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The Relationship Between SMEs' Resources and Their Sustainable Growth With Moderating of Government-Private Supports, and Gender of Entrepreneurs, in Lao PDR.

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ABSTRACT

This paper aims to investigate the relationships between SME's resources including, financial resources (FRR), financial literacy (FLR), managerial capacities (MCR), market orientation (MKR), technological innovation awareness (TIR), and their sustainable growth (SG), and to identify the impact of government support (GS), private support (PS), and Gender of entrepreneur (GE) moderate the effect of these resources on their SG. The Structural Equation Modelling, Interaction effects, Multiple group techniques, and SPSS/AMOS version 23 used for hypothesis testing.

Evidence supports existing theories and informs the importance of resources in enhancing operational business for SG. Emphasize the need for authorities, agencies, and other partners to find out how to increase support through various interventions, programs/initiatives to empower SMEs improving their resources to achieve sustainable business growth.

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1. Introduction

Small and Medium-sized Enterprises (SMEs) are crucial for promoting sustainable economic growth because they increase productivity, generate and distribute money, and create jobs (WBG, 2019). They interact with different parties and provide contributions to Technological Innovation (TI) to promote sustainable economic growth. As a result, investing effectively in these businesses'' sustainable growth (SG) is crucial and cannot be disregarded. But the majority of them continue to struggle with inadequate funding and disorganized business strategies, which frequently have a negative effect on expansion, survival, and sustainability (Rahman et al., 2016). Firm's survival depends on business performance, long-term growth strategies and ability to maintain competitive advantage and growth (Yoo et al., 2018). Businesses need to continue growing sustainably to avoid financial problems (El Madbouly, 2022). However, the idea of sustainable business growth, which denotes maximum rate of a firm's sales without exhausting its financial resources. And it's not a new concept, which means continuous and stable business expansion (Ashta, 2008; Higgins, 2009). As a result, SMEs face difficulties in achieving and maintaining sustainable growth, which is more than simply a chance because it actually exists. At the same time, Lao SMEs are similar to those in other nations. Because they are crucial to the country's socio-economic development. For this reason, the government develops policies to promote and support them by providing diversified fund sources and other facilities. According to Decree No.25/GOL, dated 16th January 2017, they are defined as enterprises related to commodity production, trade, and services with annual income and assets not exceeding LAK 6 billion and labor less than 99 people.

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The interest in Resource-Based View (RBV) of an organization's performance and growth has increased and is a critical strategic perspective that was built on Penrose (1959) compose of resources and competence, which is main theoretical perspectives in strategic management theory (Amit & Schoemaker, 2016). Previous studies found some of firms' resources affect their business growth. For instance, Effect of entrepreneurs' skills on business SG (Diabate, Sibiri, et al., 2019). Management capacities, technology, marketing and innovation technical competency had impacted on business performance (Kim, 2021) and Effect of personal factors, business characteristics, managerial factors, capital availability, business support, and business environment on success of SMEs (Al-Tit et al., 2019). In Laos, no research has been conducted on the relationships between SMEs' resources and their SG and the impact of the moderating role of government-private supports, and the gender of entrepreneurs in such relationships is ever rarer. However, previous studies found some other evidence. For instance, the government and non-government play a critical role to support SMEs to overcome their challenges with high taxation, high inflation, unstable exchange rates, and fund limitations. They also didn't play enough attention to innovation awareness, competitiveness abilities, and market and network limitations (Kyophilavong, 2007). Entrepreneurial orientation positive impacted on competitive advantages, and then they had impacted on SMEs' growth (Sirivanh et al., 2014). Past studies investigated only the relationship between an enterprise's resources and their business performance and growth. Therefore, this study attempts to fulfill the research gaps to prove the relationship between SME's resources and their SG due to the limitation dedicated to SG of SMEs in developing countries, for instance in Laos.

This study aims to explore the relationship between SMEs' resources and their SG with the moderating effect of government-private supports, and GE. The research questions are: Is there a positive effect of SMEs' resources on their SG, and to what extent GS, PS, and GE may moderate these relationships? Understanding these issues will shed light on which resources to focus on, both tangible and intangible, as well as capabilities. Findings may help policymakers; private and others sectors find the right support channels for SMEs to survive and grow their business sustainably within uncertain environment presently. To achieve the study objectives, the paper was structured: Next section provided an overview of relevant literature and hypotheses development that could provide theoretical features on which to look at the research. Then focuses on research method, findings, and discussion, research implications and conclusion.

2. Literature review and Hypothesis development

2.1 Sustainable Growth of SMEs

The concept of sustainable growth firm is used to test the alignment of a firm's growth objectives with its financial policies including increasing annual sale and assets without issuing of new equity (Ashta, 2008; Higgins, 2009). Firm growth could become sustainable and unsustainable (Babcock, 1970), which means not just to survive but to maintain competitive within industry (Fonseka et al., 2012).

2.2 Resource Based Theory

RBV was developed through numerous publications from 1980s to 1990s. Resource refers to tangible and intangible assets to conceive and implement business strategies (Barney, 1991; Barney et al., 2001; Porter, 1981; Wernerfelt, 1984), which consists of resources and capacities to convert into final goods and services. Resources include of financial or physical assets, tradeable knowledge, and human capital (Amit & Schoemaker, 2016). This study applies theory by selecting some resources of SMEs that appropriate to the Lao context and thought to be likely contribute to their SG, including FRR, FLR, MCR, MKR, TIA and the 40 hypotheses were suggested as follows:

Business finance (FRR) refers to firm's ability to allocate both internal and external funds in a way that maximizes return on investment for the business (Myers & Majluf, 1984; Osei-Assibey, 2013). Profits and liquidity are capital management objectives (Rahim, 2017). Earlier studies measured FRR construct by twelve items (Hossain, 2020) and found it influenced on performance (Khan et al., 2022), and indirectly influenced on firms' SG through their profits (Nastiti et al., 2019). Following hypotheses were formulated:

H1_1. There is a positive relationship between FRR and FSG.

H1_2. There is a positive relationship between FRR and NFSG.

