

Policy Implications for Small and Medium-Sized Enterprise Exchange: A Study of Market of Alternative Investment (MAI)^{*}

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Abstract

Small and Medium-Sized Enterprises (SMEs) play an important part in Thailand's economy; however, most SMEs have been struggling with financing their business operation and future growth. Undeniably, public funding is an untapped financing option for SMEs. Thus, the SME exchange is a crucial platform for SMEs to access public funding, as the Market for Alternative Investment (MAI), operated under the Stock Exchange of Thailand, is an alternative capital market for SMEs. Although the MAI has been continuously growing, MAI still has a relatively smaller number of listed companies compared to alternative capital markets in other countries. In fact, there are enormous numbers of SMEs in Thailand that have not gained access to public funding and the capital markets as yet. Therefore, a study of the factors that impact SMEs' intention to pursue an initial public offering (IPO) in the MAI would be necessary to increase SME access to public funding. In this study, the determinants that impacted Thai SMEs' intention to pursue an IPO in the MAI were investigated using multiple regression technique. Subsequently, the research findings were discussed and the policy implications for the SME exchange concluded. The implications from this research are expected to be broadly advantageous for the governing body of Thailand's capital market, the Securities and Exchange Commission, and SME firms that seek public funding opportunities.

Keywords: SME, MAI, policy, IPO

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แนวคิดเชิงนโยบายสำหรับตลาดหลักทรัพย์เพื่อวิสาหกิจขนาดกลางและขนาดย่อม (SME): การศึกษา Market for Alternative Investment (MAI)*

กนก กาญจนภู**

บทคัดย่อ

วิสาหกิจขนาดกลางและขนาดย่อม (SME) นั้นมีบทบาทสำคัญกับเศรษฐกิจของประเทศไทย เป็นอย่างมาก อย่างไรก็ตาม ยังมีธุรกิจ SME หลายรายประสบปัญหาในการจัดหาแหล่งเงินทุน เพื่อการสร้างเสริมความเจริญเติบโตของธุรกิจในอนาคต ทั้งนี้ การระดมทุนจากมหาชนหรือตลาดทุน ยังเป็นอีกทางเลือกของการจัดหาแหล่งเงินทุนที่ธุรกิจ SME ยังมิได้เข้าถึงและใช้ประโยชน์มากนัก ดังนั้น ตลาดหลักทรัพย์เพื่อธุรกิจ SME จึงเป็นตลาดทางเลือกที่สำคัญในการเข้าถึงแหล่งเงินทุนสำหรับธุรกิจ SME ทั้งนี้ ในประเทศไทยนั้น ตลาดหลักทรัพย์ Market for Alternative Investment หรือ MAI ได้ถูกตั้งขึ้นเพื่อเป็นตลาดหลักทรัพย์ทางเลือกที่สำคัญสำหรับธุรกิจ SME ในการระดมทุน

แม้ว่า ตลาดหลักทรัพย์ MAI จะมีการเติบโตอย่างต่อเนื่องมาโดยตลอด อย่างไรก็ตาม ตลาดหลักทรัพย์ MAI ยังมีจำนวนบริษัทที่เข้ามาจดทะเบียนในระดับที่ไม่สูงนัก เมื่อเปรียบเทียบกับตลาดทุนในลักษณะเดียวกันนี้ในประเทศไทยอีก นอกจากนั้น ยังมีธุรกิจ SME จำนวนมากในประเทศไทย ที่ยังมีข้อจำกัด ขาดโอกาส และขาดช่องทางในการเข้าถึงแหล่งเงินทุนได้อย่างมีประสิทธิผล

ดังนั้น งานวิจัยฉบับนี้จึงมุ่งเน้นการศึกษาปัจจัยที่ส่งผลต่อความตั้งใจของผู้ประกอบการในการนำบริษัทเข้าจดทะเบียนและนำหุ้นออกขายครั้งแรกในตลาดหลักทรัพย์ MAI ผ่านการประมวลผลโดยหลักสูตรที่การตัดถอยเชิงเส้นพุ่นในขั้นเบื้องต้น และได้อภิปรายผลลัพธ์และข้อค้นพบ ตลอดจนสรุปแนวคิดเชิงนโยบายในขั้นท้ายสุด ซึ่งแนวคิดที่ได้จากการวิจัยฉบับนี้สามารถนำไปใช้เพื่อประโยชน์ในการกำหนดนโยบายเพื่อสนับสนุนให้ธุรกิจ SME มีโอกาสที่ดียิ่งขึ้นเข้าถึงแหล่งเงินทุนมหาชน สำหรับผู้บริหารตลาดหลักทรัพย์และผู้กำกับดูแลตลาดหลักทรัพย์ ตลอดจนสามารถเพิ่มพูนความรู้ ความเข้าใจ เกี่ยวกับแนวคิดการระดมทุนในตลาดหลักทรัพย์ที่สำคัญ สำหรับผู้บริหารธุรกิจ SME เพื่อประโยชน์ในการตัดสินใจที่มีประสิทธิภาพยิ่งขึ้น

คำสำคัญ: วิสาหกิจขนาดกลางและขนาดย่อม ตลาดหลักทรัพย์ เอ็ม เอ ไอ นโยบาย ไอพีโอ

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Introduction

Small and Medium-Sized Enterprise (SME) is essential to the Thailand economy. According to The Organization for Economic Co-operation and Development (OECD), there were approximately 2.9 millions SME firms. Nevertheless, access to funding has been challenging for SMEs although both debt financing and capital market financing are available. For debt financing, SMEs have been facing a high cost of funding as the interest rate has been continually rising. According to OECD (2013), the average interest rate for SMEs has been constantly increasing from 5.94 percent in 2007 to 6.34 percent, 6.66 percent, 7.14 percent, and 8.06 percent in 2008, 2009, 2010, and 2011, respectively. Thus, the interest rate for SMEs has been dramatically increasing by an average of 7.97 percent annually from 2007 to 2011. Moreover, OECD (2013) data shows that the SME collateral as a percentage to total loan was approximately two hundred and thirty percent annually, on average, from 2007 to 2011. From this data it can be concluded that if a SME wished to take out a business loan, they needed to place their assets as a warranty with the value of more than double the loan amount. Both the rising interest rate and enormous collateral requirement are burdens for SMEs to finance for their growth and development. Alternatively, Thai SMEs may obtain public funding through the Stock Exchange of Thailand (SET); however, they would face several challenges including: regulatory limitations, underwriting fees, and ongoing compliance costs. For example, to be listed on SET, SMEs must have THB three hundred million (approximately USD 9.35 million) as a minimum in paid up capital after initial public offering (IPO) and at least one thousand minority shareholders to hold more than twenty to twenty-five percent of shares. The requirements might not be a problem for large firms: but these are significant limitations for SMEs.

