Research Article

Does Higher Startup Intention Leads to Higher Growth Performance? An Analysis into Factors Impacting Growth Performance of Indian Startups

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Abstract: Startup growth performance captures the process of going from a concept to scaling up operations, dealing with obstacles, and accomplishing major indicators of success. Resilience, adaptability, and strategic vision are necessary for the dynamic journey that is achieving startup growth performance. Entrepreneur’s startup intentions act as a beacon, influencing their strategic choices for business establishment. It establishes the standard for how the startup overcomes obstacles, evolves to the expectations of the market, and adapts its offerings which makes startup intentions a key factor for the growth performances of startups. The current study examines the impact of startup intentions, expected returns and intention for equity usage on the growth performances of Indian startups using Partial least squares structural equation modelling (PLS-SEM). PLS-SEM can be used for handling complex models with numbers of variables and indicators, making predictions, and conducting exploratory research. In addition, PLS-SEM does not require assumptions related to normal distribution of data. The structural model assessment shows that startup intention (STARTUP_INT) and intention to use equity (INT_EQT) have positive significant association with growth performances (GWTH_PER). Moreover, intention to use equity was found to be significant mediator in startup intention and growth performance relationship. However, there was negative and significant correlation between expected return (EXP_RTN) and growth performance of startups. The findings have crucial implications for entrepreneurs and policy makers, which can enhance Indian startup ecosystem.

Keywords: startup intention; entrepreneurial-intention; expected returns; equity; startup growth; startup performance; PLS-SEM

1. Introduction

Startups are vital for the growth of economies as they are generative source for employment and production in an economy. (Nigbor-Drożdż, 2022) highlighted that their contribution to the economic revolution is substantial. Startups are a creative type of company that are searching for a scalable business plan. However, successful establishment and growth of startups business are influenced by various factors like entrepreneurial and startup intentions, availability of finance, government supports and restrictions, state of economic development, global financial scenario, risk and returns, etc. The current study deals with the analysis regarding role of Startup Intentions, Expected Returns and intention for equity usage on the Startups’ performances in India.

With the growing world population, unemployment has become a major cause of concern for youth. It is widely accepted that efforts to address this issue are being made by launching new businesses and opportunities. Entrepreneurial and startup intent is essential because it propels innovation, growth in the economy, and advancement in life. People who aspire to be entrepreneurs are driven to spot opportunities, take measured risks, and add value. (Staniewski & Awruk, 2016) stated that the high unemployment rate and high failure rate of newly founded companies (which may deter potential entrepreneurs), it is crucial to keep looking for additional factors that can alter the relationship between business intention and business behaviour and realised that affirming one’s strong will, ability to solve problems,
and persistence in this regard can positively influence and lift the entrepreneurial spirit, which may then increase the likelihood that a potential entrepreneur will choose to work for themselves. (Martins et al., 2023) examined the factors like impact of peer, familial, institutional, and self-efficacy support that influence young entrepreneurs’ intentions to launch their own businesses. It is anticipated that these elements would inspire new graduates to launch their own businesses. The study’s findings demonstrated the beneficial effects of self-efficacy, peer support, institutional support, and family support on entrepreneurial intention. Furthermore, entrepreneurial intention is strongly influenced by risk-taking, entrepreneurial inventiveness, and understanding of entrepreneurial abilities.

By lowering reliance on established industries and settled business, startup intentions help in establishment of new business which enhances the resilience of economies. However, arranging the requisite finances for business establishment is the biggest challenge for an entrepreneur. (Ries, 2011) highlighted that even with their brilliant business concept and inventiveness, they needed a variety of resources to break into the market. Thus, the acquisition of financial resources becomes essential for launching an entrepreneurial endeavour. (Heller & Veihl, 2024) claimed that a startup’s ability to secure money is a crucial factor in determining its success, and that structural changes to the financing environment may have a significant impact on the development paths of emerging businesses. The authors observed that a significant portion of firms who receive seed funding are successful in obtaining additional funding in the initial years after the transaction.

An essential factor in determining the decisions and behaviour of entrepreneurs is the correlation between expected return on investment and startup intention. Expected return in broad terms can includes both possible monetary gains and non-monetary benefits like autonomy and impact, which has a significant impact on people’s willingness to take on the risks involved in launching a new business. (Achim, 2010) investigated that does a business with growth potential also have a strong return on investment? And confirms that the answer can be affirmative in certain condition only as it is only possible that under efficient working circumstances can the value added be realized. To put it another way, someone can engage in profitable endeavours without documenting growth, which lowers their worth. However, it is evident that any firm that has experienced consistent development over time needs to be both lucrative and efficient (i.e., have a high return on investment). All of these are possible only when the states of efficacy and efficiency are maximized, or optimized.