Financial literacy (FLR) means to the set of skills and knowledge necessary for effective decisions, use financial services, and business position in the market (Reich & Berman, 2015), consists of knowledge, attitude, and awareness dimensions (Eniola & Entebang, 2017). Previous studies measured FLR construct by twelve items (Yang et al., 2018; Ye & Kulathunga, 2019) and found it influenced on performance and sustainability (Agyapong & Attram, 2019; Yakob et al., 2021; Ye & Kulathunga, 2019). Following hypotheses were formulated:

H2_1. There is a positive relationship between FLR and FSG.

H2_2. There is a positive relationship between FLR and NFSG.

Managerial capacities (MCR) plays an important role in accomplishing business goals by integrating resources through productive teamwork with additional knowledge and expertise (Hussain et al., 2020). RBV identifies resources and capabilities are the source of a firms' sustainable competitive advantages (Barney et al., 2001). An enterprise's knowledge, experience, and management abilities are critical to business success (Popescu et al.,

2020). Previous studies measured MCR by nineteen items (Bourne & Franco-Santos, 2010) found it influenced on firms' SG (Hussain et al., 2020). Following hypotheses were formulated:

H3_1. There is a positive relationship between MCR and FSG.

H3_2. There is a positive relationship between MCR and NFSG.

Market orientation (MKR) is the process by which a business gather market information pertinent relevant to the current and future needs of its customers and share it both internal and externally the organization (Kohli et al., 1993; Sen, 2006), consists of customer orientation, competitor orientation and inter-functional co-organization components (Kohli & Jaworski, 1990; Narver & Slater, 1990; Slater & Narver, 1994). Previous studies measured MKR by twelve items (Narver & Slater, 1990) and found its effected on firm growth (Buli, 2017; Hoque & Awang, 2019; Subramanian & Gopalakrishna, 2001). Following hypotheses were formulated:

H4_1. There is a positive relationship between MKR and FSG.

H4_2. There is a positive relationship between MKR and NFSG.

Technological innovation (TI) refers to ideas and knowledge of new goods, processes, and services that create commercially successful (Schramm, 2017; Zastempowski et al., 2020). Schumpeter (1934) defined "Innovation means the introduction of new techniques and organizational models for introducing of new things in industry: products, method of production, market opening, development of raw material sources or other inputs, and creation of new market structures" (Ince et al., 2016). Technology is a capital resource for firm grow (Barney, 2000). TI adoption has two dimensions, individual and organizational characteristics (Thong & Yap, 1995). Previous studies found Innovation impacted on business performance and organizational effectiveness (Lin & Lai, 2020; Yoo et al., 2018). Leadership styles and innovation influenced on sustainable performance (Hassan et al., 2021). Technological competency indirect effected on business's performance through eco-innovation and open innovation (Valdez-Juárez & Castillo-Vergara, 2021). Following hypotheses were formulated:

H5_1. There is a relationship between TI awareness and FSG.

H5_2. There is a relationship between TI awareness and NFSG.

2.3 Stakeholders' Theory and Upper Echelons Theory.

Stakeholders theory introduced by R. E. Freeman, emphasizes the integration of business and ethnicity (Freeman, 1994), becomes popular in academically and professionally management literature (Donaldson & Preston, 1995), and can be seen from the Barnett and Salomon (2012) who found businesses with influence on stakeholders had highest corporate financial performance. While Upper echelons theory suggests that managers partly influence organizational outcomes, strategic decisions, and performance (Hambrick & Mason, 1984). Executives' experiences, values, and personalities influenced on interpretation situations facing, affected their choices, and managerial characteristics are indicators of management situation (Hambrick, 2007). These two ground theories reference to study the moderating variables of current research, as follows:

The role of government (GS) plays a crucial role in creating the enabling environmental and relieving of the burden regulatory procedures for SMEs (Chowdhury, 2007), work together with other stakeholders by developing skills, sharing business information, building suitable networks, and etc (Mahadea & Kabange, 2019; Roper & Hart, 2013; Storey & Tether, 1998). Previous studies found government regulations negative impacted on sales revenue and performance. However, being aware of funding sources significantly increased sales revenue and profits, and contributed to employment, etc,. (Mahadea & Kabange, 2019). Tax incentives influenced on SG (Obafemi et al., 2021; Twesige & Gasheja, 2019). Following hypotheses were formulated:

H6_1. GS moderates the influence of FRR on FSG.

H6_2. GS moderates the influence of FRR on NFSG.

H7_1. GS moderates the influence of FLR on FSG.

H7_2. GS moderates the influence of FLR on NFSG.

H8_1. GS moderates the influence of MCR on FSG.

H8_2. GS moderates the influence of MCR on NFSG.

H9_1. GS moderates the influence of MKR on FSG.

H9_2. GS moderates the influence of MKR on NFSG.

H10_1. GS moderates the influence of TIR on FSG.

H10_2. GS moderates the influence of TIR on NFSG.

Private sectors focus on supporting business growth (Hossain et al., 2020). They provide help for both financial and non-financial conditions, and small firms require distinct information, financial strategies, government financing schemes, financial service items, etc, (Hossain, 2020). Previous studies found PS moderated the relationships between finance, financial literacy, and financial and non-financial growth firms (Hossain, 2020). Following hypotheses were formulated:

H11_1. PS moderates the influence of FRR on FSG.

H11_2. PS moderates the influence of FRR on NFSG.

H12_1. PS moderates the influence of FLR on FSG.

H12_2. PS moderates the influence of FLR on NFSG.

H13_1. PS moderates the influence of MCR on FSG.

H13_2. PS moderates the influence of MCR on NFSG.

H14_1. PS moderates the influence of MKR on FSG.

H14_2. PS moderates the influence of MKR on NFSG.

H15_1. PS moderates the influence of TIR on FSG.

H15_2. PS moderates the influence of TIR on NFSG.

Gender of entrepreneur (GE) has been viewed in literature recent years (Fischer et al., 1993; Melo et al., 2019). Entrepreneurship is a global field (De Bruin et al., 2006). Previous studies revealed that the percentage of female entrepreneurs was equal or greater than male in four economies: Indonesia, Malaysia, Mexico, and Brazil (GEM, 2016-17). Their expectations, reasons for starting business, motivations, opportunities are different (Kepler & Shane, 2007). Men were active entrepreneurs twice compared to women, and this gap was greater in low-income than middle-and high-income countries (Acs et al., 2004). However, women were more sustainable entrepreneurs than men when they started with the same level of experience (Outsios & Farooqi, 2017). Gender moderated the relationship between marketing and performance (Hoque & Awang, 2019). However, no difference in entrepreneurial intentions (Gupta et al., 2009), and business performance (Robb & Watson, 2012). Following hypotheses were formulated:

H16_1. GE moderates the influence of FRR on FSG.

