

การศึกษาข้อมูลเชิงคุณภาพของข้อมูลทางการบัญชีและไม่ใช่ทางการบัญชี ที่เกี่ยวข้องกับการระดมทุนสาธารณะเพื่อตราสารทุนของไทย

A QUALITATIVE-EXAMINATION OF ACCOUNTING AND NON-ACCOUNTING INFORMATION RELEVANT TO THAI EQUITY-BASED CROWDFUNDING

อรัญญา นาคหล่อ¹ กัญนิภาร์ชี นิริโรจน์ธนท¹ และ อุทัย ตันละมัย¹

¹คณะพาณิชยศาสตร์และการบัญชี จุฬาลงกรณ์มหาวิทยาลัย

Aranya Narklor¹ Kanibhatti Nitirojntanad¹ and Uthai Tanlamai¹

¹Chulalongkorn Business School, Chulalongkorn University

(Received: August 10, 2020; Revised: November 9, 2020; Accepted: November 16, 2020)

บทคัดย่อ

การระดมทุนสาธารณะเพื่อตราสารทุนหรือการระดมทุนแบบคร่าวด์ฟันดิ้งเป็นแหล่งทุนรูปแบบใหม่สำหรับสตาร์ทอัพและธุรกิจขนาดกลางและขนาดย่อมของไทย อย่างไรก็ตามในรอบ 3 ปี ที่ผ่านมา ประเทศไทยมีการระดมทุนในลักษณะนี้สำเร็จเพียงบริษัทเดียวเท่านั้น ในขณะที่ในประเทศต่างๆ ประสบความสำเร็จในการระดมทุนสาธารณะเพื่อตราสารทุนเป็นอย่างมาก งานวิจัยนี้มุ่งศึกษาการใช้ข้อมูลทางการบัญชีและไม่ใช่ทางการบัญชีในบริบทของประเทศไทย ในมุมมองของผู้มีส่วนเกี่ยวข้องจำนวน 4 กลุ่ม โดยเก็บข้อมูลจากการสัมภาษณ์เชิงลึกผู้มีส่วนร่วมในการระดมทุน จำนวน 23 คน ซึ่งประกอบด้วย นักลงทุน 15 คน ผู้บริหารของบริษัทผู้แสวงหาเงินทุน 4 คน ผู้ให้บริการแพลตฟอร์มคร่าวด์ฟันดิ้ง 3 คน และผู้แทนหน่วยกำกับดูแลระบบคร่าวด์ฟันดิ้ง 1 คน ผลการวิจัยพบว่าผู้เข้าร่วมการวิจัยส่วนใหญ่ให้ความสำคัญกับข้อมูลทางการบัญชีในเรื่องของผลตอบแทนทางการเงินที่คาดหวัง ประมาณการทางการเงิน งบการเงิน และอัตราส่วนทางการเงิน โดยข้อมูลที่ไม่ใช่ทางการบัญชีที่เกี่ยวเนื่องกับบริษัทผู้แสวงหาเงินทุนประกอบด้วย ทีมบริหารและพนักงาน ศักยภาพทางการตลาด ลักษณะผลิตภัณฑ์หรือบริการ รูปแบบธุรกิจ การสื่อสาร จำนวนเงินระดมทุน และเครือข่ายของบริษัทผู้แสวงหาเงินทุน ผลการวิจัยนี้จะเป็นประโยชน์กับผู้ให้บริการแพลตฟอร์มและผู้แทนหน่วยกำกับดูแลระบบคร่าวด์ฟันดิ้ง ในการให้ความสำคัญต่อแนวคิดความไม่เท่าเทียมกันของข้อมูลระหว่างบริษัทผู้แสวงหาเงินทุนและนักลงทุน ทั้งนี้งานวิจัยนี้ได้พัฒนากรอบแนวคิดสำหรับการวิจัยในอนาคต เพื่อศึกษาว่าผู้มีส่วนเกี่ยวข้องในการระดมทุนสาธารณะเพื่อตราสารทุนจะนำข้อมูลทางการบัญชีและไม่ใช่ทางการบัญชีไปใช้อย่างไร โดยมีการเชื่อมโยงมุมมองทางด้านการเงินเชิงพฤติกรรมกับประเด็นดังกล่าว

คำสำคัญ: การระดมทุนสาธารณะเพื่อตราสารทุน, ข้อมูลทางการบัญชีและไม่ใช่ทางการบัญชี, สตาร์ทอัพ, ธุรกิจขนาดกลางและขนาดย่อม, ผู้ให้บริการแพลตฟอร์มคร่าวด์ฟันดิ้ง

ABSTRACT

Equity-based crowdfunding (ECF) is a new funding source for Thai startups and small and medium enterprises (SMEs). However, there has been only one ECF fundraising success story in Thailand during the past three years. Nevertheless, the premise of ECF is warranted by its success in many countries. The present study addresses the use of accounting and non-accounting information by four parties involved in the Thai ECF setting. Twenty-three in-depth interviews were conducted with representatives of the four parties: fifteen investors, four founders, three platform operators, and one crowdfunding regulator. The results show that the majority of participants focused on four types of accounting information: predicted financial returns, financial projections, financial statements, and financial ratios. They also paid a great deal of attention to non-accounting information, including various characteristics of founders or fund-seekers, namely management team and staff, marketing potential, product/service characteristics, business model, communication, amount of capital, and network. The results can help platform operators and regulators to address information asymmetries between founders and investors. Finally, a conceptual framework is developed for future research to examine how different parties use accounting and non-accounting information by incorporating the behavioral finance perspective.