There is a complex and interdependent relationship between startup success, expected return, use of equity, and intention. Entrepreneurs are motivated to start their companies with the purpose of making a positive impact on society, gaining personal fulfilment, or making money. This entrepreneurial orientation helps to develop startup intention. Since expected return is a measure of the venture’s predicted profitability and performance, it is important in forming these ambitions. Whether via venture capital, angel financing, or personal savings, entrepreneurs frequently use equity sources to finance their firms and reduce their initial financial risks. Since using equity-debt mix for startup financing, promotes dedication and common objectives, by balancing incentives between investors and founders, in addition to providing the required capital. Efficient use of equity can impact startup performance by facilitating market expansion, resource acquisition, and strategic growth. The connection between them is multifaceted though, since a misaligned equity distribution or irrational expectations for returns can affect business dynamics, decision-making, and ultimately the startup’s capacity to succeed over the long run. Therefore, in order to maximize performance and long-term viability in highly competitive markets, a balanced approach to startup intention, expected return, and equity use is crucial.

2. Theoretical Framework and Hypotheses

Venture and startup development represent the dynamic process of transforming creative concepts into successful ventures. Every accomplishment, from launching goods and refining prototypes to obtaining first funding from venture capital firms or angel investors, is a monument to tenacity and adaptability. (Mergemeier et al., 2018) looked at the impact of various obstacles that nascent entrepreneurs face at different stages of the venture development process as well as on their intention to start a new venture, and concluded that obstacles to venture creation include funding issues. Also, external limitations were found to be fatal to a new entrepreneur’s ability to pursue their goal of starting a new company. Earlier, (Arafat & Saleem, 2017) found that main determinants of new company start-up in India are gender, perceived opportunity, self-efficacy (belief in one’s own ability, knowledge, and skills),
and risk perception. Moreover, every perceptual factor – aside from demographics – has a big impact on the desire to start a business. According to the research, people who see favourable prospects, don’t fear failing, and believe they have the necessary knowledge and skills are more likely to start their own business. (Birley & Westhead, 1994) investigate how British owner-managers explained their decision regarding company formation and found that they seem to be motivated by start-up triggers that are comparable to those of their international counterparts.

Venture and startup development is the perfect example of the combination of ingenuity, tenacity, and strategic vision needed to turn concepts into profitable businesses. The goals of creating a startup reflects a dedication to embracing chances, accepting difficulties, and taking calculated chances in order to create a significant impact. There are literatures that ponders the factors leading to such startup intentions. A gender-wise analysis was conducted by (Armuña et al., 2020) regarding entrepreneurial intention. Their analysis revealed that all of the participants have a common interest in starting their own business and that there is no significant difference in entrepreneurship intention between the male and female profiles in this STEM (science, technology, engineering, and mathematics) case study. Also, it was found that the competencies pertaining to the dedication to work on the business, the decision-making process, and the organization are among the aspects that are strongly associated with a higher intention to pursue entrepreneurship. (Yoo, 2014) mentioned that the intention to start a firm is considered to be the origin and the beginning point of economic progress. In the study, the author shown that the start-up intention was positively correlated with both the start-up self-efficacy and the intrinsic motivation, which indicated that in order to boost start-up intention, start-up self-efficacy and intrinsic motivation play significant roles.

Entrepreneurs need to have entrepreneurial and startup intentions before they conceptualisation and commercialisation of business entities. In previous literatures, the theory of planned behaviour is used to predict the factors affecting individuals in establishing start-ups in India, which highlights that potential individuals should have an attitude towards a new venture, which is influenced by social norms and supported by the access to opportunities and resources. In their empirical testing (Qureshi & Mahdi, 2014) show that individual entrepreneurship orientation has no discernible direct influence on students’ intentions to launch their own businesses. It will only matter if they are instructed on the principles of effectuation. Effectuation aims to present the best practical approach for reshaping these mindsets so that they may be used to businesses. A related study was conducted by (Eijdenberg et al., 2017) to examines how small business owners’ decision-making affects the expansion of their enterprises in an unpredictable environment, with a focus on effectuation and causality orientation and the results demonstrate that effectuation and causation orientations do not affect subsequent small business growth as small business owners that view the environment as uncertain are more effectuation orientated than causation oriented.