H16_2. GE moderates the influence of FRR on NFSG.

H17_1. GE moderates the influence of FLR on FSG.

H17_2. GE moderates the influence of FLR on NFSG.

H18_1. GE moderates the influence of MCR on FSG.

H18_2. GE moderates the influence of MCR on NFSG.

H19_1. GE moderates the influence of MKR on FSG.

H19_2. GE moderates the influence of MKR on NFSG.

H20_1. GE moderates the influence of TIR on FSG.

H20_2. GE moderates the influence of TIR on NFSG

Conceptual framework

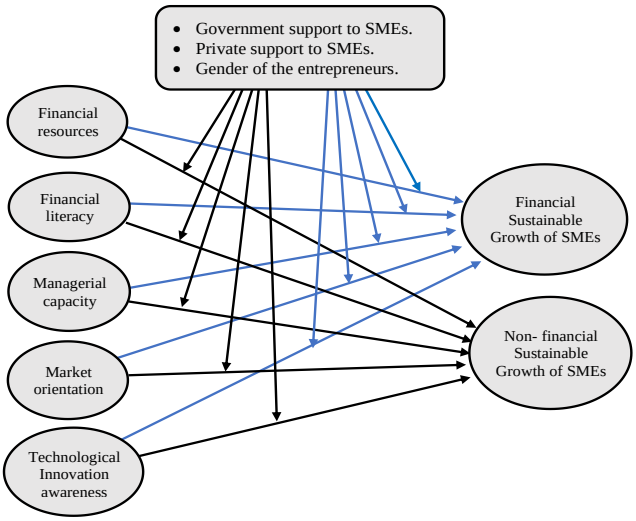

Figure 1. Research framework

3. Methodology

3.1 Study design, Measures and Measurements

This research was cross-sectional design and utilized a questionnaire instrument that was adapted from prior studies, and developed in the Lao language. The respondents were asked to answer the questions on a five-point Likert scale (from "strongly disagree" =1 to "strongly agree" =5).

Table 1. Constructs measurement in the study model

Constructs	Dimension	Number of items	Source
Financial resource (FRR)		12	Hossain (2020); Roxas and Chadee (2012)
Financial literacy (FLR)		12	Yang et al. (2018); Ye and Kulathunga (2019)
Managerial capacities (MCR)		19	Bogner and Bansal (2007)
Market orientation (MKR)		12	Narver and Slater (1990)
Technological innovation awareness (TIR)		6	Chege and Wang (2020)
Government support (GS)		8	Ahmad and Xavier (2012); Hossain et al. (2020) and Nakku et al. (2020)
Private support (PS)		10	Hossain (2020)
Sustainable growth (SG)	Financial parameter (FSGE)	6	Ali et al. (2020); Diabate, Allate, et al. (2019); Hussain et al. (2020)
	Non-financial parameter (NFSGE)	4	

Source: Author's summary

To verify the reliability and ensure validity of the questionnaire, it was adjusted based on three senior academics of Lao National University for IOCs, followed by conducting field trials with entrepreneurs (owners/ managers of SMEs) before the main studyThe questionnaire composed of: FRR, FLR, MCR, MKR, TIR, GS, PS and SG. All eight variables (nine constructs) were measured by various dimensions and 89 reflective items (see Table 1), and some items were then eliminated due to the reliability and validity tests. Five constructs: FRR, FLR, MCR, MKR, TIR, as predictors. The SG of SMEs was measured by two dimensions (finance, and non-finance), and three moderators (two constructs: GS and PS, and GE, which was noted as gender indicated in the approval document

3.2 Sampling and data collection

Target population was SMEs' owners or managers whose owners were absent from business because they involve responsibility for business activities, and the

businesses have been operating for at least three years to measure outcomes (Ćorić et al., 2011). Using random sampling technique from the listed SMEs of the 3rd National Economic Survey in 2019-2020, have experienced loans with any funding sources, and their headquarters is in four main provinces, Vientiane Capital, Luangprabang, Savannakhet, and Champasack, because they account for more than 53 percent of SMEs overall country (LSB, 2020). Sample size was determined by the rule of thumb under the guidance of the requirements for data analysis techniques, which require 15-20 observations for each predictor construct (Hair et al., 2013). Data were collected between November 2022 to January 2023 with 523 respondents. Final samples were 517 due to the information completion.

3.3 Analytical strategy

Data was analyzed by using SPSS/Amos 23.0 to test hypotheses with two steps of multivariate analysis method. **First**, Confirmatory factor analysis (CFA) to assess uni-dimensionality, then the reliability and validity were assessed after CFA model fit. **Second**, Structural equation modeling (SEM) techniques. **Third**, Moderator role of PS and GS were adopted in modeling by interaction effect (Baron & Kenny, 1986) and Moderating effects of GE by using the multiple-group analysis test, here, data was split into two groups and renamed "Female" and "Male" (273 male and 244 female respondents) and results were presented by multiple comparations (Byrne, 2004).

4. Results and Discussion

4.1 Sample characteristics

Table 2. Respondents and SMEs profiles.