Therefore, it is essential to embrace a stock exchange for SMEs. On this aspect, The Market for Alternative Investment (MAI) was established under The Securities Exchange of Thailand Act as a fund-raising platform for SMEs and start-up ventures. The market prerequisites of the MAI are lower than those of the SET. SMEs need have only THB twenty million, (approximately USD 0.63 millions) as a minimum paid-up capital

after IPO with only three hundred minority shareholders who hold twenty percent of shares. Indeed, the MAI can be defined as the SME exchange in Thailand that offers opportunities for SMEs to access public funding with less stringent obligations. As a consequence, the market capitalization of the MAI has been drastically rising since the market origination and greatly increased from USD 692 million in 2008 to USD 10,297 million in the third quarter of 2014, which is approximately 13.86 times greater. Also, the number of listed companies has been continuously increasing.

Nevertheless, the MAI still has great room for development in terms of the number of listed companies. As of the third quarter of 2014, the MAI had only one-hundred and four listed companies; however, there are total 2.9 millions SMEs in Thailand and, of that, 18,387 firms are medium-sized companies (OECD, 2011). Therefore, there are still a number of untapped SMEs that have not yet utilized the MAI platform to gain access to public funding.

Moreover, when comparing the MAI with alternative markets from other countries, the MAI has a comparatively slow growth in terms of the number of listed firms. In relation to this aspect, a number of alternative markets from other countries were selected for comparison (Table 1) and the comparison of alternative markets was illustrated in Figure 1, Figure 2, and Figure 3.

Table 1. MAI and list of selective alternative markets

Country	Alternative Market
Thailand	MAI
UK	Alternative Investment Market (AIM)
USA	NASDAQ
Canada	TSX Venture
Australia	National Stock Exchange of Australia (NSX)
Japan	Market of the High-growth and emerging stocks (MOTHERS)
Singapore	SGX Catalyst
China	SZSE-SME Board SZSE-ChiNext
HK-PRC	Growth Enterprise Market (GEM)
South Korea	KOSDAQ
Switzerland	Berne-Exchange (BX)
South Africa	Alternative Exchange (AltX)

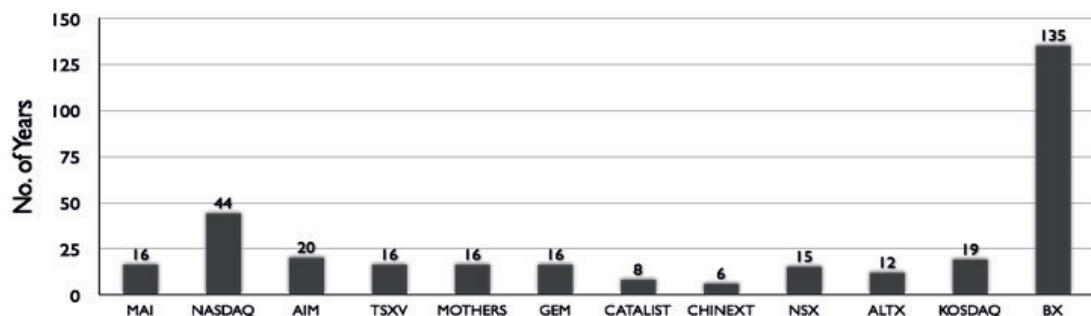


Figure 1. MAI and other similar markets – number of years since inception

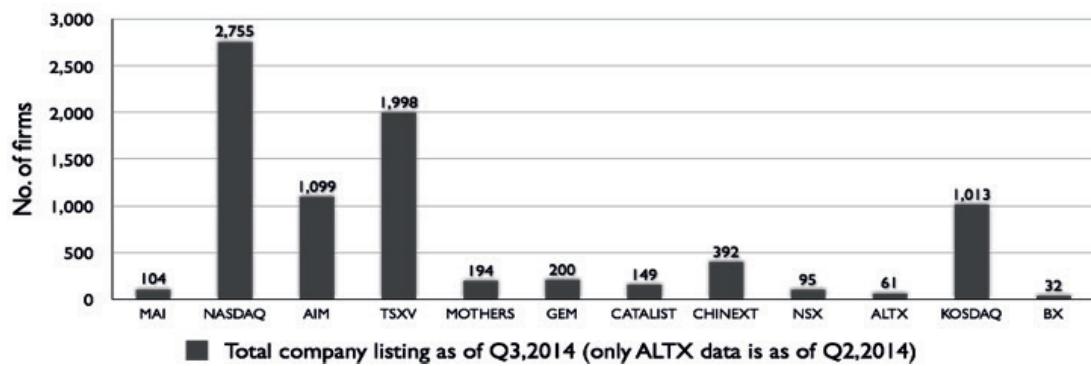


Figure 2. MAI and other similar markets – total listed companies

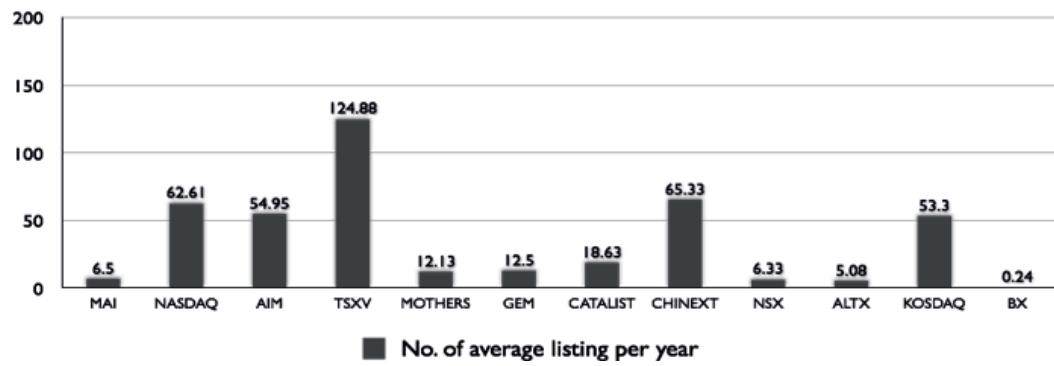


Figure 3. MAI and other similar markets – average listed companies per year

According to Figure 1, the median year of selected alternative markets since the inception was sixteen years: the same as the MAI. However, other alternative markets have a significantly higher number of listed companies, while the MAI is in the bottom third (Figure 2). While the MAI has increased by only 6.5 listed companies per year on average (Figure 3), other markets increased the listing number at a significantly higher annual rate. This data serve a factual benchmark for the MAI for further development.

Therefore, Thai SMEs' access to capital market is a major area that the MAI can improve further upon by increasing opportunities for Thai SMEs to strengthen their financial status and raise funds for future growth.

Research Objectives

This research examines the mindset of Thai SMEs towards the MAI to understand the factors that drive their intention to enter the MAI. The findings were valuable for policy planning to promote SME access to capital markets and increase the number of listing firms. The findings were also analyzed and formed into policy implications for the MAI and the SME exchange. The research objectives were as follows:

1. To examine determinants that impact upon the intention of small and medium-sized enterprises (SMEs) to pursue an initial public offering (IPO) in the MAI.
2. To identify major policy implications for the MAI or the SME exchange based on the research findings and comparative studies.

Literature Review

In order to examine determinants that have an impact upon the intention of SMEs to pursue IPO in the MAI, it is essential to understand why firms choose to go public and why firms choose not to go public. The advantages and the disadvantages of IPO were discussed.

