SCHOOL OF GRADUATE STUDIES

Assessment of Capital Structure of Startup Firms: The Case of Ethiopian Startups

A Thesis Submitted to the School of Graduate Studies in Partial Fulfillment for the Requirement of Master's of Business Administration Degree

By:
Biruk Haregwoin
(SGS/0077/2013A)

Advisor:
Abebaw Kassie (PhD)

ADDIS ABABA, ETHIOPIA
May, 2022

Saint Mary's University

School of Graduate Studies

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DECLARATION

I, Biruk Haregwoin, the undersigned declare that this thesis entitled "Assessment of Capital Structure of Startup Firms: The Case of Ethiopian Startups" is my original academic research. This paper has not been submitted in fulfillment of any academic work, at any level. All sources used as references for this study have been duly acknowledged and cited. All the research procedures conform with the standard and regulations of Saint Mary's University.

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Submission Date: _____

Program: Master's of Business Administration

Graduate Studies, College of Business

APPROVAL PAGE

Saint Mary's University

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By:

Biruk Haregwoin

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LIST OF ABBREVIATIONS

APA	American Psychological Association
EBIT	Earnings Before Interest and Tax
ICT	Information and Communications Technology
IPO	Initial Public Offering
MSMEs	Micro, Small and Medium-sized Enterprises
PE	Private Equity
POT	Pecking Order Theory
R & D	Research and Development
SMEs	Small and Medium-sized Enterprises
SNNP	Southern Nations, Nationalities and People's Region
SPSS	Statistical Package for Social Science
UK	United Kingdom
USA	United States of America
USD	United States Dollar
VC	Venture Capital
3Fs	Founders, Friends, and Family's Capital

ABSTRACT

Startup firms are part and parcel of the world we live in today. Consequently, the startup space is gaining strong attention and support from policy makers, government bodies, scholars, investors, and financial institutions in the rest of the world, but little is investigated and done in the case of Ethiopia. So long as research is conducted to bridge a gap in scholarship domain, this work aimed at coming up with authentic study of startups in relevance with their sources of finance and capital structure. The research was conducted on 64 Ethiopian startups registered at Yegara.org. The research employed a descriptive research design. And mixed research approach that combined questionnaire and semi-structured interview primary data gathering instruments was used. The study found that startups fundamentally use internal sources of finance of founder/s savings and family and friends' capital, and show similar finance patterns, regardless of their startup characteristics. It has also been identified that there is a severe lack of startup finance supply in the country and also limited experience of obtaining external finance while there is a strong need for them. When it comes to external finance type preferences, startups showed preference for having equity finance over debt finance. The reasons for preferring equity finance instead of debt were accessibility, non-financial benefits accompanied, and the appropriate investment terms and conditions when compared to debt finance. Moreover, three of the four startup characteristics showed a significant relationship with debt/equity preference. Based on these findings, it is recommended that Ethiopian startups should be provided with external sources of finance tailored to meet their characteristics and conditions, and the government and other key stakeholders shall work jointly to create suitable startup finance scheme and environment.

Keywords: Startups, Debt Finance, Equity Finance

CHAPTER 1: INTRODUCTION

1.1 Introduction

This introduction chapter discusses and holds the backdrop of the research work. It includes the background of the study, statement of the problem, research questions, research objectives, significance of the study, scope of the study, and organization of the study parts consecutively.

1.2 Background of the Study

A startup is a company setup to explore for repeatable and scalable business model (Blank, 2010). Startups operate to deliver new products and services in extremely uncertain market conditions (Reis, 2011). They are mostly but not necessarily associated with high technology products such as software (Calopa et. al., 2014). Many consider all companies in their early days of establishments and in technology arena to be startups. According to Paul Graham (2012), a notable entrepreneur and venture capitalist, being newly formed or technological alone could not lend a company such a name; instead, a venture must have a fast growth design attribute to be deemed a startup.