Characteristics		Frequency (N=517)	Percentage
1. Respondents profile			
Position in business	Owner	424	18%
	Manager	93	82%
Gender	Male	273	52.8%
	Female	244	47.2%
Age of respondents (Years)	Means ±SD: 43.5±9.77		
Level of Education	High school	282	54.5%
	Vocational education	64	12.4%
	Bachelor	154	29.8%
	Master	15	2.9%
	Ph.D.	2	0.4%
2. SME's Profile			
Age of business (Years)	Means ± SD: 9.86±5.55		
Gender of entrepreneur	Male	295	57.1%
	Female	222	42.9%
Education of Entrepreneur	High school	280	54.2%
	Vocational education	68	13.2%
	Bachelor	151	29.2%
	Master	15	2.9%
	Ph.D.	3	0.6%
Type of business	Manufacturing	82	15.9%
	Trade	228	44.1%
	Service	207	40%
Size of business (Assets)	Small size	395	76.4%
	Medium size	122	23.6%
Number of employees (person)	Means ± SD: 5.37±6.81		
	Less than 5	379	73.3%
	6-50	134	25.9%
	51-99	4	0.8%
Location of business	Urban	349	67.5%
	Rural has road	168	32.5%
Sources of funding (Each n=517).	Commercial bank	362	70%
	Financial institution	132	25.5%
	Government fund	16	3.1%
	Village fund	10	1.9%
	Others/ informal	40	7.7%

Source: Author's summary

Table 2 shows out of 517 total respondents, 82 percent were owners, 52.2 percent were male. Majority completed high school. They mostly run businesses in trade (44.1 percent). The average business operating period was 9.86 years (57.1 percent). Around three quarters (73.3 percent) had fewer than 5 employees and three-quarters (70 percent) of business funding were bank loans.

4.2 Descriptive Statistic

Data was screened to check for inaccurate data entry, out-of-range values, missing and outliers, and tested the normality. Normality tests were confirmed by satisfactory and acceptable Skewness and Kurtosis below the cutoff value of +/-3 (Kline, 2011), a positive correlation of all items within latent constructs (Coltman et al., 2008), no threat of constructs' multicollinearity due to the Variance Inflation Factor (VIF) value above 3 and lower value (below 0.2) of Tolerance (Hair et al., 2013) (see Table 3), and no Systematic Measurement Errors because of absence of Common Method variance (CMV) by Harman's single-factor test (Podsakoff et al., 2003).

Table 3: Summary of data screening

Variables	Min	Max	Mean	Std. D	Skewness	Kurtosis	VIF	Tolerance
FRR	1	5	3.63	0.567	-0.083	0.272	1.623	0.616
FLR	2.17	5	3.66	0.609	-0.154	-0.581	2.396	0.417
MCR	2.21	5	3.75	0.586	0.020	-0.697	2.686	0.372
MKR	1.92	5	3.70	0.599	-0.052	-0.458	2.499	0.400
TIR	1	5	3.56	0.697	-0.098	0.066	2.245	0.445
GS	1	5	3.65	0.801	-0.441	-0.168	1.797	0.556
PS	1	5	3.31	0.864	-0.714	0.368	2.155	0.464
FSGE	1.67	5	3.640	0.656	0.058	-0.462	-	-
NFSGE	2	5	3.759	0.710	0.067	-0.837	-	-

Source: Author's calculation

4.3 Assessment of Measurement Model

After ensuring the structural model free from CMV and collinearity issues. The measurement model analysis determined the factor loadings and model fit indices illustrating the absolute fit level of CMIN/df=1.902 provided satisfactory value <2 (Schumacker & Lomax, 2004); GFI= 0.855; CFI=0.939; TLI=0.932; SRMR=0.042 and RMSEA=0.043, which show acceptable values (Bentler, 1990; Hu & Bentler, 1998) (see Figure 2, Appendix). Then, Reliability and Validity of constructs were tested in Table 4, which presents Cronbach's Alpha values at greater than 0.7 and Composite Reliability values above 0.7. The Construct Validity, which presents the Standardized Factor Loadings of items provided satisfactory values above 0.5. The Average Variance Extraction (AVE) found satisfactory values at greater than 0.7 (Hair et al., 2013). Final total items were 50 items for all constructs. Then, Discriminant Validity was confirmed by assessing HTMT Ratio of Correlation, which displayed acceptable values below 0.8 see table 5 (Henseler et al., 2014). As results, Measurement model recognized sufficient evidence of construct validity and reliability

Table 4: Construct reliability and validity measures

Construct/Items		Construct Validity		Construct Reliability	
		Convergent Validity Factor loadings	AVE	Composite reliability (CR)	Cronbach's Alpha
		> 0.5	> 0.7	> 0.7	>0.7
Financial resource (FRR)			0.81	0.59	0.765
	FR1	0.810			
	FR2	0.886			
	FR3	0.579			
Financial literacy (FLR)			0.550	0.830	0.822
	FL1	0.778			
	FL2	0.723			
	FL3	0.684			
	FL4	0.760			
Managerial Capacities (MCR)			0.500	0.870	0.883
	MC8	0.690			
	MC9	0.687			
	MC10	0.720			
	MC11	0.725			
	MC12	0.667			
	MC18	0.699			
	MC19	0.743			
Market orientation (MKR)			0.510	0.840	0.842
	MK8	0.686			

	MK9	0.716			
	MK10	0.702			
	MK11	0.716			
	MK12	0.686			
Technology innovation awareness (TIR)			0.580	0.890	0.878
	TI1	0.804			
	TI2	0.694			
	TI3	0.721			
	TI4	0.808			
	TI5	0.779			
	TI6	0.740			
Financial sustainable growth (FSGE)			0.660	0.890	0.846
	FSG1	0.740			
	FSG2	0.899			
	FSG3	0.895			
	FSG5	0.765			
Non-financial sustainable growth (NFSG)			0.620	0.83	0.821
	NFSG1	0.681			
	NFSG3	0.655			
	NFSG4	0.844			
Government Support (GS)			0.550	0.910	0.911
	GS1	0.572			
	GS2	0.713			
	GS3	0.781			
	GS4	0.800			
	GS5	0.730			
	GS6	0.762			
	GS7	0.785			
	GS8	0.759			
Private support (PS)			0.570	0.930	0.938
	PS1	0.774			
	PS2	0.828			
	PS3	0.710			
	PS4	0.792			
	PS5	0.731			
	PS6	0.782			
	PS7	0.751			
	PS8	0.741			
	PS9	0.730			
	PS10	0.707			

Source: Author's calculation

Table 5: Discriminant Validity using HTMT Ratio

	FRR	FLR	MCR	TIR	MKR	FSGE	NFSGE	GS	PS
FRR									
FLR	0.497								
MCR	0.410	0.719							
TIR	0.478	0.560	0.602						
MKR	0.379	0.516	0.705	0.726					
FSGE	0.404	0.659	0.562	0.544	0.485				
NFSGE	0.166	0.496	0.452	0.466	0.453	0.587			
GS	0.213	0.242	0.325	0.481	0.435	0.268	0.413		
PS	0.266	0.517	0.456	0.585	0.517	0.511	0.435	0.674	

Source: Author's calculation

4.4 Assessment of the Structural Model

Result of CFA was strongly supported continuing the structural model test by assessing path coefficients and P-values, which is a multivariate technique that combines the aspects of multiple regression and factor analysis to assess the interconnected relationship at once together (Hair et al., 2013). Research used a 95% confidence interval to determine whether hypotheses were supported or rejected. Three steps: **First**, testing relationship between SMEs' Resources and their Sustainable growth (SG); **Second**, testing impact of moderator (GS, PS). **Third**, testing effect of GE as a moderator, on the relationship between SMEs' resources and their SG.