(Gani et al., 2022) examines the relationship between Asian persons’ entrepreneurial goals and perceptual factors based on the cognitive theory as the cognitive theory of entrepreneurship helps to develop both individual and collective vision. It was found that all perceptual characteristics are predictably significantly correlated with entrepreneurial intention and there was a strong positive correlation between opportunuity perception, self-efficacy, media attention, and role model. By examining the ways in which entrepreneurial and accomplishment needs would impact start-up intention, with a particular emphasis on the mediating functions of start-up motivation (Yoo, 2015) summarizes that by improving key psychological traits associated with entrepreneurs, such as achievement needs, entrepreneurship, and start-up motivation, entrepreneurs can enhance their startup intention. Later, (Jin, 2017) investigated the relationship between start-up intention and entrepreneurial performance based on positive psychological capital of young entrepreneurs and the findings indicate that start-up intention was positively impacted by the sub-factors of positive psychological capital, including hope, resilience, and self-efficacy. However, another sub-factor, optimism, did not have a significant effect on start-up intention. Also, it was discovered that start-up intention and the positive psychological capital of young entrepreneurs were strongly correlated.

Based on the primary survey of 3,400 respondents of the Adult Population Survey (APS) of Global Entrepreneurship Monitor (GEM) carried out in 2016 (Ali & Jabeen, 2022) assessed the intention of the adult population in India toward a startup project and concluded that people with start-up intention differ from those without such intentions on all demographic dimensions. Earlier, (Mamun et al., 2017) stated that prior to actually starting a company firm,
intention is essential as the foundation for pursuing self-employment and starting new ventures by offering empirical data on the variables impacting university students’ intentions to establish their own businesses and their launch preparations.

The driving force behind people starting and growing new businesses is their startup intention. Creating something new and valuable is the fundamental driving force behind entrepreneurial ambition, whether it be a new service, product, or even a paradigm shift in the market. Startup intentions frequently represent a larger desire to make a beneficial impact on society, be it through social impact, job creation, or technological advancement. An unwavering search for innovation and opportunity drives people to enter the risky yet lucrative world of startups.

Startups require equity money to develop and survive because it builds the basis for their transition from launch to operational scale. Equity financing exchanges funds for a share of the company’s ownership, as opposed to debt financing, which entails borrowing money that must be paid back with interest. For startups, equity financing is like a lifeline—it provides the essential financial resources that spur development and innovation. By bringing investors’ and entrepreneurs’ interests into line, this arrangement promotes a cooperative relationship aimed at long-term success. (Altass, 2023) looks at how capital structure (equity vs. Debt) is fascinating for small businesses, the investors and intermediaries that supply it, and the loan and private equity markets in which they operate through the lens of the growth cycle paradigm.

The most popular form of equity raising for young startups includes angel investment, venture capital financing, equity crowdfunding, government grants etc. (Hwang et al., 2023) examined the linkage between equity crowdfunding and performance of startups and revealed that equity crowdfunding provides substantial benefits that impact the survival and success of these companies. A similar conclusion was drawn by (Chemmanur et al., 2011) regarding Venture capital funding, by demonstrating that, overall, VC-backed companies are more efficient than non-VC-backed companies at all times. Moreover, this efficiency advantage of venture capital (VC)-backed enterprises results from screening as well as monitoring: VC-backed firms are more efficient than non-VC-backed firms both before and after getting financing; additionally, these firms’ efficiency grows more after VC financing.

In the startup ecosystem, venture capital (VC) funding is essential because it provides resources and vital assistance that spur innovation and growth. Venture capitalists mostly offer equity financing to startups as a means of investing in high-potential projects and taking part in their growth process while sharing in the rewards and risks of becoming an entrepreneur. (Croce et al., 2013) aimed to determine how much of the “screening” or “value added” that VC investors contribute to European venture capital (VC)-backed high-tech companies, which leads to their superior success by analysing the productivity growth of portfolio firms before and after the first venture capital round. The authors demonstrated that, prior to the first round of VC funding, productivity growth between VC-backed and non-backed enterprises is not statistically different; yet, significant variations are observed in the initial years following the investment event. It was also discovered that the portfolio firm is “imprinted” by the value-adding services that venture capital investors offer. (Jeong et al., 2020) This study looked into how a startup’s success and sustained growth are affected by its first round of venture capital funding. According to the data, a startup’s success increases with the timing of the VC companies’ initial funding offer. This suggests that early-stage VC investment results in sustainable growth.