Advantages of IPO

Financing Growth and Development

An IPO can be an effective tool for financing future growth and development. Chorruk and Worthington (2010) found that firms intended to pursue IPOs to gain financing flexibility as well as increase bargaining power over the bank. In fact, the volume of shares offered during IPOs will be higher if firms have a financial liquidity problem and are largely based on debt financing (Huyghebaert & Van Hulle, 2006). Pagano, et al. (1998) highlighted that firms have issued IPOs to restructure and balance sources of funds after high investment and that the public status helps the firms to gain cheaper loans. Fischer (2000) also investigated the Neuer Markt, the capital market for hi-tech business in Germany, to reveal why companies went public and found that high growth and investment firms pursued IPOs to meet capital demand. Additionally, firms go public in order to tap business potential during positive market conditions (Ritter & Welch, 2002). Kim and Weisbach (2008) also studied 16,958 IPOs and 12,373 season-equity offers in thirty-eight countries and found that the firms used capital raised by IPOs mainly for financing growth. This finding was in line with that of De Albornoz and Pope (2004) who stated that firms that cannot generate a sufficient internal cash flow tend to go public to fund large investment projects.

Public Image and Visibility

According to a survey of chief financial officers (CFOs) from twelve European countries, Bancel and Mitoo (2009) found that enhancing visibility and prestige was one of the most important benefits of going public. Likewise, when the firm is undertaking the IPO process, consumers may receive a positive signal about product quality, although the shares have yet to become available and be traded. This phenomenon is likely to happen in a high-tech or innovative industry in which new products are routinely introduced at the same time as IPOs (Stoughton et al., 2001). Furthermore, public listing can be an effective tool to increase visibilities and to signal credibility to suppliers and customers (Röell, 1996). Thus, being a public company may positively enhance public image and reputation amongst stakeholders, which can be useful in terms of social capital in advancing business performance.

Exit Mechanism

An IPO can serve as a mechanism for entrepreneurs and venture capitalists to cash out and exit the ventures. Ritter and Welch (2002) affirmed that the main reason for issuing an IPO of most firms is that the founders and current owners may want to use the public market for selling their shares and receive cash back at any point in the future. Black and Gibson (1998) emphasized the importance of exit by a venture capital fund as well as suggested the model in which predicted that entrepreneurs prefer IPOs as the exit mechanism. For venture capitalists, IPOs were a more profitable exit option than selling the company (Black & Gibson, 1998). Additionally, firms may utilize the capital market system to evaluate their company value. Indeed, the IPO process and the capital market can help facilitate company sale through merger and acquisition and price setting. Hence, the founders and the shareholders do not need to undergo the valuation and negotiation process, which takes time and effort.

Brau and Fawcett (2006) conducted a survey of three hundred and thirty-six CFOs and identified that the key reasons for an IPO was to effectively facilitate the acquisition process. Hsieh et al. (2011) discussed the valuation uncertainty caused by the fact that private firms may not know what their proper valuation is, so it is difficult to make a takeover decision. Hence, a market valuation via an IPO can serve as a tool to reduce valuation uncertainty and indicate the appropriate valuation that includes the firm's potential and the investor's expectation reflected in the stock price. Brau et al. (2003) suggested that firms in a concentrated industry and high-tech industry are likely to conduct an IPO before pursuing merger and acquisition. Zingales (1995) also stated that the advantage of using an IPO for selling a firm was the “[i]nitial owner can use an IPO to extract a portion of the trade surplus, without having to bargain with the buyer over it” (Zingales, 1995: 444). Therefore, a firm's owner who aims at merger and acquisition opportunities may have incentive to pursue an IPO at the prior steps. Pagano (1993) argued that the capital market could help owners to reduce the rate-of-return risk by diversifying the investment; in other words, sharing risks with other investors in the capital market. While firms are still

private, it is impractical for owners to diversify their portfolio by selling equity to diverse groups of outside investors (Chemmanur & Fulghieri, 1999). This will incur huge transaction costs for negotiation, valuation, and contracting. Correspondingly, going public is an essential action at the first step to increase liquidity of the stock itself before diversification.

Organizational Improvement

In contrast to private firms, public firms receive more public attention on their governance and operations. Public firms are subject to regulations and disclosure requirements forcing the management to act professionally. Caccavaio et al. (2012) found that listed firms positively recognized that prerequisite reports and guiding practices could increase managerial effectiveness and efficiency. Furthermore, going public could send a positive signal to employees that firms intended to move toward substantial growth in the future (Röell, 1996; Brav et al., 2009). This results in employees feeling more secure and motivated by increasing opportunities.

Moreover, public firms can design various performance incentives, i.e., stock options to incentivize corporate executives to boost company growth. Holmstrom and Tirole (1993) argued that stock price could serve as an incentive for management so that the market could directly monitor and incentivize management performance. In addition, the stock price also served as an important performance indicator and instrument for monitoring and control. The performance monitoring and assessment from the board of directors could be subjective while the stock price was a clear indicator that reflected quantified performance and might be directly used for rewards and penalties.

Lastly, business succession can be achieved through IPOs. Burkart et al. (2003) presented a model that founders might surrender their stock and control to outside investors in the absence of capable successors. Likewise, Garcia-Perez-de-Lema et al. (2011) stated that the most important reason behind family firm IPOs is to survive in business and pursue growth. Moreover, the public market can also serve as an external control upon management (Holmstrom & Tirole, 1993). Thus, owners can

use it as a monitoring mechanism.

Increasing Wealth

An IPO can be a springboard to increase the firm's value. A firm with high potential that firstly enters the capital market is usually attractive to investors, resulting in a substantial increase in stock price and company value. Past empirical findings demonstrate that IPO stock in the USA during 1980-2001 was 22.6 percent return over three years after the first trading day (Ritter & Welch, 2002) while the similar test demonstrate returns of 34.47 percent and 61.86 percent for the sample of 1,526 U.S. IPO common stocks during 1975-1984 and the controlled sample of 1,526 U.S. IPO common stocks during 1975-1984, respectively (Ritter, 1991). Although these results indicate that these IPO stocks were underperformed in the long term, IPO issuers clearly benefited from this "window of opportunity" (Ritter, 1991). Thus, owners might expect to substantially increase their own wealth by taking advantage of the significant increase of firm value through IPO.

Disadvantages of IPO

Loss of Control

When firms go public, owners have to divert a portion of ownership to public investors. Cressy and Olofsson (1997) documented that loss of control was a major constraint that SMEs did not want to undergo as a result of the flotation process. Hwang (2004) argued that a firm's manager significantly increased their private control even more so than the owners. This is aligned with the fact that family members acted as both owners and managers in family-run SMEs. Hence, in making an IPO decision, there is a trade-off between the private benefit of control and the benefit of portfolio diversification by going public (Benninga et al., 2005)

Loss of Privacy

A public firm might lose its privacy as important information becomes more available to the public and competitors. Yosha (1995) suggested that disclosure of confidential information could be a burden and a disadvantage for entrepreneurial firms as it may cause information leakage to business rivals. Campbell (1979) pointed

out that when firms disclosed strategic information or potential projects publicly to investors or shareholders, it would entice their competitors to take advantage and make use of that information. Caccavaio et al. (2012) also argued that firms are mainly concerned over the loss of privacy resulting from being listed.