Figure 3 shows evidence exploring model fits values and coefficient of determination (R^2) was 0.438 for FSGE and 0.355 for NFSGE, which indicates the 43.8 percent and 35.5 percent of FSGE and NFSGE, can be explained by FRR, FLR, MCR, MCR, and TIR.

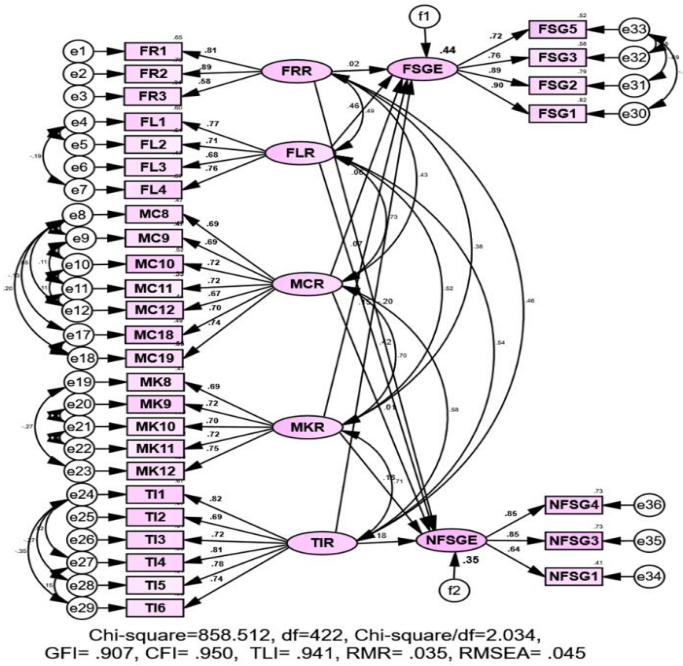

Figure 3. Structure model result

4.5 Hypothesis testing

Direct effect

Results of path coefficient indicated statistically significant direct effects of FLR and TIR on their SG in both finance and non-finance. Evidence also indicated the effect of MKR on NSGE. Results supported hypotheses H2_1, H2_2, H4_2, H5_1 and H5_2 (see Table 6).

Moderation effect

Table 7 shows the moderation effect of GS on the relationship between SMEs' resources and their SG: results indicated significant impact of GS on the relationship between: FLR (β=0.077, P<0.05), MC (β=0.085, P<0.05), MKR (β=0.130, P<0.05), and TIR (β=0.125, P<0.001) and FSGE. These results supported hypotheses H7_1, H8_1, H9_1, and H10_1. This table also shows evidence of significance impact of PS on the relationship between: MKR (β=1.115, P<0.01), TIR (β=0.164, P<0.001) and FSGE, and MKR (β=0.111, P<0.01), TIR (β=0.084, P<0.05) on NFSGE. Results supported hypotheses H14_1, H15_1, H14_2, and H15_2. Moreover, Slope of the relationship presented in the mod. graphs indicated the presence of high GS, the relationship between the FLR, MCR, MKR, and TIR and their FSGE were high (see Figure 4.1,4.2,4.3, and 4.4, in Appendix). Similarly, the mod. graphs also indicated the presence of high PS, the relationship between MKR, and TIR and their SG were high (see Figure 5.1,5.2,5.3, and 5.4, in Appendix).

Table 6: Path Coefficients for Structural Model

Relationship between variables	Hypothesis	Estimate	S.E.	C.R.	P-value	Results
FRR → FSGE	H_{1_1}	0.019	0.045	0.422	0.673	Rejected
FLR → FSGE	H_{2_1}	0.464	0.081	6.135	0.000	Supported
MCR → FSGE	H_{3_1}	0.061	0.092	0.752	0.452	Rejected
MKR → FSGE	H_{4_1}	0.065	0.089	0.911	0.362	Rejected
TIR → FSGE	H_{5_1}	0.150	0.063	2.579	0.010	Supported
FRR → NFSGE	H_{1_2}	-0.198	0.050	-3.558	0.000	Rejected
FLR → NFSGE	H_{2_2}	0.423	0.091	4.902	0.000	Supported
MCR → NFSGE	H_{3_2}	0.007	0.107	0.074	0.941	Rejected
MKR→NFSGE	H_{4_2}	0.183	0.105	2.911	0.021	Supported
TIR→ NFSGE	H_{5_2}	0.177	0.074	2.555	0.011	Supported

$R^2_{(FSG)}$= 43.8%, and $R^2_{(NFSG)}$= 35.5%, Fit indices: χ2/df=1.902; GFI= 0.855; CFI=0.939; TLI=0.932; SRMR=0.0447; RMSEA=0.042.

Source: Author's calculation

Furthermore, test χ2difference comparison found significant difference between male and female groups in the study model (Δχ2 /Δdf=18.848, P<0.05) see Table 8. In other words, estimates suggest in fact that GE significantly moderated the relationship between SMEs' resources and their SG. In addition, Coefficient of determination (R2) among male entrepreneurs was 0.462 (46.2 percent) and 0.430 (43 percent) for FSGE and NFSGE, respectively, However, among female entrepreneurs were 0.449 (44.9 percent) and 0.305 (30.5 percent) for FSGE and NFSGE, respectively, which indicate the SMEs' SG can be explained by their resources, see Table 9.