Equity funding is essential not only for budding startups, but also for well performing startups like unicorns. (Lee & Nam, 2020) aimed to explore the possibility that unicorn firms that reach an exceptionally high value could delay their exit in order to secure additional funding and reap additional rewards and found that unicorn startups typically increase in valuation with longer funding periods. However, the institutional features of startups, we also added that VC investors contribute to European venture capital (VC)-backed high-tech companies, which leads to their superior success by analysing the productivity growth of portfolio firms before and after the first venture capital round. The authors demonstrated that, prior to the first round of VC funding, productivity growth between VC-backed and non-backed enterprises is not statistically different; yet, significant variations are observed in the initial years following the investment event. It was also discovered that the portfolio firm is “imprinted” by the value-adding services that venture capital investors offer. (Jeong et al., 2020) This study looked into how a startup’s success and sustained growth are affected by its first round of venture capital funding. According to the data, a startup’s success increases with the timing of the VC companies’ initial funding offer. This suggests that early-stage VC investment results in sustainable growth.

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The capacity to successfully navigate a competitive landscape, acquire investors, and provide value to customers is what makes a startup successful. Resilience, adaptability, and strategic vision are characteristics of high-performing startups that are necessary for attaining long-term growth and market leadership. The startup’s performance measures, such as revenue growth, client acquisition, market development, and operational efficiency, are closely linked to this expectation. Strong performance goes beyond financial measurements to create a vibrant startup culture. (Achim, 2010) claimed that the idea of business performance is extremely intricate as understanding the strategies employed to optimize worldwide business performance is highly beneficial to the strategic management of any organization. (Tasáryová & Pakšiová, 2021) supported the fact that nearly all economic choices, whether short- and long-term, at the macroeconomic and microeconomic levels, involve some degree of assessment of firm performance. (Kotane & Kuzmina-Merlino, 2012) listed a financial metrics which includes current ratio, the ratio of net working capital to sales, sales margin, debt to equity, financial cycle, maturing, and return on equity to be used as a financial indicator in Indian financial system for the analysis of business performances.

(Lee et al., 2016) empirically examines the influencing factors that affect their performance of technology driven startups and demonstrated that the entrepreneurial competence (technological, strategic management, creative, and team commitment) positively influences growth intention, and that growth intention positively influences both financial

and technological performance. The entrepreneurial orientation domain (EO) and the connections between it and the performance of business growth have been the subject of much research from both unidimensional and multidimensional viewpoints. (Omisakin & Adegoke, 2022) looked at the growth success of EO and New Zealand family businesses as well as the impact of the environment on the connection. It was discovered that environmental factors significantly moderate the association between EO and family business growth, and that EO dimension variables were a strong predictor of family business growth performance.

A multitude of elements impact the performance of startups, dictating the course of their expansion and triumph in the competitive marketplace. (Prasastyoga et al., 2018) examined the psychological mechanisms underpinning small business growth beliefs (SBGBs), or the anticipated outcomes of small business growth, with an emphasis on the predictive roles of perceived competence and regulatory focus. It was projected that those with a strong promotion focus would anticipate more good effects from small company growth, while those with a strong prevention focus would anticipate more negative effects. Furthermore, irrespective of their regulatory orientation, people who thought they were capable of expanding a business also held favourable growth beliefs, especially when it came to the emotional effects of growth.

(Frank et al., 2007) show that during the start-up and early business development stages, new businesses tend to separate themselves from their initiators that make it possible to sway the prospective pool of individuals who are eager to launch new companies based on traditional personality attributes (of founders). (Hay & Kamshad, 1994) is in the view that growth is of utmost importance for the majority of people managing SMEs, especially for non-owner managers leading SMEs, who prioritize growth more than owner-managers. (Ogbechi et al., 2020) claimed that small businesses in Lagos, Nigeria have exhibited and internalized the fundamental principles of strategic planning for sustainable business performance and it is significant that most SMEs employ other resources derived from technical capabilities and infrastructure more effectively than they do strategic planning, which is one of their most underutilized instruments.

In the end, a company’s startup performance is a measure of its vision and execution as an entrepreneur, determining its course for long-term success and market disruption. In the light of ever-expanding startup ecosystem, it is essential to study the interrelated impact among startup intention, equity intention, expected return and startup growth performance in India. Based on the previous studies, following hypotheses can be drawn to be tested:

H1: There exists significant relationship between startup intentions and growth performances of startups in India.