Keywords: Equity-based Crowdfunding, Accounting and Non-accounting Information, Startups, SMEs, Crowdfunding Platform Operators

INTRODUCTION

Startups¹ and small and medium enterprises (SMEs)² drive economic growth, foster economic recovery and innovation, and fulfill business ecosystems. However, a lack of funding at their early- or seeding- stage can result in the failure of startups and SMEs (Paakkarinen, 2016). Traditional banks or financial institutions examine the financial statements of borrowers before giving loans to these startups. Without proper accounting data, it would be challenging for startups and SMEs to access this type of funding source. Consequently, startups and SMEs tend to use their savings. According to the European Startup Monitor (2016), 84.5% came from fund seekers' savings, 29.6% from family and friends, and 26.5% from government subsidies.

Since 2009, crowdfunding has become an alternative source of funds for startups, new entrepreneurs, and small business operators that typically involves the use of internet platforms. There are four crowdfunding models: reward-based, donation-based, lending-based (also known as Peer-to-Peer lending or P2P lending), and equity-based crowdfunding. Despite extensive research on lending-based and reward-based crowdfunding, the drivers of investment decisions in equity-based crowdfunding (ECF) are likely to differ from other crowdfunding models (Ahlers, Cumming, Günther, & Schweizer, 2015; Mollick, 2014). The reason is that investors in the ECF is primarily focused on financial gain as opposed to philanthropic motivation or obtaining new products/ discounts/ special options as in the reward-based model.

Regulators worldwide pay close attention to ECF because of its complexity, the large amount of investment, the high risk, and the impact on the large number of investors. There are many risks associated with ECF, including intellectual copyright issues, market rejection, campaign failure, administrative and accounting problems, regulatory and compliance risks, and fraud (Rechtman & O'Callaghan, 2014; Tomboc, 2013; Valanciene & Jegeleviciute, 2013). Hornuf and Schmitt (2016) asserted that ECF tends to be risky. They studied 303 campaigns from 22 different ECF platforms in Germany, from September 2011 to December 2015 and found 210 (69%) successfully funded campaigns, 54 (18%) failed campaigns, and 39 (13%) with no publicly available information about funding status.

Most academic studies focus on the determinants of successful donation-based and reward-based crowdfunding campaigns, especially from the Kickstarter platform (Koch & Cheng, 2016; Kuppuswamy & Bayus, 2015; Marom, Robb, & Sade,

¹ Startups refer to a group of individuals or small business organizations established with few personnel and resources, but they have ideas and innovations (<http://www.industry.go.th/>).

² SMEs refer to companies with paid up capital in the accounting period not exceeding 5 million baht and revenue from sales of goods and services in the accounting period not exceeding 30 million baht (<http://www.rd.go.th/>).

2016; Mollick, 2014). However, not much research exists to shed light on what information is used by the key parties in the ECF context. None of them has investigated ECF in terms of using accounting and non-accounting information from the perspectives of fund seekers, investors, and platform operators. In the business world, fund seekers tend to overstate the value of their firms, whereas investors cannot observe the firm's actual value. Information asymmetry results in an adverse selection problem between fund seekers and investors in the ECF and might be more severe than that of traditional capital markets because investors may not be able to obtain reliable financial information. The operator of the ECF platform creates opportunities for fund seekers and investors by matching their interests, by serving as a communication medium, and by establishing rules and guidelines to promote good governance for ECF investment. For the Thai ECF environment, on December 30, 2019, “*Company A*” was the first successful online equity-based crowdfunding campaign in Thailand. The company raised a total of THB 18.6 million within 90 days on the SINWATTANA platform and offered dividends equal to half its net profit, or a dividend payout ratio of 50%. There were 77 investors involved in this ECF campaign, including three foreigners and 10-12 local high-net-worth and institutional investors. This not only sheds light on the benefit for startups and SMEs to leverage the Thai ECF fundraising in their pursuit of growth, but also reflects the future of the alternative finance industry.

RESEARCH OBJECTIVE

This study aims to analyze accounting and non-accounting information that is related to ECF investment. The study explores whether and how ECF platform operators can mitigate information asymmetry between fund seekers and investors. This study investigates accounting and non-accounting information that is used by fund seekers to attract investment through an ECF campaign and examines the information which influences ECF investors.

LITERATURE REVIEW

1. Crowdfunding

Although crowdfunding appears to be relatively new in today's raising capital, it has existed for some time. For instance, the pedestal of the Statue of Liberty was funded by Americans through crowdfunding donations where more than 160,000 donors, including young children, businessmen, street cleaners, and politicians, donated money to build the base of the statue (Tomboc, 2013). Research has

revealed four types of crowdfunding: donation-based, reward-based, lending-based (P2P), and equity-based crowdfunding. Hossain and Oparaocha (2017) examined the characteristics of the different types of crowdfunding, for example, motivation and expected return of funders, type of contribution, classification of contract, complexity, and risk appetite.