Table 7: Interaction effect results for moderation role of GS and PS

Hypothesis		Estimate	C.R.	P-value	Results
GS moderates the relationship between the:					
FRR*GS →FSGE	H_{6_1}	0.072	1.778	0.075	Rejected
FLR*GS→ FSGE	H_{7_1}	0.077	2.132	0.033	Supported
MCR*GS→ FSGE	H_{8_1}	0.085	2.279	0.023	Supported
MKR*GS→ FSGE	H_{9_1}	0.130	3.263	0.001	Supported
TIR*GS→ FSGE	H_{10_1}	0.125	3.239	0.001	Supported
FRR*GS→ NFSGE	H_{6_2}	-0.129	-3. 202	0.001	Rejected
FLR*GS →NFSGE	H_{7_2}	-0.084	-2.193	0.028	Rejected
MCR*GS →NFSGE	H_{8_2}	-0.048	-1.245	0.213	Rejected
MKR*GS →NFSGE	H_{9_2}	0.073	1.851	0.064	Rejected
TIR*GS→ NFSGE	H_{10_2}	0.047	1.212	0.226	Rejected
Hypothesis		Estimate	CR	P-Value	Results
PS moderates the relationship between the:					
FRR*PS→ FSGE	H_{11_1}	0.028	0.749	0.454	Rejected
FLR*PS→ FSGE	H_{12_1}	0.064	1.861	0.063	Rejected
MCR*PS →FSGE	H_{13_1}	0.035	0.987	0.324	Rejected
MKR*PS→ FSGE	H_{14_1}	1.115	3.017	0.003	Supported
TIR*PS→ FSGE	H_{15_1}	0.164	4.448	0.000	Supported
FRR*PS →NFSGE	H_{11_2}	-0.135	-3.381	0.000	Rejected
FLR*PS →NFSGE	H_{12_2}	-0.079	-2.065	0.039	Rejected
MCR*PS→ NFSGE	H_{13_2}	-0.038	-0.975	0.330	Rejected
MKR*PS →NFSGE	H_{14_2}	0.111	2.807	0.005	Supported
TIR*PS →NFSGE	H_{15_2}	0.084	2.149	0.032	Supported

Source: Author's calculation

Evidence from path coefficients of multi-group comparison ($\Delta\chi2/\Delta df$) indicated significant difference between men and women groups in the relationship between MKR and TIR, and their FSGE ($\Delta \chi2/\Delta df=4.3218$, $P<0.05$) and ($\Delta \chi2/\Delta$ df=7.928, $P<0.01$), respectively. Estimates found male entrepreneurs had non-significant negative moderating effects on the relationships between MK and FSGE (b=-0.127, P=0.191). However, female entrepreneurs had significant positive moderating effect on these relationships (b=0.186, P=0.078). In contrast, male entrepreneurs had a significant moderating effect on the relationships between TIR and FSGE (β=0.339, P<0.001), whereas female entrepreneurs had non-significant moderating effect on these relationships (β=0.008, P=0.915) (Table 9). Results support hypotheses H19_1 and H20_1.

Table 8: $\chi2$ difference test for moderator effects of gender of the entrepreneur

Nested Model Comparisons	Difference	χ^2	P value	Result
Sustainable growth ←Resources	10	18.848	0.042	Supported

Source: Author's calculation

Table 9: Path Coefficients of the Multi-group Comparison Test

Hypothesis		Male	Female	Group Differences	Results
		SE (T-values)		$\Delta \chi^2/\Delta$ df	
FRR → FSGE	H_{16_1}	0.044 (0.755)	0.026 (0.356)	0.025 n.s.	Rejected
FLR → FSGE	H_{17_1}	0.493 (4.092)	0.453 (4.815)	0.895 n.s.	Rejected
MCR→FSGE	H_{18_1}	-0.001(-0.013)	0.119 (1.062)	0.395 n.s.	Rejected
MKR→ FSGE	H_{19_1}	-0.127(-1.308)	0.186 (1.765)	4.321**	Supported
TIR→FSGE	H_{20_1}	0.339 (3.811)	0.008 (0.107)	7.928***	Supported
FRR→NFSGE	H_{16_2}	-0.255(-3.734)	-0.137 (-1.499)	0.683 n.s.	Rejected
FLR→NFSGE	H_{17_2}	0.284 (2.239)	0.497 (4.372)	0.301 n.s.	Rejected
MCR→ NFSGE	H_{18_2}	0.081 (0.624)	-0.026 (-0.188)	0.270 n.s.	Rejected
MKR→NFSGE	H_{19_2}	0.232 (2.069)	0.100 (0.773)	0.656 n.s.	Rejected
TIR→ NFSGE	H_{20_2}	0.270 (2.722)	0.147 (1.507)	0.828 n.s.	Rejected

CMIN/df=2.034, GFI=.907, TLI=.950, CFI=.941, SRMR=0.0446 and RMSEA=0.045

***=P<0.05; ***=P <0.01; n.s.= not significant*

R^2_{male} FSG=46.2% and R^2_{male} NFSG =43%; R^2_{female} FSG=44.9% and R^2_{female} NFSG=30.5%

Source: Author's calculation

4.6 Discussion

The relationship between SMEs' resources and their sustainable growth

Analyze supported 5 among 10 hypotheses, the relationship between FLR and their SG, both in finance and non-finance parameters, and between TIA and SG, both in finance and non-finance parameters. And between MKR and NFSGE. The RBV states that competitive advantages and business depend on the competence and resources of an enterprise (Amit & Schoemaker, 2016). This study results support previous researches conducted by Diabate, Allate, et al. (2019) indicated association between firm and entrepreneur characteristics and at least one of the three growth measurements; Diabate, Sibiri, et al. (2019) found entrepreneurs ability impacted on business sustainable growth; Hossain (2020) and Hossain et al. (2020) explored positive effect of financial literacy on firm growth; and Yakob et al. (2021) indicated financial literacy impacted on SMEs' performance; Narver and Slater (1990) shown positive effect of market orientation on business profitability; Hoque and Awang (2019) reveal direct effect of entrepreneurial marketing on firm performance; Chege and Wang (2020) found technological innovation impacted on company's performance, and Yoo et al. (2018) shown positive effect of technological innovation capability on business performance and organizational effectiveness.

The government and private support moderate the relationship between SME resources and their sustainable growth.