H2: There exists significant relationship between startup intentions and expected returns on investment for startups in India.

H3: There exists relationship between startup intentions and intention to use equity capital for startups in India.

H4: There exists significant relationship between expected returns and growth performances of startups in India.

H5: Expected returns mediates the relationship between startup intention and growth performances for startups in India.

H6: There exists significant relationship between intention to use equity and growth performances of startups in India.

H7: Intention to use equity mediates the relationship between startup intention and growth performances for startups in India.

3. Materials and Methods

The Materials and Methods are presented here. Ensure that all the data, materials, and protocols related to the article are made available to the readers. If the data set used for the study is large and cannot be included in the article, then ensure that it is deposited to publicly available databases or information, share the sources, and provide relevant information to access the data. Additionally, if the nature of the study requires ethical approval, like a study in animals or an experiment involving humans, ensure that the information about the ethical approval is provided.

The research’s methodological foundation consists of both general scientific and specialized scientific procedures that were selected with the study’s goals and objectives in mind. We used conceptual model framework for hypothesis testing and determining the
significance of structural relationships. This ‘material and methods’ sections aimed at enabling readers to comprehend the background and methodology used for the study. The research is quantitative in nature and experts’ opinions was incorporated in the process of questionnaire designing and data collection.

3.1. Variables’ Measurement

In the study, Startup intention (STARTUP_INT) is the main independent variable, while startup’s growth performance (GWTH_PER) is dependent variable. The study includes two mediating variables i.e., Expected return on Investment (EXP_RTN) and intention to use equity (INT_EQT). The data have been collected using five-point Likert scale (where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree and 5= strongly agree)

Scale for measuring STARTUP_INT has been adopted from (Guerrero & Urbano, 2014) which consist of four items like “I am ready to do anything to be an entrepreneur”, “I will make every effort to start and run my own business”, “I am determined to create a business venture in the future” and “My professional goal is to be an entrepreneur”. The startup intention scale shows good reliability, as the Cronbach’s alpha for STARTUP_INT is 0.89.

To measure expected return on investment (EXP_RTN), a four-item scale was adopted from (Appelhoff et al., 2015) which consist statements like “decisive for the project were considerations about potential returns”, “the selection of options for our project was mostly based on calculations of potential returns”, “we mainly considered the potential odds of the project” and “Decisions on capital expenditures were primarily based on potential returns”. The Cronbach’s alpha for EXP_RTN is 0.86 which shows it has good internal reliability.

To measure intention to use equity as a form of capital (INT_EQT), we adapted (modified as per need), three-items scale as used by (Koropp et al., 2014) which includes statements like “I intend to use equity for the next startup investment project”, “I will make an effort to use equity for the next startup investment project” and “I will try to use equity for the next startup investment project”. The scale was checked for its reliability, the Cronbach’s alpha is 0.85 which means the scale has good internal reliability.

The final endogenous construct i.e., the final dependent variable which is growth performance of startup (GWTH_PER) is measured using five-items scale adopted from (Yu et al., 2022) consisting of statements like “Compared to peers, in the last three years the startup firm has employed more”, “Compared to peers, in the last three years the startup firm has achieved more significant sales growth”, “Compared to peers, in the last three years the startup firm has seen faster growth in new products/service”, “Compared to peers, in the last three years the startup firm has seen more significant market share growth” and “Compared to peers, in the last three years the startup firm has seen more significant profit growth”. The reliability of the scale is good as Cronbach’s alpha is 0.91.

3.2. Sample

The analysis is based on the sample of 400 entrepreneurs (consisting of startup founder, co-founder, Chief Executive Officer (CEO), Chief Experience Officer (CXO) and Chief Financial Officer (CFO) who are well versed with the financial data of their startup. The data is collected using online questionnaire using simple random sampling technique via professional networking sites and emails.

3.3. Data Analysis Technique

This study has employed partial least squares structural equation modeling (PLS-SEM) technique to analyze the relationship between Startup intention and Growth performance of Indian startups. Being a non-parametric technique, multivariate normality assumption is not a necessary condition for running PLS-SEM. Since PLS-SEM offers greater predictive relevance, this technique was suitable for the analysis instead of CB-SEM (Hair et al., 2019). Since all the four constructs were reflective in nature, consistent PLS algorithm was run in SmartPLS 4 software (Ringle et al., 2022) for model estimation.