Startups contain astonishing growth potential, yet also experience unanticipated and repeated failures (Slavik, 2019). Proneness of startups to failure is enormously significant at a global scale. Ninety-percent of startups founded die out according to voluminous statistics (Forbes, 2022; Kalyanasundaram et. al., 2021; Startup Genome, 2011**)**. Even though that is the case, the few successful startups introduce massive influence to the market. Google, Facebook, Uber, Airbnb, Dropbox and Xiaomistartup companies rose to worldwide prominence in their respective industries and managed to increase their triumphant enterprise values by tens of billions of dollars shortly (Lee & Kim, 2019). Similarly, Interswitch, Flutterwave, Andela, Chipper Cash, Opay, and Wave startup companies have been able to obtain a unicorn status more recently in Africa.

The high failure rate that lies in the unique business model, brisk scaling, and uncertain market reception make startups find it arduous to access finance globally. By and large, acquiring the money needed to bring startup ideas to life is challenging to secure (Moogk, 2012). Difficulty of

raising startup capital intensifies in nations that have weakened business landscape characterized by poor legal framework and reserved financial system (Korosteleva & Mickiewicz, 2011).

Broadly, finance sources can be divided into two: equity and debt (Rossi, 2014).Debt finance entails borrowing funds from creditors with the condition of repaying the principal and the interest at a specified time. According to Crowdfunding-in-Ethiopia (2020) document, just as in many countries, banks and institutional financiers chiefly focus on providing large and low-risk loans to established companies in Ethiopia. Low risk appetite, capital limit requirement and prohibitive transaction costs hold back banks from offering loans to MSMEs.

Equity is an umbrella term encompassing various financial instruments that share profits or losses of a business (Gilligan & Wright, 2020). Equity finance pervasively consist both private equity and public equity. But in this research the entrepreneurial finance typologies of private equity such as angel investment, venture capital, accelerators, crowd funding, and the likes are to convey it. Private equity is the provision of equity capital to unquoted companies with high growth potential by financial investors (Dziekonski & Ignatiuk, 2015). Private equity targets consumer-related sectors in Ethiopia to exploit the increasing urbanization and nascent middleclass (AVCA, 2015). According to Disrupt Africa (2021), a combined 2,038,627,500 USD was raised by 564 African startups in 2021. As to the report, only 4.8% of startups were financed through some form of debt while the overwhelming majority coming from equity finance on the continent. From these, four Ethiopian startups acquired 3,775,000 USD finance in 2021. The raised capital for Ethiopian startups was 63.1% higher than the previous year's.

Startups are little companies but contribute vastly to economy in terms of creating jobs and paving the way for innovation and competition (Boyarchenko, 2020). Ethiopian technology-enabled startups such as Ride, Feres, and Deliver Addis have shown remarkable results in providing convenient ride-hailing and on-demand delivery services of late. These firms also made the sizeable unemployed to have job opportunities and proved the possibility of local wealth creation through entrepreneurship. An economy needs proliferating startups that ascend into large corporations so as to fuel growth (Kalyanasundaram, 2017).Understanding this,

governments are observed encouraging startups to stimulate their growth and increase employment rates (Al Sahaf & Al Tahoo, 2021).

Building a startup ecosystem and creating a culture that promotes entrepreneurship are instrumental elements for achieving a startup revolution (Singh, 2020).Startup ecosystem includes startups, finance providers, public administrators and regulatory bodies, universities and more. Governments play a pivotal function for the establishment of new ventures; government plans, policies, initiatives, and strategies affect entrepreneurs (Dutta, 2016). Ethiopia lacks a conducive startup ecosystem that created a dearth of startup businesses as opposed to lots of countries. As to Startupblink.com (2021), Addis Ababa, the only mentioned city from Ethiopia, ranked 495th in the top 1000 cities for startup success.

In 2020, a Startup Act draft document has been released in Ethiopia. If this draft passes to policy, a National Startup Business Council is to be formed. Consequently, startups will get an innovation business label and enjoy privileges of innovation funding, financial and tax-related incentives, guarantees, legal assistance, administrative support and beyond (Startup Business Proclamation, 2020). The fund will obtain revenues from the government grants, budgets, loans, and other external donations (TechinAfrica, 2021). The proclamation also puts into account startup investors as well as ecosystem builders. It states that the Ethiopian Investment Commission with the Investment Board may reduce the minimum investment capital set for foreign direct investment for the sake of startups. At present, the policy in place requires a foreign investor to allocate a minimum of 200,000 USD to enter Ethiopia for a single investment project (UNCTAD, 2020).