Evidence confirmed four among ten hypotheses that indicate GS moderated the relationship between SMEs' resources (FLR, MCR, MKR, and TIR) and their SG. However, current finding seems inconsistent with a previous study by Hossain et al. (2020). While, this current informed PS moderated effect of resources (MKR and TIR) on SG, both finance and non-finance parameters, which support previous research conducted by Hossain (2020). For instance, the PS moderated the relationship between MKR and TIR of SMEs and their SG, both in finance and non-finance. Therefore, the current research supports Stakeholder theory that emphasizes the integration of business and ethnicity as evidence by Barnett and Salomon (2012) who indicated the businesses with high influence on stakeholders would had highest corporate financial performance.

The gender of the entrepreneur moderates the relationship between SMEs' resources and their sustainable growth.

Results informed the fact that GE moderated the relationship between resources of SMEs and their SG in the study model. In particular, moderating the relationship between MKR and TIA, and FSGE. This evidence supports the Upper echelons' theory that suggests managers partly influence organizational outcomes, strategic decisions, and performance (Hambrick & Mason, 1984), and supports previous research by Hoque and Awang (2019) who found gender moderated the relationship between entrepreneur marketing and firm performance.

Implications

The study results led to understand the perception of SMEs' owners-managers about their business' resources and SG in the Lao context. Recognize FLR, MKR, and TIA are the most significant positive related to business SG compared to other resources in the study, which explore today's entrepreneurial ecosystem. This study also indicates GS, PS and GE moderate the relationship between some of study's resources and sustainable business growth of SMEs.

However, the current research is a cross-sectional study (exploring conclusion of causal relationships) versus a longitudinal approach. Therefore, the results may not conclude as similar and consistent over time. In addition, the study sample wasn't divided into sectors equally, so results couldn't compare across sectors. Moreover, future similar studies could be applied in other locations with qualitative method, such as in-depth interviews with authorities/regulators and/or Focus group discussion among entrepreneurs to gain a comprehensive understanding of factors necessary for business SG as well as finding out the nature of factors linked to SG, and larger enterprises can be tested because their financial records available, we can analyze data in other ways, such as estimating sustainable Growth Rate (SGR).

5. Conclusion

These findings indicate three significant theoretical and practical contributions. First, by providing the interrelation of an entrepreneur's perspective on business SG, this study makes the most significant contribution to the literature and supports the paradigm of SME's management. Second, entrepreneurs might benefit from understanding the importance of SME's resources in operating businesses to boost the business productivity and SG. Third, through the influence of authorities, agencies, and other partners, we can find out how to increase support for various interventions, programs, or initiatives to empower them to improve their resources both tangible and intangible to achieve a great business outcome. Therefore, stimulating these aspects of capacities will eliminate the issues faced by entrepreneurs, and prioritizing resources has cost benefits in increasing productivity and growing businesses in an efficient, effective, and sustainable manner.

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APPENDIX

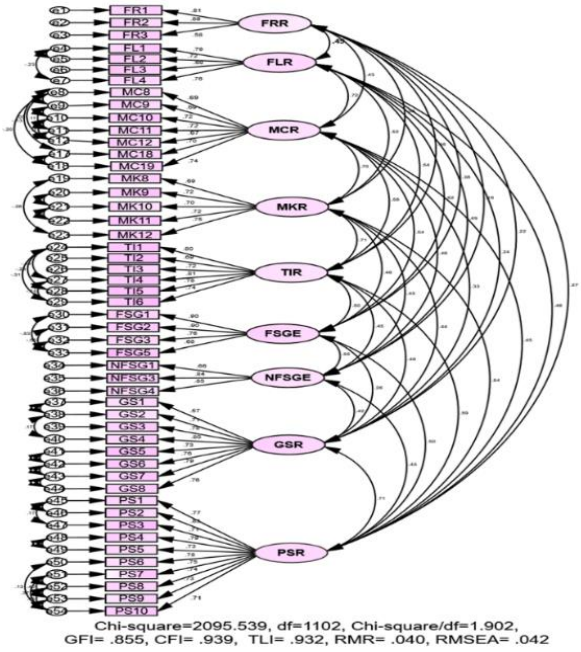
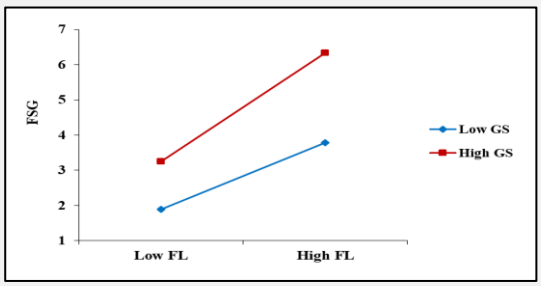


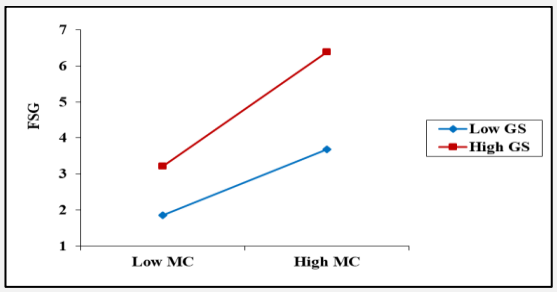
Figure 2: Confirmatory Factor Model Analysis

Figure 4: Interaction Effects of Moderator (Moderating role of government supports to SMEs)



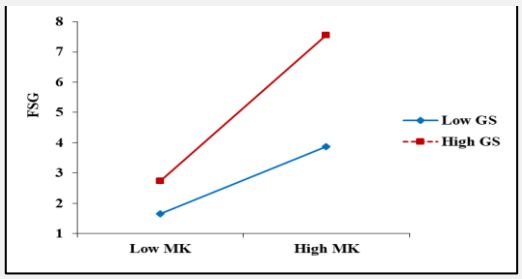
FL = financial literacy; GS = government support; FSG=Financial sustainable growth.

Figure 4.1: *Moderation effect of GS on the relationship between FL and SMEs FSG.*



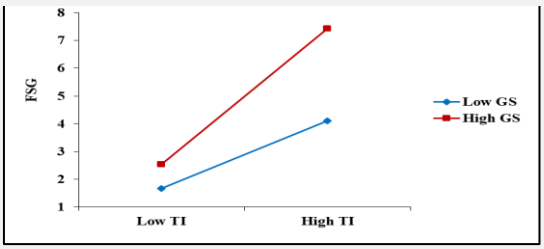
MC = Managerial capacity; GS = Government support; FSG=Financial sustainable growth.