This study focuses on equity-based crowdfunding (ECF). Investors receive equity in a company in return for their investment. Investors may receive profit sharing or make capital gains. This type of crowdfunding has the potential to promote the seed-stage activity of startups. Popular crowdfunding platforms include CrowdCube from the U.K. and FundersClub from the U.S. With different types of crowdfunding, Mollick (2014) and Ahlers et al. (2015) revealed that the ECF context is different from other crowdfunding contexts. ECF concentrates on sharing future profits or offering returns from a plan. Although many studies have explored the factors affecting crowdfunding success, especially in the context of donation-based and reward-based crowdfunding, only a few studies have revealed the key factors affecting ECF investment decisions. Previous studies concentrated on examining the success factors using secondary data, particularly from the Kickstarter.com platform (Koch & Cheng, 2016; Kuppuswamy & Bayus, 2015; Robertson & Wooster, 2015; Tran, Dontham, Chung, & Lee, 2016). The success factors identified in existing crowdfunding literature, whether for reward-based, donation-based, or lending-based crowdfunding may also apply to ECF. Nonetheless, the use of a qualitative method in the present study should confirm these factors, and at the same time, reveal additional factors that affect investment decisions in ECF campaigns.

2. Fund seeker perceptions

Some researchers found that personal networks, such as families and friends, Facebook friends, and social networks, played an important role in fundraising. They also stated that fund seekers who had extensive social networks were more likely to succeed in fundraising than those who did not (Angerer, Brem, Kraus, & Peter, 2017; Brown, Mawson, Rowe, & Mason, 2018; Courtney, Dutta, & Li, 2017; Koch & Cheng, 2016; Li et al., 2016; Löher, 2017; Lukkarinen, Teich, Wallenius, & Wallenius, 2016; Mollick, 2014; Moritz, Block, & Lutz, 2015; Walthoff-Borm, Schwienbacher, & Vanacker, 2018). Moreover, fund seeker personality, staff education and experience, preparedness and passion may enhance the trustworthiness of projects (Ahlers et al., 2015; Angerer et al., 2017; Cumming, Meoli, & Vismara, 2019; Li et al., 2016; Mamonov & Malaga, 2018; Moritz et al., 2015). Setting an excessive funding goal, an inadequate

funding amount, the lack of a substantial business plan, a long funding period, project delays, and prior project failure may also affect the credibility of fund seekers (Courtney et al., 2017; Forbes & Schaefer, 2017; Koch & Cheng, 2016; Lukkarinen et al., 2016; Mollick, 2014; Signori & Vismara, 2018; Vulkan, Åstebro, & Sierra, 2016). Thus, perceptions of the fund seeker is a key success factor for fundraising.

3. Investor perceptions

Ahlers et al. (2015) and Moritz et al. (2015) revealed that retail investors tended to lack investment experience and had little verified information, a low level of financial sophistication and usually ignored risks. However, communication between investors and fundseekers can decrease the information asymmetries between them. For instance, a face-to-face oral presentation by a fund seeker may create a good first impression for investors. Two-way communication can lead to sympathy, openness, and trustworthiness between the investors and fund seekers (Angerer et al., 2017; Estrin, Gozman, & Khavul, 2018; Moritz et al., 2015). Lukkarinen et al. (2016), also revealed that the availability of financial statements and financial projections is positively associated with the number of investors, but not the amount of fundraising. In addition, financial statement information and forecasts reflect the credibility and capability of a company. Many researchers (Koch and Cheng (2016), Forbes and Schaefer (2017), and Estrin et al. (2018)) asserted that investors would like to see fund seekers present their action plans, project risk detail level, project the risk of failure, and risk section length. These factors appear to play a significant role in investors' decisions.

4. Crowdfunding platform operators

Moritz et al. (2015) and Koch and Cheng (2016) revealed that platform operators have a responsibility to consider and clarify fund seeker information, such as products, market segments, previous financial support, past successful/failed funded projects, and exit strategy. Platform reputation, such as track-record and trustworthiness, is an essential success factor (Cumming et al., 2019; Forbes & Schaefer, 2017; Löher, 2017; Moritz et al., 2015). Gabison (2014) also found that platform operators play a role in preventing fraud or decreasing the likelihood of project failure. These operators have a responsibility to clarify campaign information, design extensive anti-fraud procedures to protect their project investors, and increase the platform's trustworthiness.

In general, an ECF platform that is approved by a regulator would gain trust and reduce the perceived uncertainty of ECF investment. This study explored two ECF platforms that were approved by the Securities and Exchange Commission of Thailand (SEC). The first platform, called the "LIVE", is owned by the Stock Exchange of Thailand (SET). The LIVE platform, approved by SEC on October 24, 2017, is operated by LiveFIN Corp, Ltd., with 99.99% shares held by the SET. The second platform, "SINWATTANA Equity Crowdfunding," is not affiliated to any regulatory bodies. The "SINWATTANA" platform, run by the Phoenixict Co., Ltd., was approved by the SEC on November 8, 2018.

5. Information asymmetry

Adverse selection and moral hazard problems arise from information asymmetries between contracting parties. Adverse selection occurs before entering into a contract. Moral hazard, on the other hand, is a hidden action problem that emerges as the principal cannot observe the agent's actions until after the contract is in place. This study focuses on the adverse selection problem. According to Akerlof (1970), the adverse selection problem, known as the "lemons" problem in the capital market, exists between entrepreneurs and potential investors whereby an entrepreneur has an incentive to overstate the value of their firm, but investors cannot assess the firm's actual value. Wright and Robbie (1996), revealed that when valuing a firm, investors use accounting and non-accounting information to mitigate the adverse selection problem between entrepreneurs and investors. Investors may put effort into due diligence to verify the robustness of accounting information, especially profit and cash flow forecasts.

6. Accounting vs. Non-Accounting Information

This study divides information into two categories - accounting and non-accounting information. Accounting information refers to the type of information that appears in the company's complete or partial financial statements (or financial reports) - statement of financial position, income statement, or cash flow statement (Bruns, 1968). It includes financial forecasts because IASB argues that predictive value is relevant if it helps users of the financial statements in predicting the future trend of businesses.