Direct and Indirect Costs of IPO

There are numerous processes to undergo when issuing an IPO. Caccavaio et al. (2012) highlighted that firms perceived admission fees and prerequisite listing procedures as a substantial burden for going public. Additionally, the transaction costs incurred during the IPO process such as advisory and underwriting fees for investment bankers were also a significant burden (Ritter, 1987).

Additionally, public firms need to comply with numerous rules and regulations to ensure corporate governance. These expenses are indirect costs. SMEs need to shift attention from the business focus to the corporate requirements and this may result in a reduction in their competitive advantage in comparison to being a small firm with the ability to make quick decisions, take more risks, and have more market accessibility. Mousa and Wales (2012) highlighted that entrepreneurial orientation was positively correlated with the survival of the firm after an IPO. Moreover, to achieve transparency and comply with the regulations, it is considerably costly in terms of financial information processing and expertise is needed to meet the requirements (Di Maggio & Pagano, 2012). Furthermore, firms would prefer to stay private because of stringent corporate governance and regulations (Boot et al., 2006). Chorruk and Worthington (2010) found that reporting requirements is a major obstacle that prevents firms from going public.

Changes in Culture and Management Styles

There are several changes when firms move from private to public. The firm may receive more pressure from outside stakeholders due to higher visibility, more compliance, and intensive auditing by regulators. The fact that SMEs prefer to pursue a more informal management practice is a barrier to going public (Caccavaio et al., 2012). Brav et al. (2009) found that cultural resistance negatively impacted

the IPO decision for old private firms. Bertrand and Schoar (2006) also conducted a study and found that family values could affect the firm's business and operation in a number of ways. Most SMEs are also family businesses. Thus, family culture is very strong so owners may resist change and avoid pursuing an IPO because they are comfortable with existing practices.

IPO Intention and Determinants

Ajzen and Fishbein (1975: 288) defined intention as “a person’s location on a subjective probability dimension involving a relation between himself and some action.” Furthermore, Ajzen (1991) developed the Theory of Planned Behavior (TPB) model to explain how behaviors are derived. According to the theory as illustrated in Figure 4, the key factor that leads to behavior is intention while intention is derived by attitude towards behavior, subjective norm, and perceived behavioral control. Accordingly, intention can lead to and predict an action of an individual.

This model has proved to contain strong predictors of intention. According to Ajzen (1991), the results of sixteen studies were conducted based on the TPB model as a prediction of behavior showed a strong correlation between the three variables (attitude toward the behavior, subjective norm, and perceived behavioral control) and the intention. These previous studies examined intention on different aspects, such as job search, losing weight, election participation, gift giving, and exercising.

When the TPB model was applied to IPO decision, the final action – whether to undergo IPO – will be derived from the IPO Intention of the firm’s owner or decision maker. Ajzen and Fishbein (1975: 288) described behavioral intention as “a person’s subjective probability that he will perform some behavior.” Therefore, IPO intention can be described as the subjective tendency that the firm’s owner will pursue IPO issuance. Hence, the key variables that directly impact the IPO intention according to the TPB model can be classified and applied to the case of IPO decision as follows:

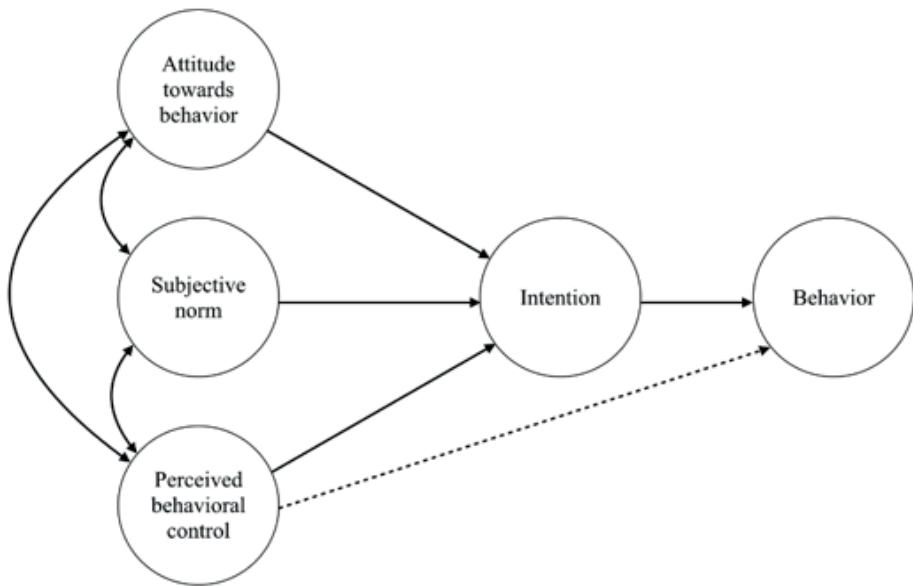


Figure 4. Theory of Planned Behavior (TPB)

Source: Ajzen (1991: 182)

Attitude towards behavior: Ajzen and Fishbein (1975: 216) defined attitude towards behavior as “[a]n attitude represents a person’s general feeling of favorableness or unfavorableness toward some stimulus object.” According to Ajzen and Fishbein (1975: 222-223), the expectancy model suggested that attitude towards behavior is derived from beliefs about the consequence of behavior and evaluation of the consequence whether its outcomes are positive or negative. In short, Ajzen (1991: 197) described attitudes towards behavior as “beliefs concerning consequences of a behavior”. In the case of IPO decision, the attitude towards behavior is the attitude towards IPO, that is, beliefs and considerations about advantages and disadvantages of IPO in different aspects.

Subjective norm: Ajzen (1991) described that subjective norm can be inferred from normative beliefs and an individual’s motivation to comply. As Ajzen (1991: 195) stated, “[n]ormative beliefs are concerned with the likelihood that important referent individuals or groups approve or disapprove of performing a given behavior.”

Thus, in the IPO decision, the subjective norm can be explored through the opinion about the IPO decision of important stakeholders and the tendency that the owner will comply with those opinions.

Perceived behavioral control: Ajzen (1991) mentioned the perceived behavioral control is an important factor that influences intention, since it concerns whether or not the person believed that he or she had resources, opportunities, and capabilities to pursue the action. Accordingly, in the IPO decision, perceived behavioral control can be whether the owners believe that IPO issuance is feasible and whether they have control over their decision.

Conceptual Framework and Hypothesis

According to the TPB model, the attitude towards behavior, the subjective norm, and the perceived behavioral control directly influence the level of intention. Regarding the attitude towards behavior, Ajzen (2002) described that people's intention and decision to perform or not to perform the behavior resulted from attitudinal consideration. Additionally, Ajzen (1991: 197) described the attitude towards behavior as "beliefs concerning consequences of a behavior". Therefore, it can be inferred that the attitude towards IPO is an owner's beliefs or consideration concerning consequences of IPO. This can be either expectation or concern regarding the advantages and disadvantages of IPO.