Figure 4.2*: Moderating effect of GS on the relationship between MC and FSG*



MK = Market orientation; GS = Government support; FSG=financial sustainable growth.

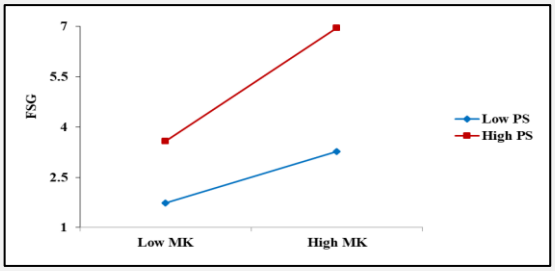
Figure 4.3*: Moderating effect of GS on the relationship between the MK and SMEs FSG*



TI = Technological innovation awareness; GS = Government support; FSG=financial sustainable growth.

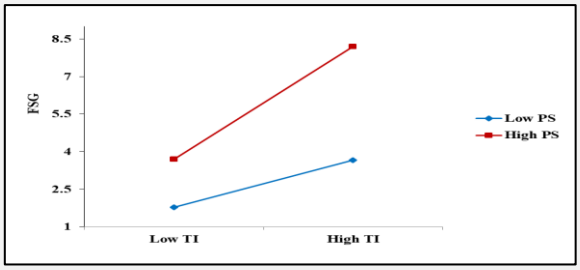
Figure 4.4: *Moderating effect of GS on the relationship between the TI and SMEs FSG*

Figure 5: Interaction Effects of Moderator (Moderating role of Private supports to SMEs)



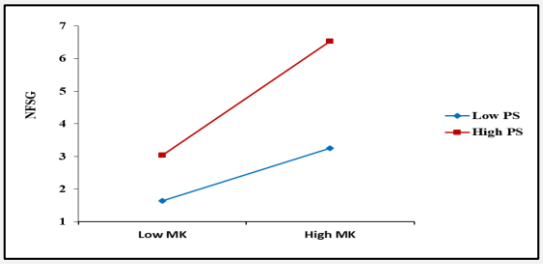
MK = Market orientation; PS = Private support; FSG=Financial sustainable growth.

Figure 5.1: *Moderating effect of PS on the relationship between the MK and SMEs FSG.*



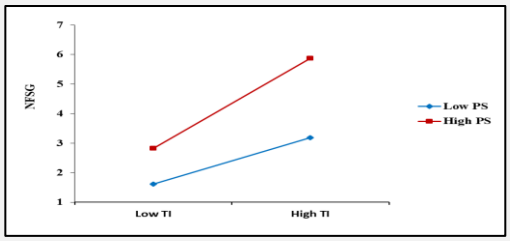
TI= Technological innovation awareness; PS= Private support; FSG=Financial sustainable growth.

Figure 5.2: *Moderating effect of PS on the relationship between the TI and SMEs FSG*



MK = Market orientation; PS = Private support; NFSG=non-financial sustainable growth.

Figure 5.3: *Moderating effect of PS on the relationship between the MK and SMEs NFSG.*



TI = Technological innovation awareness; PS = Private support; NFSG=non-financial sustainable growth.

Figure 5.4: *Moderating effect of PS on the relationship between the TI and SMEs NFSG.*

Summary of final items for nine constructs.

1. **Financial resource (FRR)**
   - FR1-Start-up capital available
   - FR2-Adequate financial resources/Satisfactory level with enterprise's finance
   - FR3-be able to access/additional capital when necessary.
2. **Financial literacy (FLR)**
   - FL1-The ability to analyze firms 'financial performance periodically
   - FL2-Firm prepares monthly income statement
   - FL3-Firm Can compute the cost of loan capital
   - FL4-Firm has savings account
3. **Managerial Capacities (MCR)**
   - MC8-Being effective communicators of business information
   - MC9- Create collaborative behaviors within a team
   - MC10- be able to persuade others
   - MC11- have a combination of technical, cognitive, and interpersonal skills that enable them to effectively coordinate and organize their teams.
   - MC12-well-participate within the organization and monitor business skills
   - MC18-encourage the staff to take responsibility for the team's performance
   - MC19-Interested in the long-term development and progress of our team member
4. **Market orientation (MKR)**
   - MK8-Business has a target to create the product competitiveness
   - MK9- There is good coordination across the inside of our business
   - MK10-Interparty, among sections/persons in our business shares information
   - MK11-In our business, there is coordination between divisions in formulating a marketing strategy
   - MK12-All parts in our business participate in the creation of added value for customers.

5. Technology innovation awareness (TIR)
- TI1-Our business introduced a new line of products/services
- TI2-Our business invested in R&D new line of products/services
- TI3-Our business used new technology in the production/service process
- TI4-Our business used new methods/procedures in production and service delivery
- TI5-Our business has marketed new products/services
- TI6-Our business market share has increased due to the new branding of our product

6. Finance sustainable growth (FSGE)
- FSG1-Sales volume increased
- FSG2-Profit volume increased
- FSG3-Total assets increased
- FSG5-Ability to repay creditors

7. Non-financial sustainable growth (NFSGE)
- NFSG1-Market share/size increased.
- NFSG3- Number of satisfactory customers increased.
- NFSG4-Reputation in public increased

8. Government Support (GS)
- GS1- Adequate infrastructure to run business as follows_ access to road, electricity, water, telephone, etc.
- GS2- License application and registration process
- GS3- Tax intensive for business.
- GS4- Favorable government policy.
- GS5- Maintain law and order situation.
- GS6- Skill training program organized by a government agency.
- GS7- Providing relevant information/knowledge that assists business.
- GS8- Creation of a local business environment that encourages business for growth/ development.

9. Private support (PS)
- PS1- Providing information on the market.
- PS2- Information support on consumer of my products
- PS3- Providing information on capital source.
- PS4- Providing information on technologies to support my business.
- PS5-Provide information on raw material sources.
- PS6- Information support on government regulations that are relevant to my business.
- PS7- Training support to improve technical abilities.
- PS8- Training support to improve interpersonal abilities.
- PS9- Training support to help understand the business.
- PS10- Training support to enhance personal productivity)