4. Results

The following results were obtained after running the PLS-SEM Algorithm, Bootstrapping and PLS predict procedure in the SMARTPLS 4 software.

4.1. Measurement Model Assessment

Table 1 summarizes the results of the investigation into the construct’s indicator reliability, internal consistency reliability, convergent validity, and discriminant validity.
Reliability is concerned with consistency, while validity is concerned with accuracy. Internal consistency is measured using Cronbach’s Alpha, and according to Hair et al. (2012), all constructs have Cronbach Alpha values of more than 0.7, which is considered satisfactory. Each item’s factor loadings were looked at in order to evaluate convergent validity. Furthermore, it was discovered that the Average Variance Extracted (AVE) was higher than 0.5, indicating additional support for convergent validity.

Table 1. Reliability and validity analysis of constructs

<table>
<thead>
<tr>
<th>Construct</th>
<th>Factor Loadings</th>
<th>Cronbach’s Alpha</th>
<th>Composite reliability (rho_a)</th>
<th>Composite reliability (rho_c)</th>
<th>AVE</th>
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<tbody>
<tr>
<td>Startup Intention</td>
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<td>Expected Returns</td>
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<td>Intention to use equity</td>
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<tr>
<td>Growth Performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GWTH_PER_1</td>
<td>0.754</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GWTH_PER_2</td>
<td>0.911</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GWTH_PER_3</td>
<td>0.878</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GWTH_PER_4</td>
<td>0.903</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GWTH_PER_5</td>
<td>0.857</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Discriminant validity among reflective constructs has been checked before analysis of structural relationships, as evidenced by the diagonal values are greater than other values in respective columns as shown in Table 2, which is a condition for the Fornell-Lacker Criterion, used for assessing discriminant validity. In addition, heterotrait-monotrait ratio (HTMT) was also looked in the software, which also ensures about discriminant validity establishment.

Table 2. Discriminant validity- Fornell-Larcker criterion

<table>
<thead>
<tr>
<th></th>
<th>EXP_RTN</th>
<th>GWTH_PER</th>
<th>INT_EQT</th>
<th>STARTUP_INT</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXP_RTN</td>
<td>0.837</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GWTH_PER</td>
<td>-0.297</td>
<td>0.862</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INT_EQT</td>
<td>-0.102</td>
<td>0.442</td>
<td>0.877</td>
<td></td>
</tr>
<tr>
<td>STARTUP_INT</td>
<td>-0.211</td>
<td>0.567</td>
<td>0.313</td>
<td>0.865</td>
</tr>
</tbody>
</table>

4.2. Structural Model Assessment

The bootstrapping process is used in SMARTPLS 4 to construct the inner or structural model. Using a structural model, path-coefficients, t values, and p values are evaluated to test hypotheses. In order to compute path coefficients and their significance for hypothesis testing, bootstrapping was carried out using 10,000 subsamples (at a 5% significance level). The significance of the direct, indirect, and total impacts was computed on the basis of bias-corrected confidence interval. Figure 1 displays the bootstrapped graphical output.
In Table 3, Summary of hypothesis table is shown based on the bootstrapping result. This table presents the results of a statistical analysis testing various hypotheses regarding relationships between different variables. Based on p-value, $H_1$, $H_2$, $H_3$, $H_4$, $H_5$, $H_6$, $H_7$ was accepted, while $H_5$ stands not accepted.

Table 3. Summary of hypothesis results.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Relationship</th>
<th>Coefficient</th>
<th>T-Statistics</th>
<th>P-values</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_1$</td>
<td>STARTUP_INT -&gt; GWTH_PER</td>
<td>0.440</td>
<td>8.650</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>$H_2$</td>
<td>STARTUP_INT -&gt; EXP_RTN</td>
<td>-0.211</td>
<td>2.710</td>
<td>0.007</td>
<td>Accepted</td>
</tr>
<tr>
<td>$H_3$</td>
<td>STARTUP_INT -&gt; INT_EQT</td>
<td>0.313</td>
<td>6.629</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>$H_4$</td>
<td>EXP_RTN -&gt; GWTH_PER</td>
<td>-0.175</td>
<td>2.777</td>
<td>0.006</td>
<td>Accepted</td>
</tr>
<tr>
<td>$H_5$</td>
<td>STARTUP_INT -&gt; EXP_RTN -&gt; GWTH_PER</td>
<td>0.037</td>
<td>1.623</td>
<td>0.105</td>
<td>Not Accepted</td>
</tr>
<tr>
<td>$H_6$</td>
<td>INT_EQT -&gt; GWTH_PER</td>
<td>0.286</td>
<td>4.778</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>$H_7$</td>
<td>STARTUP_INT -&gt; INT_EQT -&gt; GWTH_PER</td>
<td>0.090</td>
<td>3.386</td>
<td>0.001</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