Non-accounting information refers to information as being qualitative, narrative and future-oriented prose that relates to business data, such as the firm's competitive advantage, marketing plans, and the description of the team, which

affect a decision-making standpoint (Bruns, 1968; Kirsch, Goldfarb, & Gera, 2009). Therefore, any other information that is not related to business data, such as entrepreneurs' facial trustworthiness, is not included in this study.

According to Kirsch et al. (2009) a business plan, in general, consists of eight components: (1) an explanation of the product/process, (2) a description of the target market/industry analysis, (3) the value proposition, (4) the firm's competitive advantage(s), (5) the business stage, (6) a description of the team, (7) the marketing plan, and (8) financial and revenue models (projecting revenue estimates). Therefore, component (8), the financial and revenue models (projecting revenue estimates), represents accounting information in this study while the other components (1) – (7) are regarded as non-accounting information.

To conclude, even though the literature offers many crowdfunding success factors, prior research has seldom studied the perspectives of participants in ECF simultaneously. Very little in-depth knowledge is available about how the three main groups of participants, namely fund seekers, investors, and ECF platform operators, provide and use accounting and non-accounting information in the ECF context. This study aims to fill this gap in the ECF literature by identifying how accounting information is employed in investor decision making on ECF investment. The study also hopes to provide empirical evidence to demonstrate that ECF is a valuable fundraising mechanism for startups and SMEs whose longevity would, in turn, help to boost employment and GDP, and enhance economic solvency in Thailand.

RESEARCH METHODOLOGY

1. Participants

This study conducted a total of 23 interviews covering four main groups of participants, of whom 15 were male and 8 were female with an average age of 42 years old. Investors included 15 potential investors who had investment experience with an average of 16 years in SET, startups, or SMEs. The four fund seekers were three CEOs/MDs of firms that are involved with the LIVE platform, and the CEO of the firm involved with the SINWATTANA platform. The three participants from the two ECF platforms included a director of the LIVE platform, an assistant director of the LIVE platform, and the CEO/Founder of the SINWATTANA platform. The representative of the ECF regulator group was a senior officer from the FinTech Department of the Securities and Exchange Commission (SEC). Table 1 summarizes the characteristics of the interviewees.

2. Research tools

This study used interview guidelines, one-on-one semi-structured interviews, and a snowballing technique to gather data from multiple sources, and content as well as thematic analysis was employed to analyze the qualitative data systematically (Kvale & Brinkmann, 2009).

3. Data collection

Qualitative data is (a source of) information that can be analyzed (by employing a well-grounded method) to yield detailed descriptions and explanations of behaviors and attitudes. The data were collected from 23 interviewees between September and December 2019. Each interview session lasted between 50 and 80 minutes, and the total transcription duration was 200 hours.

Table 1 Characteristics of interviewee

Type	Business	Education	Profession	Gender	Age (average)	Investment experience (average years)	Length of the interview (average minutes)
Investor	Business consulting Business investment Incubator Technology	Bachelor degree(5) Master degree (9) Ph.D. degree (1)	CEO	Male(2)	53	26	75
			Co-Founder	Male(2)	42	14	60
			Director	Male(5) Female(2)	38	14	65
			Angel Investor	Male(3) Female(1)	45	18	75
Fund seeker	Service Retail trade Technology	Bachelor degree(3) MPh.D. degree (1)	CED	Male(1) Female(1)	43	-	50
			Director	Male(1) Female(1)	44	-	80
Platform	ECF platform operator	Master degree (2) Certificate (1)	Director	Male(1) Female(2)	44	-	60
Regulator	ECF regulator	Master degree	Senior Officer	Female	40	-	60

4. Data analysis

Based on qualitative research design theory, this study developed a conceptual framework (summarized in two propositions) addressing key-accounting and non-accounting information, investor behavior, and the relationships with ECF investment decisions. Data from each interview was transcribed verbatim and included all the utterances of the speakers and non-verbal sounds. The data was then coded line-by-line and phase-by-phase to assess individual interview implications. The

initial list of codes was based on researcher knowledge by using the NVivo software version 12, a software program that supports qualitative research. A third-party consultant reviewed the codes with the original transcriptions. To check the credibility of the information gathered, two individual investors read and analyzed the same set of transcripts. Table 2 presents the information from the interviewees by category. From coding and categorization to abstraction, this study developed a "theoretical framework - the core of the emerging theory" (Glaser & Strauss, 1967). The study also formulated two propositions relating to the role of accounting and non-accounting information, investor behavior, and the decision making of retail investors in the ECF environment.

Table 2 Categories of information

Type Information	Investor 1	Investor 2	Investor 3	Investor 4	Investor 5	Investor 6	Investor 7	Investor 8	Investor 9	Investor 10	Investor 11	Investor 12	Investor 13	Investor 14	Investor 15	Fund seeker 1	Fund seeker 2	Fund seeker 3	Fund seeker 4	Platform 1	Platform 2	Platform 3	Regulator 1
Accounting																							
Financial statements	●	●			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Financial projection	●	●			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Expected financial returns			●	●		●				●			●		●								
Financial ratio						●	●			●													
Non-Accounting																							
Fund seeker characteristic		●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
Product/Service characteristic			●		●			●			●			●		●	●	●	●		●	●	●
Business model	●			●	●	●	●			●	●	●	●							●			
Teamwork				●	●	●	●			●	●	●	●						●		●	●	
Communications				●										●				●	●	●			
Market potential			●	●	●															●	●		
Networks											●									●	●		

RESEARCH FINDINGS

1. Accounting information

Accounting information is essential for investment decision making. Four categories of accounting information are shown in Table 3: (1) financial statements, (2) financial projection, (3) expected financial returns, and (4) financial ratios. Lukkarinen et al. (2016) revealed that the availability of financial statements and financial projection is positively associated with the number of investors. Financial statement information and forecasts also signal credibility and capability for companies. Some studies showed that high funding goals were negatively associated with funding success (Cumming & Johan, 2013; Mollick, 2014).