Moreover, National Bank of Ethiopia is assumed by a directive to govern angel investment, venture capitals, and private equity development (Startup Business Proclamation, 2020). There is no locally raised private equity fund currently in Ethiopia because of a restrictive legislation (Bekele, 2020). Receiving funds from public and investing the raised capital is considered as a banking business, and a company must earn a bank license to involve in such practice (Banking Business Proclamation, 2008). Private equity and venture capital funds operating in Ethiopia are incorporated overseas and only have subsidiary offices in the country to bypass the limiting

legislation. In general, the Startup Act is anticipated to prepare a hospitable ecosystem for startups' blossoming upon its official effectiveness.

This research with the title Assessment of Capital Structure of Startup Firms: The Case of Ethiopian Startups has been conducted on startups that have listed themselves on the Yegara.org website, created for startups and other ecosystem participants to meet. The website came into existence by the collaboration of the Ethiopian government and the MasterCard Foundation. The website is aimed at providing startups access to visibility from investors, the general public, and other parties. Ethiopian startups put their founders' profiles, brief business plans, total financial need and contact information, so that interested parties could reach them effortlessly. The formal registration and information that could be found from the website gave rise to the selection of this platform, and startups from the website were included for this research to ascertain the overall startup capital structure make up.

1.3 Statement of the Problem

Financing is vital for startups (Hermann & Stahl, 2021). Businesses require finance to realize what is conceived in idea. Nonetheless, contrary to this notion, Ethiopian companies are at a disadvantage when it comes to access to finance. Debt and equity financiers are found in rare availability and in limited operational flexibility across the country for bolstering entrepreneurial practices. Myers & Majluf (1984) developed a hierarchical capital structure theory: the Pecking Order Theory. This theory hypothesizes that firms are driven by information asymmetries and transaction costs to use internally generated capital prior to seeking more expensive external sources of finance (Ullah et. al., 2010). In economics and contracts context, information asymmetry is present when one party has more or better information than the other (Minnola et al., 2013). According to the Pecking Order Theory, information asymmetry stands for the greater knowledge only the owners-managers (insiders) are expected to have about the firm than any other external debt or equity finance providers (outsiders). Lack of knowledge of internal affairs of a company thus will force external financiers to just speculate and undervalue the firm for their own advantage. As a result of information asymmetry, debt providers will require debt security collateral to extend finance. Similarly, equity financiers will ask for higher ownership stake and under-price the firm's share for the finance to be committed. Debt is cheaper than equity since it does not contain risk of agency cost as investor financing, hence firms select a

standard Pecking Ordered funding source beginning from internal source, then debt, and equity as a last resort (Mendez-Morales, 2019).

Startups which are characterized by innovativeness need to expend capital and time for new product/service R&D and testing, without going to market soon after the commencement of their operations, meaning without being profitable. It has also been argued that financial constraints should severely affect R&D investments due to the high degree of uncertainty and risk of innovation output success (Bartoloni, 2011). And again, innovative companies seldom possess tangible assets. Tangible assets such as equipment and machinery are requirements for bank funding, making the collateral capability of firms essential for debt (Mendez-Morales, 2019). As a result, ample researches evidenced that the capital structure of R&D intensive firms showed significantly less debt than in the case of other companies (Kedzior et al., 2020). More equity and fewer debt financing were found to be the sources of finance on firms with higher degrees of innovation inputs which exhibit uncertain outcomes (Mina & Lahr, 2018). This has been the case not only for the financial provision aspect of equity investment but also for the value addition that comes with angel and venture capital investors, that could support startups in non-financial terms of experience, networks, publicity, and myriad other skills. Such results shift the preference of capital from debt to equity and been called Reversed as well as Altered Pecking Order Theory by various researchers (Hogan & Hutson, 2004; Paul et. al., 2007; Ullah et. al., 2010; Vanacker & Manigart, 2010)

There is an academic research void about startups in general and their sources of capital in particular in Ethiopia. More than any time now, offering a startup capital and an enabling environment seems mandatory. The global startup ecosystem has a worth of more than 3.8 trillion USD (Startup Genome, 2021). In avoiding research and practicality regarding startups, Ethiopia is missing out from this ever-growing economic treasure.