### 4.3. Predictive Power Analysis

Based on the Q² values, the $PLS_{predict}$ Procedure in SMARTPLS 4 software was used to analyse the sample predictive power as suggested by Shmueli et al. (2016). Also, $PLS_{predict}$ out-of-sample predictions can be used by researchers to evaluate the predictive power of their model (Hair et al., 2019, 2022). The results of the predictive power analysis are summarised in Table 4.

The Q² value in $PLS_{predict}$ compares the prediction errors of the PLS path model with simple mean predictions values. When the prediction errors produced by the PLS-SEM model is compared to those of the naïve benchmark linear model, the PLS model has generated lower error for all variables, indicating a good predictive power. Furthermore, all measurable and latent variable Q² values are greater than zero, indicating that the sample has out-of-sample predictive potential.

Table 4. $PLS_{predict}$ Result Summary

<table>
<thead>
<tr>
<th>Prediction Error Comparison</th>
<th>Items</th>
<th>$Q^2_{predict}$</th>
<th>PLS-SEM_RMSE</th>
<th>PLS-SEM_MAE</th>
<th>LM_RMSE</th>
<th>LM_MAE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXP_RTN_1</td>
<td>0.037</td>
<td>0.459</td>
<td>0.283</td>
<td>0.458</td>
<td>0.277</td>
<td></td>
</tr>
<tr>
<td>EXP_RTN_2</td>
<td>0.016</td>
<td>0.574</td>
<td>0.311</td>
<td>0.578</td>
<td>0.320</td>
<td></td>
</tr>
</tbody>
</table>
A well-constructed model with predictive power accuracy is essential for universal applicability of research outcomes. The structural equation modelling (SEM) can be used when examining and validating intricate relationships between variables, both latent and observed, and when conventional statistical techniques such as regression analysis may not be adequate to fully capture the intricacy of the relationships being studied. However, it is crucial to remember that SEM has limitations and that sample size, data quality, and model assumptions must all be carefully taken into account before data analysis and interpretations.

5. Discussion

Discussions regarding startup growth performance and factors that significant and non-significant impact on growth is pivotal for the development of startup ecosystem. The findings enable entrepreneurs to take financial decisions which are backed on rational ground. Also, the policy makers may formulate and execute the policies that are essential to foster growth of startups and also for the development and expansion of conductive business ecosystem in India.

5.1. Findings of the Study

Prior to the model’s execution, Common Method Bias (CMB) was checked that may arise when respondents’ data is obtained using a single method such as an interview or questionnaire. Presence of such bias can make the result inaccurate, skewed, or unreliable because respondents could be influenced by the same variables or provide answers to questions in the same way when collected on Likert scale. Thus, a complete collinearity assessment was carried out before model assessment. The data was determined to be free from CMB since none of the constructs’ inner VIF values were found to be greater than 3.3 when the constructs were checked against a random endogenous variable (Kock, 2015).

In the measurement model assessment, the factor loading of each item regarding their respective construct was greater than 0.7 which means the items were true representative of their respective construct. The data was checked for composite validity and discriminant validity which was found satisfactory. Next, we check for effect sizes $f$-square for all structural model relationships with GWTH_PER.

The effect size of startup intention (STARTUP_INT) and intention to use equity (INT_EQT) was found to be moderate, with $f$-square of 0.294 and 0.129 respectively and effect size of expected return was rather weak with $f$-square of 0.051 (Cohen, 1988). The assessment of Model’s Explanatory power is done by running PLS-SEM Algorithm, by examining the $R^2$ values of the final endogenous latent variables that is GWTH_PER which is 0.428 which as a rule of thumb is found to be greater than 0.3 when the constructs were checked against a random endogenous variable (Kock, 2015).