The literature review reveals that the advantages of IPO can be categorized into five aspects: financing growth, public image and visibility, owner's exit mechanism, organizational improvement, and owner's wealth increase; while the disadvantages can be identified as loss of control and privacy, direct and indirect costs incurred during and after IPO, and changes in culture and management style. Thus, hypotheses concerning attitudes towards IPO can be constructed as shown in Table 2.

Table 2. Summary of Hypotheses on Thai SMEs' IPO Intention Determinants

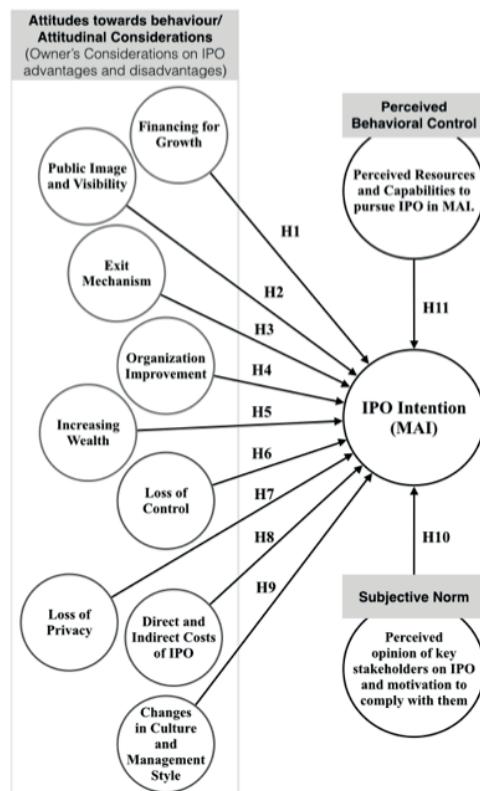
Hypothesis
H1: The owner's expectation to have better financing opportunities for the firm's future growth through IPO has a positive relationship with his or her intention to pursue IPO in the MAI.
H2: The owner's expectation to increase the firm's public image and visibility through IPO has a positive relationship with his or her intention to pursue IPO in the MAI.
H3: The owner's expectation to exit the business through IPO has a positive relationship with his or her intention to pursue IPO in the MAI.
H4: The owner's expectation to improve the organization through IPO has a positive relationship with his or her intention to pursue IPO in the MAI.
H5: The owner's expectation to increase personal wealth through IPO has a positive relationship with his or her intention to pursue IPO in the MAI.
H6: The owner's concern over loss of control after IPO has a negative relationship with his or her intention to pursue IPO in the MAI.
H7: The owner's concern over loss of privacy after IPO has a negative relationship with his or her intention to pursue IPO in the MAI.
H8: The owner's concern over direct and indirect costs during and after IPO has a negative relationship with his or her intention to pursue IPO in MAI.
H9: The owner's concern on changes in culture and management styles after IPO has a negative relationship with his or her intention to pursue IPO in the MAI.

Additionally, Ajzen (1991) proved that subjective norm and perceived behavioral control in the TPB model have a direct link to intention. Subjective norm can be inferred from the owner's perception of key stakeholders' opinions on IPO and his or her tendency to comply with those opinions, while perceived behavioral control can be inferred from the owner's perceived resources and capabilities to pursue IPO. Hence, the hypothesis can be constructed as in Table 3.

Table 3. Summary of Hypotheses on Thai SMEs' IPO Intention Determinants (cont.)

Hypothesis
H10: Subjective norm of IPO decision has a positive relationship with the owner's intention to pursue IPO in the MAI.
H11: Perceived behavioral control of IPO decision has a positive relationship with the owner's intention to pursue IPO in the MAI.

To summarize, IPO intention can be articulated as the owner's intention to take his or her private firm to be listed as public. The focus is on firm's IPO to the MAI. Based on the TPB model, IPO intention will serve as dependent variable while independent variables include attitude towards behavior, which is consideration of IPO advantages and disadvantages, subjective norm, and perceived behavioral control. Questionnaire items will be constructed to measure all variables. The conceptual framework is illustrated in Figure 5.

**Figure 5.** Conceptual Framework

Data Collection, Methodology, and Analysis

Data Collection

The unit of analysis was privately-owned SMEs. As the factors that determined the intention of SMEs to pursue IPOs in the MAI were reflected by attitudes and considerations of firm owners or senior executives, the questionnaires were directly distributed to these decision-makers. SME firms were classified by number of employees, initial paid-up capital, and size of assets. The data of SME firms were collected from the private company database of Department of Business Development (DBD). There were two hundred and forty-one valid sample SME firms. All samples responded to the seventy-three questions six points Likert-type scale questionnaire, developed based on the TPB in accordance with the questionnaire guidelines and examples given by Ajzen (1991; 2002). Primarily, the questionnaire assessed three major aspects that lead to IPO intention. These three aspects include an attitude towards behavior, a subjective norm, and a perceived behavioral control. Finally, IPO intention was also measured.

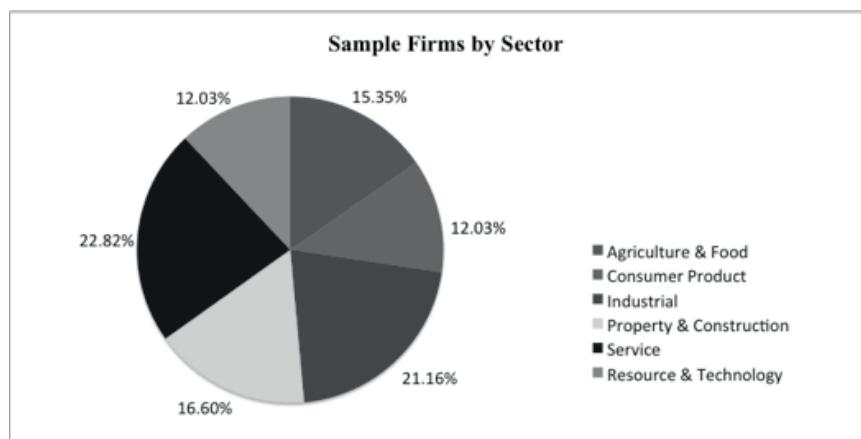
The respondents from all samples held either ownership positions or management and directorial positions. Both are decision-makers and leaders of the firms, who can accurately reflect viewpoints concerning the IPO. As can be seen in Table 4, the majority of the representatives held an ownership status (one hundred and seventy-one respondents); another sixty-one respondents were at the highest managerial rank, such as chief executive officer (CEO), managing director, or president.

Table 4. Summary of Questionnaire Respondents

Respondent Status	Example Title / Position	Frequency
Ownership Status	Owner / Successor / Partner / Shareholder	171
Directorship Status	Chairman / Director / Executive Director	28
Organization Leader Status	CEO / Managing Director / President	61
Management Status	CFO / COO / Executive / Manager	95

Note: Respondents in seventy-eight samples of two hundred and fourty-one samples held more than one title.

The distribution of samples was balanced in several aspects. Regionally, 69.29 percent of samples were located in the Central region including Bangkok, Samut Prakan, Samut Sakorn, Pathumthani, and Nakorn Phathom; while 30.71 percent of the samples were located in other provinces. The proportion between Central and non-Central region of samples was close to that of the total registered private firms (DBD, 2014) which indicated 70.79 percent in the Central region and 19.21 percent in other provinces. The Chi-Square test indicated the p-value of 0.610 (more than 0.05); therefore, the null hypothesis of equality of the two distributions could not be rejected and the proportions between the regions of the two sources are not statistically different. The samples also represented different sectors (Figure 6) and contained multigenerational membership of management in the case of family firms. (Figure 7).