Table 3 Types of accounting information

Type	Quote
Financial statements	<p>If you are an SME and you want to raise fund, your financial statement needs to be reliable or efficiency certified. Or at least, the firm must be potentially profitbale. There must be some net profits. (<i>investor 5</i>)</p> <p>We need to look at the statement of financial position first. It's the stability of the firm. What is their liability? How much stakeholder percentage is? What is the book-price? It's like a medical checkup before the decision. Is this firm sick? If it is sick, we'll screen it out. We won't get involved in its business. (<i>investor 8</i>)</p> <p>Is your financial statement ready to be presented? Are you ready to show everything to the public? (<i>Founder 4</i>)</p>
Financial projection	<p>Forecast needs to be logical. If I ask how you came up with this figure, the firm must be able to explain it. Logic is crucial. If you want me to invest, you need to tell me how much I will earn after I pay this amount of money. What is my profit from this investment? (<i>Investor 7</i>)</p> <p>I'll take a look at the financial projection of the founder as a baseline. Then I'll calculate how much I will invest and earn in the future. I'll customize the scenario by myself. (<i>Investor 11</i>)</p> <p>Yes, I have to prepare the auditing financial statement from the previous year. Of course, because we raise a fixed amount of money for the certail number of share so I have to do financial forecasts. (<i>Founder 2</i>)</p>
Expected financial returns	<p>We expect that investments in startups offer 30 times benefits in 4-8 years. (<i>Investor 6</i>)</p> <p>Expected income is a priority for sure, but nobody knows if it's just selling dreams. We can just wait and see. (<i>Investor 8</i>)</p> <p>I just want my business to grow 12%-15% annually until that day. That's good enough. (<i>Investor 14</i>)</p>
Financial ratios	<p>I'll take a look at the P.E. (Price to Earnings Ratio) which will tell you how healthy is your business? (<i>Investor 8</i>)</p> <p>Normally we realize that startup's liquidity ratio is not very good, but we can see if is reasonable. (<i>Investor 9</i>)</p> <p>I believe it depends on the industry. We'll consider ROE and ROI. (<i>Investor 12</i>)</p>

2. Non-Accounting information

The analysis of the transcriptions revealed seven interesting aspects of non-accounting information (Table 4): (1) fund seeker characteristics, (2) product/service, (3) business model, (4) teamwork, (5) communications, (6) market potential, and (7) network.

Table 4 Types of non-accounting information

Information	Quote
Fund seeker characteristics	<p>Fund seekers need to be transparent. You want their money! You want their support! But if you close off, who's gonna give it to you? It's about mentality. And here you are just to take other people's money or you are here to be transparent. Ask for support and have integrity. (<i>Investor 15</i>)</p> <p>Fund seekers must give priority to honesty and trustworthiness. They must respect each other. They also need to ensure that the firm is going to make profits and return the money to the investors at the time specified. (<i>Founder 4</i>)</p>
Product/Service	<p>If the product has potential and prospect of success, no need go after anyone. Investors will jump at your fundraising for sure, but the problem is there is no product, no product modification at all. (<i>Investor 5</i>)</p> <p>I'll consider if the products have prospect of success. How long will it take? Is it rarely produced in Thailand? (<i>Founder 1</i>)</p>
Business model	<p>The exit strategy must be clear. It may cause a firm less attention. They've already invested in your business. How can they take their money back? Will the value be able to increase? They'll think there is no exit for them or no secondary market. (<i>Investor 7</i>)</p> <p>Business model is to find a new perspective for developing a business that makes the world a better place. Your product can solve customers' pain points. (<i>Investor 13</i>)</p>
Teamwork	<p>Staff is a factor for decision-making. I always try to visit their offices to meet their staff. (<i>Investor 14</i>)</p> <p>Every single staff member must be in the same team with us. They need to know what our firm is doing; for example, if we are fundraising, they all have to help with the P.R. as well for the whole team can achieve our goals together. (<i>Founder 4</i>)</p>
Communications	<p>You need a communication channel to introduce yourself to investors as they will know what you are doing and they need to feel that what the purpose of your fundraising is. (<i>Investor 5</i>)</p>
Market potential	<p>We'll take a look at the members. Then we'll see the growth of the pattern since we can compare the market sizes. (<i>Investor 5</i>)</p> <p>We look at the market size and then look at defensibility. (<i>Investor 6</i>)</p>
Network	<p>We need to build networks from family, friends, and acquaintances. Persuade them to join our network. Make them trust us and ensure that their money won't disappear. Then the fundraising will be successful. (<i>Founder 4</i>)</p>

3. Development of conceptual framework (initial)

In summary, the data illustrate that although individually, accounting and non-accounting information is important to stakeholders in the ECF, mixed information types (both accounting and non-accounting) have more impact on the decisions of retail investors. Based on the qualitative findings of the present study, an initial conceptual framework is shown in Figure 1. This study, therefore, proposes the following:

P1. The use of different types of information, accounting, non-accounting, and mixed, will affect the decisions of retail investors differently in equity-based crowdfunding.