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Hypothesis was tested based on structural model assessment. The result shows that $H_1$, $H_2$, $H_5$, $H_6$, $H_7$ was accepted, while we failed to accept $H_3$. An examination of beta
coefficient reveals that startup intention has positive and significant impact on intention to use equity and also on growth performance of Indian startups. However, impact of startup intentions on expected return was found to be negative although significant. This may be due to the fact that individuals with high entrepreneurial and startup intentions are more motivated by non-financial returns (like reputation, service motive, self-actualization etc.) than financial returns from startups. Also, expected return has negative and significant impact on startup’s growth performance. The likely reason for such negative relation may be due the high expectation of startup founders/entrepreneurs regarding return from their business but in reality, the business may show lower performance as it is in its early life cycle stage. Moreover, expected return does not mediate the relationship between startup intention and growth performance. An important conclusion can be drawn regarding intention for equity usage in startup business as intention to use equity has significant positive relationship with growth performances. Also, equity intention significantly mediates the relationship between startup intention and growth performance. However, the strength of mediation was moderate as Variance Accounted For (VAF) as the ratio of indirect effect to the total effect was 65.85% (i.e., 0.027/0.041).

In addition to hypothesis testing, PLS\textsuperscript{Predict} procedure in SMARTPLS4 was used as it is crucial aid in model validation, evaluates its predictive power, assesses out-of-sample performance, establishes the significance of each variable, and enables well-informed decision-making based on predictive analytics data. The outcome shows that the sample model has moderate predictive power and the findings can be generalised.

5.2. Implications of the Study

This study adds to the current limited literature on growth performances of Indian startups and factors affecting it. The current study has been one amongst the pioneer researches to investigate the mediating role of expected return and intention to use equity capital between the relationship of startup intention and growth performance. The finding of this study reconfirms the previously established notion that startup intention and equity usage intention has positive influence on growth performance. However, surprisingly expected return was found to be negatively associated with growth performance. The most logical reason for this, in spite of high expectations startups generally depicts low financial growth in their initial phase. By examining the mediating relationship, intention to use equity was found to be a significant mediator. Thus, it is suggested that by employing more and more equity in the capital structure, firm can enhance their growth performance. It is also suggested that policy makers can offers programmes for the development of startup intent among youth populations as it would lead to tackling the unemployment.

5.3. Limitations and Scope for Further Research

Despite of its theoretical and practical implications, the current research has several limitations. First, more variables should be included in the model estimation as there is scope for problem of omitted mediator-variable in the study which is evidence by the presence of significant direct path-coefficients but one specific indirect path coefficient (representing mediating relationship) was found to be insignificant. Secondly, unlike previous researches, the analysis shows negative coefficient for relationship between expected return with startup intentions and growth performance. Further studies should investigate the causes for such negative relationships. Lastly, the study is based on data collected from varied class of entrepreneur residing across nation and belonging to different business sectors. Thus, a more region or geographic-specific and sector-wise analysis could be conducted as rate of return (ROR) and debt-equity mix varies industry to industry.

6. Conclusions

The decision to launch a business is frequently preceded by the act of actually taking entrepreneurial action. Startup intentions research offers insights that are useful for understanding entrepreneurial behaviour, hence it is researched in the context of economic development and entrepreneurship study. A deeper analysis of the same can reveal both the obstacles and the enablers of entrepreneurship. Having this knowledge is essential for creating laws and initiatives that promote entrepreneurship and lower obstacles to entry. The outcomes of present research suggest the important role of equity capital which can be in form of founder’s own money, love money, angel investment, venture capital funds etc., during the initial stages of startup lifecycle. It is also suggested that in majority of cases,
entrepreneurs have unrealistically high expectations regarding returns.

Since the ultimate goal of every business is to achieve growth, exploring the various environmental dynamism that encompasses the startup is essential to achieve the growth targets. From the policymakers and planners view point, such researches are important for framing suitable laws. Moreover, based on these outcomes, curriculums can be designed for igniting the growth-pace of startups in India. From a scholarly standpoint, research on startup goals advances the theories and frameworks used in entrepreneurship studies. It improves our knowledge of the dynamics of new venture development, decision-making under uncertainty, and entrepreneurial behaviour.

In conclusion, there is a dynamic and symbiotic relationship between startup intention and startup firm performance. In an alternate way, strong startup performance generates larger financial returns, raises valuation, and boosts investor confidence which may further encourage entrepreneurs to take such business endeavours. It is suggested that entrepreneurs must have a realistic expectation regarding financial returns based on the size and age of their startups. Also, by employing equity capital instead of debt capital may help to accelerate the performance and growth of startups in their initial stages. Policy makers can lead to generating startup intentions in the prospective entrepreneurs by offering programmes and financial aids which may ultimately leads towards fostering a dynamic and healthy startup ecosystem in India.

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**References**