**Figure 6.** Summary of Distribution by Sector

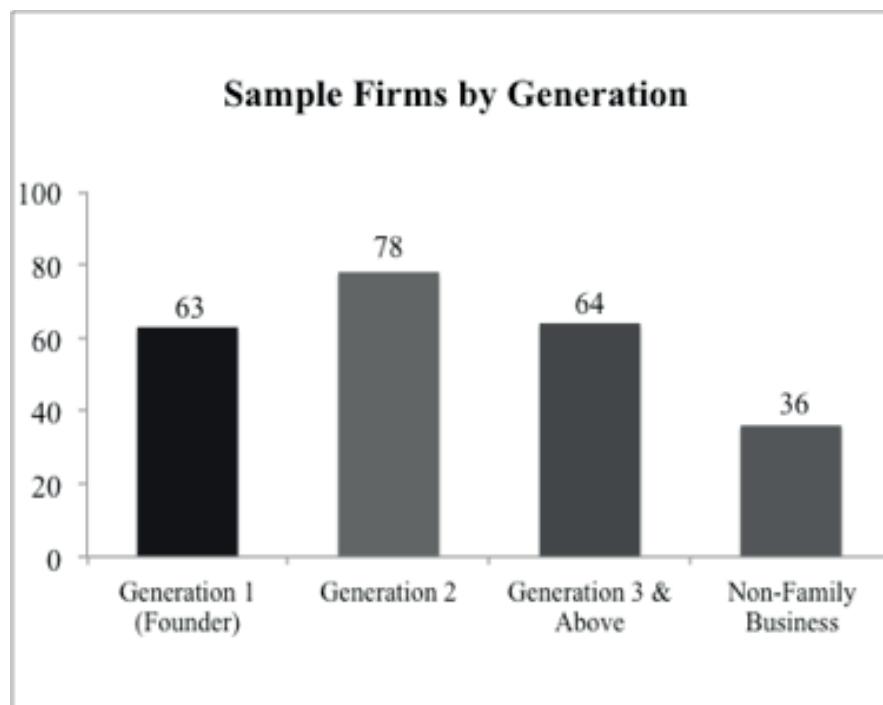


Figure 7. Summary of Distribution by Family Generation

The firm's size was indicated by the number of employees. The numbers of samples with high-employment (hired \geq two hundred people), medium-employment (hired fifty to one hundred and ninety-nine people), and low-employment (hired $<$ fifty people) were eighty-two, eighty-four and seventy-five, respectively. According to Chi-Square test, the p-value was 0.757, so the null hypothesis of equality of the three distributions could not be rejected; therefore, the number of samples in each category was statistically equal.

Methodology

The data were analyzed using multiple linear regressions to identify the determinants and the relationship between the independent variables and the dependent variable. The variables are shown in Table 5.

Table 5. Summary of Variables

Variable	Definition of Variable
FINOPT	Owner's expectation to have better financing opportunities for the firm's future growth through IPO
PUBIMG	Owner's expectation to increase the firm's public image and visibility through IPO
EXIT	Owner's expectation to exit the business through IPO
ORGIMP	Owner's expectation to improve the organization through IPO
WEALT	Owner's expectation to increase the personal wealth through IPO
LCONT	Owner's concern over loss of control after IPO
LPRIV	Owner's concern over loss of privacy after IPO
IPOCOST	Owner's concern over direct and indirect costs during and after IPO
CHANGE	Owner's concern over changes in culture and management style after IPO
SN	Owner's Subjective Norm
PBC	Owner's Perceived Behavioral Control
INTENT	Owner's Intention to pursue IPO.

The multiple regression formula was described as follows:

$$\begin{aligned} \text{INTENT} = & b_1 + b_2 \text{FINOPT} + b_3 \text{PUBIMG} + b_4 \text{EXIT} + b_5 \text{ORGIMP} + b_6 \text{WEALT} \\ & + b_7 \text{LCONT} + b_8 \text{LPRIV} + b_9 \text{IPOCOST} + b_{10} \text{CHANAGE} + b_{11} \text{SN} + \\ & b_{12} \text{PBC} + U \end{aligned}$$

Along with multiple regressions, other statistical methods were executed. Chi-Square test was performed to verify the representativeness of the collected samples. Thereafter, the test of reliability, normality, linearity, homoscedasticity, and multicollinearity were conducted to ensure multiple regression assumptions. Furthermore, One-way ANOVA statistics was deployed to explore if the firm's characteristics had any impacts on IPO intention.

Data Analysis

The multiple regression assumptions (Osborne & Waters, 2002) were tested. The reliability of measurement and variables was satisfactory as Cronbach's alpha values for all variables were more than 0.7. Normality assumption was valid as each Q-Q plot fairly fitted along the regression line. Linearity assumption was adequate as all scatter plots demonstrated the nature of linear relationship between each independent variable and dependent variable. Homoscedasticity test was demonstrated constant variances among error terms. Lastly, no serious Multicollinearity problem was found as variance inflation factor (VIF) for most factors were below three. Only rare cases that the VIF values went beyond three but the maximum VIF value were still 3.116. The final regression model was constructed in five steps. Each of which improved the model fit, as the adjusted R-square increased from 0.680 to 0.740, 0.744, 0.748 and finished at 0.753 (Figure 7).

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.825 ^a	.681	.680	.73114	.681	510.802	1	239	.000
2	.862 ^b	.743	.740	.65846	.061	56.677	1	238	.000
3	.864 ^c	.747	.744	.65421	.004	4.100	1	237	.044
4	.867 ^d	.752	.748	.64846	.005	5.222	1	236	.023
5	.871 ^e	.758	.753	.64224	.006	5.591	1	235	.019

a. Predictors: (Constant), PBC

b. Predictors: (Constant), PBC, SN

c. Predictors: (Constant), PBC, SN, FINOPT

d. Predictors: (Constant), PBC, SN, FINOPT, WEALT

e. Predictors: (Constant), PBC, SN, FINOPT, WEALT, CHANGE

f. Dependent Variable: INTENT

Figure 7. Model Summary and R-Square Changes

Model	Coefficients ^a						
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.051	.190	.268	.789	-.323	.425
	PBC	1.010	.045			.922	1.098
2	(Constant)	.467	.180	2.597	.010	.113	.821
	PBC	.645	.063			.520	.769
	SN	.398	.053			.294	.502
3	(Constant)	.352	.187	1.879	.062	-.017	.721
	PBC	.600	.066			.469	.731
	SN	.389	.053			.285	.493
	FINOPT	.086	.042			.002	.170
4	(Constant)	.455	.191	2.381	.018	.079	.832
	PBC	.603	.066			.474	.733
	SN	.410	.053			.305	.514
	FINOPT	.140	.048			.045	.236
	WEALT	-.102	.045			-.190	-.014
5	(Constant)	.593	.198	2.994	.003	.203	.983
	PBC	.614	.065			.486	.743
	SN	.424	.053			.320	.528
	FINOPT	.158	.048			.063	.254
	WEALT	-.115	.045			-.203	-.027
	CHANGE	-.122	.051			-.223	-.020

