, pp. 442-454.
- Jeribi, A., Jeribi, M.M. and Jarboui, A. (2014), "Voluntary and involuntary underpricing in IPOs", *Global Business and Management Research: An International Journal*, Vol. 6 No. 2, pp. 122-138.

- Komenkul, K., Sherif, M. and Xu, B. (2016), "Prospectus disclosure and the stock market performance of initial public offerings (IPOs): the case of Thailand", *Investment Management and Financial Innovations*, Vol. 13 No. 4, pp. 160-179.
- Kothari, S.P., Li, X. and Short, J.E. (2009), "The effect of disclosures by management, analysts, and business press on cost of capital, return volatility, and analyst forecasts: a study using content analysis", *The Accounting Review*, Vol. 84 No. 5, pp. 1639-1670, doi: [10.2308/accr.2009.84.5.1639](https://doi.org/10.2308/accr.2009.84.5.1639).
- Kravet, T. and Muslu, V. (2011), "Textual risk disclosures and investors' risk perceptions", *AAA FARS conference, 2010*, University of Texas.
- Leone, A.J., Steve, R. and Micheal, W. (2007), "Disclosure of intended use of proceeds and underpricing of initial public offerings", *Journal of Accounting Research*, Vol. 45, pp. 111-153.
- Li, M., McInish, T.H. and Wongchoti, U. (2005), "Asymmetric information in the IPO aftermarket", *Financial Review*, Vol. 40 No. 2, pp. 131-153, doi: [10.1111/j.1540-6288.2005.00097.x](https://doi.org/10.1111/j.1540-6288.2005.00097.x).
- Logue, D.E. (1973), "On the pricing of unseasoned equity issues: 1965-1966", *Journal of Financial and Quantitative Analysis*, Vol. 8 No. 1, pp. 91-103.
- Loughran, T. and McDonald, B. (2013), "IPO first-day returns, offer price revisions, volatility, and form S-1 language", *Journal of Financial Economics*, Vol. 10 No. 2, pp. 307-326, doi: [10.1016/j.jfineco.2013.02.017](https://doi.org/10.1016/j.jfineco.2013.02.017).
- Loughran, T. and Ritter, J. (2004), "Why has IPO underpricing changed over time?", *Financial Management*, Autumn, pp. 5-35.
- Lowry, M. and Shu, S. (2002), "Litigation risk and IPO underpricing", *Journal of Financial Economics*, Vol. 65, pp. 309-335.
- McGuinness, P.B. (2019), "Risk factor and use of proceeds declarations and their effects on IPO subscription, price 'fixings', liquidity and after-market returns", *The European Journal of Finance*, Vol. 25 No. 12, pp. 1122-1146, doi: [10.1080/1351847X.2019.1572023](https://doi.org/10.1080/1351847X.2019.1572023).
- Mousa, F.T., Bierly, P.E. and Wales, W.J. (2014), "Different strokes: IPO risk factors, investor valuation, and firm survival", *Journal of Management and Organization*, Vol. 20 No. 3, pp. 348-364, doi: [10.1017/jmo.2014.25](https://doi.org/10.1017/jmo.2014.25).
- Nam, D., Arthurs, J.D., Nielsen, M., Mousa, F. and Liu, K. (2008), "Information disclosure and IPO valuation: what kinds of information matter and is more information always better?", *Frontiers of Entrepreneurship Research*, Vol. 28 No. 1, pp. 1-15.
- Rasidah, M., Masih, M., Ruzita, A. and Norliza, C. (2017), "Does prospectus information matter in IPO pricing?", *Journal of Islamic Accounting and Business Research*, Vol. 9 No. 4, pp. 514-530, doi: [10.1108/JIABR-10-2017-0146](https://doi.org/10.1108/JIABR-10-2017-0146).
- Reilly, F.K. and Hatfield, K. (1969), "Investor experience with new stock issues", *Financial Analysts Journal*, Vol. 25 No. 5, pp. 73-80.
- Ritter, J.R. and Welch, I. (2002), "A review of IPO activity, pricing, and allocations", *The Journal of Finance*, Vol. 57 No. 4, pp. 1795-1828, doi: [10.1111/1540-6261.00478](https://doi.org/10.1111/1540-6261.00478).
- Semenenko, I. (2012), "Listing standards and IPO performance: is more regulation better?", *Journal of Applied Finance and Banking*, Vol. 2 No. 4, pp. 209-248.
- Shi, C., Pukthuanthong, K. and Walker, T. (2007), "Does disclosure regulation work? Evidence from international IPO markets", *Contemporary Accounting Research*, Vol. 30 No. 1, pp. 1-57.
- Spindler, J.C. (2009), "IPO underpricing and disclosure", *4th Annual Conference on Empirical Legal Studies*, pp. 1-32.
- Torbira, L.L. and Oki, J. (2017), "Determinants of initial public offer underpricing in the United Kingdom : pre and post financial crisis evidence", *Research Journal of Finance and Accounting*, Vol. 8 No. 17, pp. 31-59.
- Ule, G.M. (1937), "Price movements of newly listed common stocks", *The Journal of Business of the University of Chicago*, Vol. 10 No. 4, pp. 346-369.

-
- Wasiuzzaman, S., Yong, F.L.K., Sundarasan, S.S.D. and Othman, N.S. (2018), "Impact of disclosure of risk factors on the initial returns of initial public offerings (IPOs)", *Accounting Research Journal*, Vol. 31 No. 1, pp. 46-62.
- Welch, I. (1992), "Sequential sales, learning, and cascades", *The Journal of Finance*, Vol. 47 No. 2, pp. 695-732.
- Wyatt, A. (2014), "Is there useful information in the 'use of proceeds' disclosures in IPO prospectuses?", *Accounting and Finance*, Vol. 54, pp. 625-667.

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