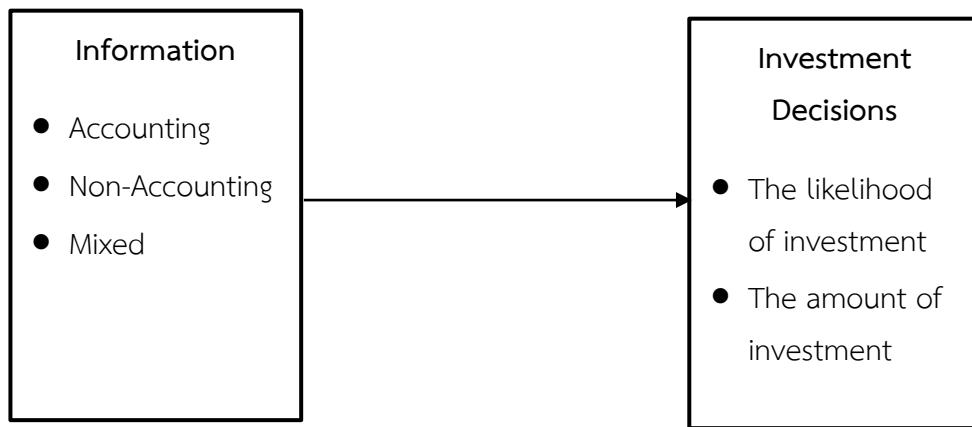


Figure 1 A conceptual framework (initial) for retail investor decision making in equity-based crowdfunding

4. Development of conceptual framework (extended)

Behavioral Investor Type (BIT) examines recognition and emotional factors which influence the limited human rationality. BIT also explains the psychological effects on investment activities, and it can even better illustrate the fact that ordinary investors are not rational, and their decisions are limited. Regarding investment decision making processes, Pompian (2011) revealed that investors rely on forecasts and their knowledge. Therefore, human judgment, behavior, and welfare are essential factors that may yield effects that differ from traditional economic assumptions. Consequently, this study proposes the following:

P2. Investor behavior affects the decisions of retail investors in equity-based crowdfunding.

5. Summary of main results and conceptual framework

In the real business environment, fund seekers tend to overstate the value of their firms whereas investors cannot assess the firm's actual value. This information asymmetry results in an adverse selection problem between fund seekers and investors. In the ECF setting, this phenomenon might be more severe than in traditional capital markets because investors may not be able to obtain reliable financial information. This study found that all participants want the ECF

platform operators to provide investment education to the investor, particularly retail investors. Since ECF is a new funding source, there has been only one success story in the ECF fundraising in Thailand during the past three years.

The key results of this study are that all participants discussed accounting information by focusing on predicted financial returns, financial projections, financial statements, and financial ratios. Notably, most investors believed that all of the financial projections of the ECF campaign were overstated, but they tended to use the information as the basis for making their forecast situations. Regarding non-accounting information, all participants paid attention to the fund seeker's characteristics, the management team and staff, marketing potential, product/service characteristics, business model, communication, amount of capital, and networks.

However, similar to prior studies, the results from the investors' interviews indicated that investors' behavior was not always in line with the criteria of rationality. Some reviews stated that the majority of investors felt that they had sufficient knowledge and experience in investing, particularly male investors with high education and more extensive portfolios, who often considered themselves to be more knowledgeable (Bikas, Jurevičienė, Dubinskas and Novickyté, 2013; Graham, Harvey, & Huang, 2009; Hirshleifer & Hong Teoh, 2003). These investors also felt competent to trade more often and to have a more diversified portfolio. In real-life situations, investors are usually blamed for their irrational decisions and beliefs because they react too emotionally in stressful situations (Hirshleifer & Hong Teoh, 2003). By incorporating the qualitative findings into the present study, a conceptual framework (Figure 2) is proposed for further research on the ECF investment of retail investors.

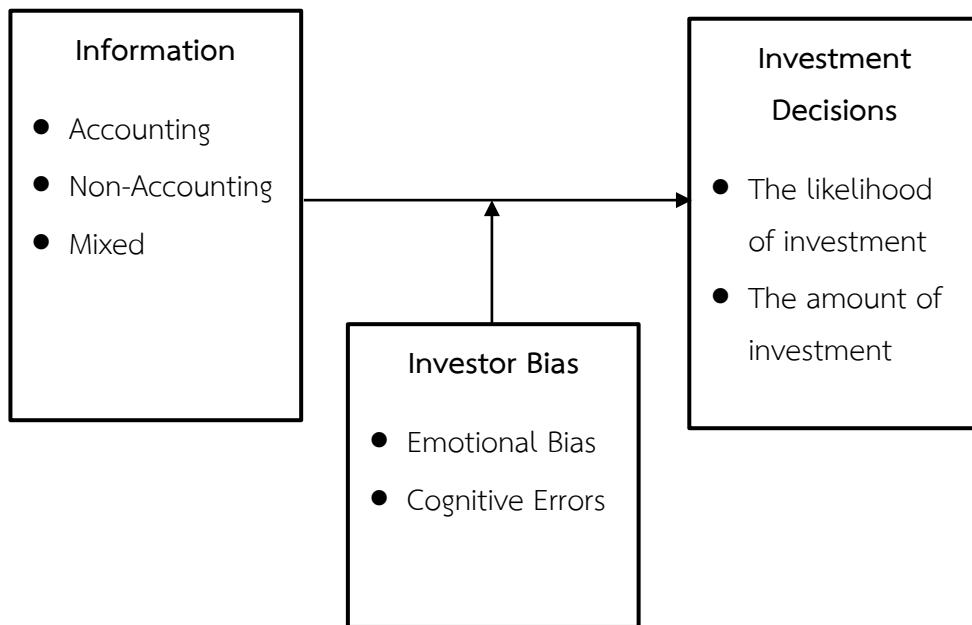


Figure 2 A conceptual framework (extended) for retail investor decision making in equity-based crowdfunding