a. Dependent Variable: INTENT

Figure 8. Summary of Coefficients

With coefficient analysis, five independent variables remained in the final model (Figure 8), including PBC, SN, FINOPT, WEALT, and CHANGE. All these were statistically significant (p -value < 0.05) with the coefficients of 0.614, 0.424, 0.158, -0.115, and -0.122, respectively and were designated as predictors of the dependent variable (IPO intention). Some variables were excluded from the model – PUBIMG, EXIT, ORGIMP, LCONT, LPRIV, and IPOCOST were not statistically significant (p -value > 0.05); hence, they were disqualified as predictors. Therefore, the regression model for IPO intention could be written as follows:

$$\begin{aligned} \text{INTENT} &= 0.593 + 0.158 \text{ FINOPT} - 0.115 \text{ WEALT} - 0.122 \text{ CHANGE} + 0.424 \\ &\quad \text{SN} + 0.614 \text{ PBC} + U \end{aligned}$$

Additionally, the research explored further whether firms' characteristics impact IPO intention. Thus, the one-way ANOVA was applied to compare the mean scores among groups in each characteristic. The four characteristics: family generation, sector, region, and firm's number of employees were independent variables while the dependent variable was IPO intention. As the one-way ANOVA has been performed, the p-value of the mean difference between groups in each characteristic: family generation, sector, region, and firm's number of employees, was 0.320, 0.196, 0.921, and 0.065, respectively. The mean difference of IPO intention among groups in each characteristic was not statistically significant ($p\text{-value} > 0.05$). In conclusion, the differences in firm's characteristics had no impact on IPO intention.

Research Findings and Policy Implications

Summary of Research Findings

Five out of eleven determinants in the initial framework remained valid. The four hypotheses (H1, H9, H10, and H11) could not be rejected. One hypothesis (H5) had a negative correlation. The other six hypotheses were rejected. The results of multiple regression analysis are illustrated in Figure 9.

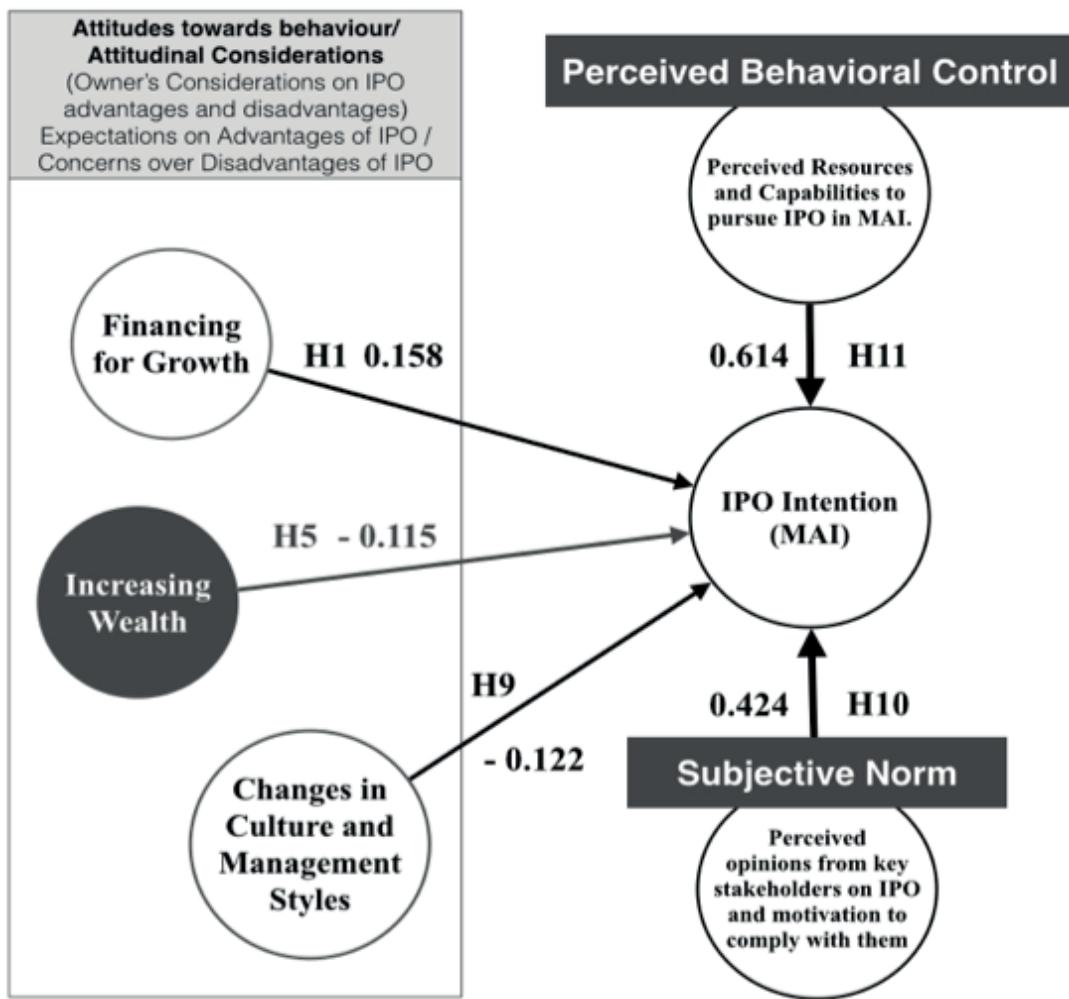


Figure 9. Final Results & Framework

Hypothesis 1 could not be rejected. There was a statistically significant positive correlation with the coefficient value of 0.158.

Discussion: Firms in the capital market can effectively improve liquidity and gain bargaining power with creditors to finance future growth. The result was consistent with key takeaways from previous studies. Additionally, SMEs usually have burdens to fund their growth as bank loans caused SME high cost in terms of interest with significant collateral and credit requirements. Therefore, it is not

surprising that the higher the expectation on financing growth, the more intention to pursue an IPO in the MAI.

Hypothesis 2 was rejected. No significant relationship was found.

Discussion: This is in contrast to the previous studies. Although being listed in the capital market may broaden the firm's reputation and visibility, it might not be a key reason for SMEs to pursue IPO in the MAI. Potentially, this benefit might be valid to the firms that utilized their reputation as an asset for growth. For instance, a firm that specializes in luxury products or property management may need to gain trust from its customers, while the firms in construction, resources and energy industry may need to gain financial credibility from their clients to undergo project tenders; therefore, going public can provide some advantage. Thus, not all SMEs aim at gaining public visibility through IPO.

Hypothesis 3 was rejected. No significant relationship was found.