DISCUSSION

This study investigated accounting and non-accounting information which is used by fund seekers to attract ECF and the information which influences investor decisions on ECF investment were also examined. Despite its practical relevance, most academic studies have focused on the determinants of successful crowdfunding campaigns in donation-based and reward-based crowdfunding but little research has been conducted to shed light on what information is used by key parties in the ECF context. This study filled the research gap by utilizing a qualitative research design based on 23 in-depth interviews with fund seekers, investors, platform operators, and regulators. The study reveals how investors use accounting information and how accounting information provided by fund seekers exhibited the desirable qualitative characteristics for investment decisions.

1. Academic and practitioner contribution

This study can contribute to the existing research in a in four ways. First, the provision of key accounting and non-accounting information can help the platform operators to screen potential ECF campaigns, which would increase the number of successful fundraising campaigns. The findings are also valuable to fund seekers by

identifying the characteristics of accounting and non-accounting information that influence investment decisions.

Second, the findings led to the development of a systematic model of collaborative information to support the decision making of ECF investors. Investors who are interested in startups and SMEs will have guidelines to determine the fund seekers who have excellent business ideas or smart SMEs with new technologies and who are confident and passionate about their products/services. At the same time, entrepreneurs will have the opportunity to pledge their projects for funding with relevant information.

Third, ECF platform operators should focus on the communication of both accounting and non-accounting information to fund seekers and investors. Enterprise information, especially fund seeker characteristics and financial statements, should be in a clear and straightforward format because a fund seeker pays attention to the things that yield success. A simple financial statement format also helps investors to monitor and make financial projections. Retail investors, in particular, need relevant, useful information in an uncomplicated format.

Finally, the findings can reduce the information asymmetries between fund seekers and investors, especially in the adverse selection case. This study provides insight into the use of accounting and non-accounting information that influence investment decision making in the ECF context. The more investment the fund seekers obtain, the greater the ECF fundraising achievement, and the greater the likelihood of longevity for startups and SMEs in Thailand's economic system.

The limitations of this study should also be noted. The findings are limited by the specific ECF fundraising context of this study and may not apply to other countries or other crowdfunding models. This study focused on the Thai equity-based crowdfunding market with regulation by the Securities and Exchange Commission (SEC). Furthermore, this study has not investigated debt-based crowdfunding, which the SEC has proposed as alternative fundraising for startups and SMEs.

2. Future research

Despite these limitations, the researcher believes that various different aspects can be investigated in further study. Firstly, it is important to test the conceptual framework proposed in this study with quantitative or experimental research. Secondly, it is also advised to further research various aspects of behavioral finance since different investors invest differently: some investors are rational; others have biased beliefs that affect their investment decisions. Therefore, assessing the

influence of emotional factors on an investor's rationality in the ECF context would be beneficial. Thirdly, deals with how regulators can strike a balance between giving latitude to the risks absorbed by ECF participants and issuing a stringent directive to the trustworthiness of ECF campaigns. The following questions could also be addressed: What would increase the fundraising success of ECF?; Is debt-based crowdfunding more useful to startups and SMEs in Thailand?; and which types of business are best suited to crowdfunding?

REFERENCES

Ahlers, G. K. C., Cumming, D., Günther, C., & Schweizer, D. (2015). Signaling in Equity Crowdfunding. *Entrepreneurship Theory and Practice*, 39(4), 955-980.

Akerlof, G. (1970). The market for lemons. *Quarterly Journal of Economics*, 84(3), 488-500.

Angerer, M., Brem, A., Kraus, S., & Peter, A. (2017). Start-up funding via equity crowdfunding in Germany—a qualitative analysis of success factors. *The Journal of Entrepreneurial Finance*, 19(1), 1.

Bikas, E., Jurevičienė, D., Dubinskas, P., & Novickyté, L. (2013). Behavioural finance: The emergence and development trends. *Procedia Social and Behavioral Sciences*, 82, 870-876.

Brown, R., Mawson, S., Rowe, A., & Mason, C. (2018). Working the crowd: Improvisational entrepreneurship and equity crowdfunding in nascent entrepreneurial ventures. *International Small Business Journal*, 36(2), 169-193.

Bruns, W. J. (1968). Accounting information and decision-making: some behavioral hypotheses. *The Accounting Review*, 43(3), 469-480.

Courtney, C., Dutta, S., & Li, Y. (2017). Resolving information asymmetry: Signaling, endorsement, and crowdfunding success. *Entrepreneurship Theory and Practice*, 41(2), 265-290.

Cumming, D., & Johan, S. (2013). Demand-driven securities regulation: evidence from crowdfunding. *Venture Capital*, 15(4), 361-379.

Cumming, D., Meoli, M., & Vismara, S. (2019). Investors' choices between cash and voting rights: Evidence from dual-class equity crowdfunding. *Research Policy*, 48(8), 103740.