Discussion: Business exit through IPO is a prominent concept in many developed economies. Business owners can cash out their investment with capital gain. Furthermore, businesses that received funding from venture capitalists or angel investors at the early stage are often obligated to pursue an exit strategy at some point, so the investors can take out their investment with returns. Nevertheless, this hypothesis was rejected. Indeed, exiting the business through IPO may not be common in Thailand. Most Thai SMEs are family businesses and their major funding is from bank loans. The tradition to pass the family business on to younger generations is still strong. Moreover, owners of firms equipped with significant fixed assets, such as machines and manufacturing lines, might not be interested in exiting their businesses in the short term, as they can still utilize these assets to generate growth. Therefore, at present, this might not be a significant motive for business owners to exit their business through IPO. In the future, this expectation is anticipated to be a major consideration for IPO in the MAI especially for start-up firms that focused on information technology and digital technologies, in which an exit strategy becomes more crucial than sustaining the business over generations.

Hypothesis 4 was rejected. No significant relationship was found.

Discussion: Although being public firms can lead to professionalism and organizational improvement, this might not be a direct factor that induces IPO. Perhaps business owners expect to improve their performance and management practices regardless of whether the firms are private or public. Indeed, the firms should improve their organizational structure and practices even before being listed and pursuing IPO to meet prerequisite requirements.

Hypothesis 5 was rejected. A significant negative relationship was found with the coefficient value of 0.115.

Discussion: Conceptually, business owners who expect to increase their personal wealth may intend to pursue an IPO and anticipate substantial capital gain after the IPO stock is in the market. Nevertheless, the findings show otherwise. The more the owners desired to increase personal wealth, the less intention the owners would have to pursue IPO. The implication could be that SME owners are not interested in increasing their personal wealth by using IPO as a means. Although SME owners may perceive this as one of IPO benefits, they might not intend to pursue IPO just for this reason. There are several means to increase personal wealth regardless of whether their firms are private or public. Potentially, the owners perceived they could generate more personal wealth by being private.

Hypothesis 6 was rejected. No significant relationship was found.

Discussion: In the past studies, SME owners were concerned that being public may cause them to lose control over their firms, resulting in this factor becoming a crucial trade-off. This factor should have reduced IPO intention. Nevertheless, the findings showed no significant correlations. In fact, owners had no need to surrender control or distribute all shares to public. They and their family members can still keep the majority of shares to retain substantial control of the firms.

Hypothesis 7 was rejected. No significant relationship was found.

Discussion: Contrary to previous research, the findings indicated that loss of privacy and important information was not a significant concern for SME owners to pursue IPO. Indeed, the firms are not necessarily required to expose all confidential information, such as trade secrets, production formulas, technologies, and client agreements. The information to be declared is largely for investors' considerations to anticipate the company's future, such as strategic roadmap and financial results, rather than in-depth details of what specific strategy is to be taken. The regulators may require some detailed information for transparency and reporting purposes; however, this is typically designated for a specific regulatory purpose, not for the public. Although information about organizations, businesses, management, and financial performance is required to be publicly visible, such information tends to be of a more general nature that competitors can typically discover even when the firm is private. Therefore, the concern over privacy might not be a direct issue for owners in considering IPO.

Hypothesis 8 was rejected. No significant relationship was found.

Discussion: During the IPO process and after being listed, firms are subject to substantial costs. The direct costs include filing and listing fees and management fees for financial advisories and underwriters; while indirect costs include money, effort, and time spent in setting proper mechanisms to meet regulatory requirements or hiring management consultants. These are expected to be major concerns for business owners. However, the findings showed otherwise. Possibly, the owners might view these expenses and compliances as preconditions and consequences of an IPO decision rather than considerations. Therefore, the owners may put more weight on other considerations at first.

Hypothesis 9 could not be rejected. There was a statistically significant negative correlation, with the coefficient value of 0.122.

Discussion: In pursuing IPO, firm owners needed to undergo several changes. The organization culture and management practices must be adapted from the context of a private or family firm to the context of a public firm. Most owners might be used to the established management practices. In a private firm, they can be a “one-man show” and make all decisions rapidly. However, in a public firm, various parties will become involved in decision-making. Some decisions may require the board’s or even regulator’s approval or code of conduct verification. Moreover, management in SMEs usually consists of family members. They may be used to discussing and agreeing upon important matters at home or during the family vacation. Nevertheless, when the firm goes public, this culture must be changed, as several parties and owners are involved. Accordingly, transparency and conflict of interests would be a concern. These matters may cause some owners to put aside their IPO intention, even though they have strong capabilities to do so. The findings were in line with previous studies, which highlighted resistance to changes.

Hypothesis 10 could not be rejected. There was a statistically significant positive correlation, with the coefficient value of 0.614.

Discussion: This is aligned with the TPB (Ajzen, 1991). Many owners or decision-makers are subject to opinions of relevant parties, such as family members, business partners, important employees, respected individuals, and significant intimates. Plausibly, Thailand is relatively a collective culture; therefore, people tend to take the opinion of important related parties into consideration before pursuing the intention. Importantly, going IPO is a decision that fundamentally impacts all stakeholders, the family, and the future generation. Owners possibly handle this with care and are mostly open to the opinions of others. Most importantly, the subjective norm is a critical factor that leads to IPO intention, as the degree of coefficients was the highest (0.614) among all factors.

Hypothesis 11 could not be rejected. There was a statistically significant positive correlation, with coefficient value of 0.424.

Discussion: This is aligned with the TPB (Ajzen, 1991). If the owners strongly believe that they are capable and will succeed in taking their firm to IPO, they will have more intention to do so. The magnitude of this factor is 0.424, which is the second highest coefficient. Regardless of any expectation and concern over IPO, the perceived behavioral control plays an essential role in leading the owner's IPO intention.

Policy Implications

It is positive that SMEs have perceived the importance and benefit of the IPO as a mechanism for financing their future growth. However, the significant factors affecting IPO Intention for SMEs were predominantly psychological issues rather than technical issues. Most of the technical factors, i.e., IPO costs, exit mechanism, and public visibility were not significant factors. Conversely, the psychological factors: subjective norm, perceived behavioral control, and resistance to change, had a crucial impact on IPO intention. Therefore, policymakers should focus more attention to identifying and addressing these psychological considerations rather than emphasizing the rational causes and reasons why firms should pursue an IPO in the MAI. Strategic policies should be shifted from theoretical education on IPO concepts towards intensive engagement and collaborations. It is important to work closely with SMEs to convince key influencers and other hidden decision-makers in the firms as well as encourage and build up the confidence of decision-makers by providing essential tools and necessary counseling. This strategy can increase the degree of subjective norm and perceived behavioral control and directly increase IPO intention.

Moreover, policymakers may not always necessarily take into account the different characteristics of SMEs in terms of region, generation, firm's number of employees, and sector. The analysis showed that there was no significant relationship. Thus, the policies can be more focused and one-size-fits-all for general SMEs.

Recommendations for further studies

As the psychological factors are critically significant, it is worthwhile to further examine subjective norm and perceived behavioral control. The next major questions to be addressed would be: Who are key actors in the firms and how do they influence IPO intention? Also, what factors determine the owner's perceived behavioral control of IPO issuance? Further, it is worth studying how IPO intention transforms into IPO decision and whether the IPO decision is determined primarily by IPO intention or any other external factors. These could elevate the understanding of the nature of psychological and behavioral factors in the IPO decision.

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