Estrin, S., Gozman, D., & Khavul, S. (2018). The evolution and adoption of equity crowdfunding: entrepreneur and investor entry into a new market. *Small Business Economics*, 51(2), 425-439.

Forbes, H., & Schaefer, D. (2017). Guidelines for Successful Crowdfunding. **Procedia CIRP**, **60**, 398-403.

Gabison, G. A. (2015). Equity crowdfunding: All regulated but not equal. **DePaul Bus. & Comm. LJ**, **13**(3), 359.

Glaser, B. G., & Strauss, A. L. (1967). **The discovery of grounded theory: strategies for qualitative theory**. New York: Taylor & Francis Group.

Graham, J. R., Harvey, C. R., & Huang, H. (2009). Investor competence, trading frequency, and home bias. **Management Science**, **55**(7), 1094-1106.

Hirshleifer, D., & Hong Teoh, S. (2003). Herd behaviour and cascading in capital markets: A review and synthesis. **European Financial Management**, **9**(1), 25-66.

Hornuf, L., & Schmitt, M. (2016). Success and failure in equity crowdfunding. **CESifo DICE Report**, **14**(2), 16-22.

Hossain, M., & Oparaocha, G. O. (2017). Crowdfunding: Motives, Definitions, Typology and Ethical Challenges. **Entrepreneurship Research Journal**, **7**(2), 20150045.

Kirsch, D., Goldfarb, B., & Gera, A. (2009). Form or substance: the role of business plans in venture capital decision making. **Strategic Management Journal**, **30**(5), 487-515.

Koch, J.-A., & Cheng, Q. (2016). The Role of Qualitative Success Factors in the Analysis of Crowdfunding Success: Evidence from Kickstarter. In **Proceedings of the 20th Pacific Asia Conference on Information Systems (PACIS 2016)**, Taiwan: Chiayi.

Kuppuswamy, V., & Bayus, B. L. (2015). Crowdfunding creative ideas: The dynamics of project backers in Kickstarter. In **Proceedings of the 20th Pacific Asia Conference on Information Systems (PACIS 2016)**, Taiwan: Chiayi.

Kvale, S., & Brinkmann, S. (2009). **InterViews : learning the craft of qualitative research interviewing**. California: SAGE.

Li, X., Tang, Y., Yang, N., Ren, R., Zheng, H., & Zhou, H. (2016). The value of information disclosure and lead investor in equity-based crowdfunding: An exploratory empirical study. **Nankai Business Review International**, **7**(3), 301-321.

Löher, J. (2017). The interaction of equity crowdfunding platforms and ventures: an analysis of the preselection process. **Venture Capital**, **19**, 51-74.

Lukkarinen, A., Teich, J. E., Wallenius, H., & Wallenius, J. (2016). Success drivers of online equity crowdfunding campaigns. **Decision Support Systems**, **87**, 26-38.

Mamonov, S., & Malaga, R. (2018). Success factors in Title III equity crowdfunding in the United States. *Electronic Commerce Research and Applications*, 27, 65-73.

Marom, D., Robb, A., & Sade, O. (2016). *Gender dynamics in crowdfunding (Kickstarter): Evidence on entrepreneurs, investors, deals and taste-based discrimination*. Retrieved January 15, 2020, from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2442954

Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*, 29(1), 1-16.

Moritz, A., Block, J., & Lutz, E. (2015). Investor communication in equity-based crowdfunding: a qualitative-empirical study. *Qualitative Research in Financial Markets*, 7(3), 309-342.

Paakkarinen, P. (2016). *Success factors in reward based and equity based crowdfunding in Finland*. Master of Science in Information and Service Management, Department of Information and Service Economy, School of Business. Aalto University.

Pompian, M. M., (2011). *Behavioral finance and wealth management: how to build investment strategies that account for investor biases*. New Jersey: John Wiley & Sons, Inc.

Rechtman, Y., & O'Callaghan, S. (2014). Understanding the basics of crowdfunding. *The CPA Journal*, 84(11), 30.

Robertson, E., & Wooster, R. B. (2015). *Crowdfunding as a social movement: The determinants of success in Kickstarter campaigns*. Retrieved January 15, 2020, from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2631320

Signori, A., & Vismara, S. (2018). Does success bring success? The post-offering lives of equity-crowdfunded firms. *Journal of Corporate Finance*, 50, 575-591.

Tomboc, G. F. B. (2013). The lemons problem in crowdfunding. *The John Marshall Journal of Information Technology & Privacy Law*, 30:2, 253.

Tran, T., Dontham, M. R., Chung, J., & Lee, K. (2016). *How to succeed in crowdfunding: a long-term study in kickstarter*. Retrieved January 15, 2020, from https://www.researchgate.net/publication/305637974_How_to_Succeed_in_Crowdfunding_a_Long-Term_Study_in_Kickstarter

Valanciene, L., & Jegleviciute, S. (2013). Valuation of crowdfunding: benefits and drawbacks. *Economics and Management*, 18(1), 39-48.

Vulkan, N., Åstebro, T., & Sierra, M. F. (2016). Equity crowdfunding: A new phenomena. **Journal of Business Venturing Insights**, 5, 37-49.

Walhoff-Borm, X., Schwienbacher, A., & Vanacker, T. (2018). Equity crowdfunding: First resort or last resort? **Journal of Business Venturing**, 33(4), 513-533.

Wright, M., & Robbie, K. (1996). Venture capitalists, unquoted equity investment appraisal and the role of accounting information. **Accounting and Business research**, 26(2), 153-168.