In addition, the ability of accessing financial resources is an essential catalyst of entrepreneurship and firm growth (Mina & Lahr, 2018). The distinction between startups that possess dominant intangible assets, innovativeness with R&D and market testing expenditures, non-legal registration, risky and long term profitability but short term high cash burn rate character and

those with tangible assets, less innovative business model, and rapid positive monetary returns has not yet been made in Ethiopia. Consequently, all companies are treated the same by investors, debt finance providers, and other stakeholders in Ethiopia. The innate peculiarities of startups are not widely understood following the lack of understanding of the space, so the startups often face difficulties accessing finance. This is a challenge that must be tackled in time so as to underpin startup driven entrepreneurship and innovativeness. This research work strived to assess the sources of startup finance acquired by the sample startups, and explain whether the startups have sourced capital from internal sources, such as founder/s savings or from family and friends, or external sources of debt finance, equity-based investments, grants, or others. By asking the sample owner-managers where the finances have been from and also examining the capital availability, a context is provided about Ethiopian startups' sources of capital.

Furthermore, innovative and scalable startups' capital structure decisions have not been studied adequately in Ethiopia. Startups consider both financial and non-financial aspects when they decide on capital structure. This study identified the debt or equity preference by the sample startups. And following that, the patterns of finance sources and debt or equity (Pecking Order or Reversed Pecking Order) preferences are discovered, along the startups dichotomous characteristics of asset type, startup stage and profitability status, legal company formation or not legally registered, and the need for R &D and market testing or otherwise. Moreover, the reasons for the debt or equity preference by the sample startups were also identified. This research also assessed startup characteristics and the relationship they have with debt/equity preference. Through all these, a thorough understanding could emerge about this often disregarded and ignored startup space. Since the startups may be just starting out and not been involved in financing practices, the research wanted to discover the sources of finance and when the question was posed about Pecking Order, preferences rather than actual finance acquiring experiences have been taken into account.

1.4 Research Questions

The research was guided by the following four basic research questions:

1. What sources of financing do the startups use?
2. Which external financing methods the startups prefer to acquire from debt and equity finance?
3. What are the reasons of the startups for preferring debt or equity finance over one another?
4. Is there a relationship between startup characteristics and debt/equity finance preference?

1.5 Objectives of the Study

1.5.1 General Objective

The general objective of this research was to assess the capital structure and sources of finance of Ethiopian startups registered at Yegara.org.

1.5.2. Specific Objectives

The specific objectives of this research work are:

- To assess Yegara.org startup registrants' sources of financing use/d at their initial periods and in their lifetime that spanned until the conduction of this research.
- To assess Yegara.org startup registrants' preferred external finance method from debt and equity finance.
- To discuss Yegara.org startup registrants' reasons behind the preference of debt or equity based finance.
- To assess the relationship patterns of Yegara.org registrant startups characteristics along debt or equity finance preferences.

1.6 Significance of the Study

This research has a potential significance of spotlighting at the type of finance in demand by Ethiopian startups. It will provide an insight on startups' characteristics and the source and preferred finance types and means. As a result, finance providers, both potential and currently involved, such as banks, microfinance institutions, equity financiers, granters, and other stakeholders in the ecosystem will benefit from such percept of Ethiopian startups' financial source standing and their finance type preferences. Strategies and plans prepared for startups by these finance suppliers and related others could be aided and tailored with the help of this research accordingly. This research is also geared towards complementing the existing knowledge gap and researchers who will conduct further studies in the area.

1.7 Scope of the Study

The research has been conducted on Ethiopian startups registered at Yegara.org. As of the conduction of this research, the platform had 77 registered startups from various sectors. Yegara.org is a website portal designed for connecting startups and potential investors in Ethiopia. It can be considered as the only organized place to find the country's several startups along with the necessary business plans, founders' backgrounds, capital needs, and contact information details. A representative sample size of the startups was included for data gathering. The startups from this platform qualify as startups in having an innovative business model and accelerated growth prospect. These are the reasons for the selection of the platform that holds the startups and the projects listed. A descriptive research design has been used and a mixed research approach that combined quantitative and qualitative methods was utilized.

Startup firms' dichotomous characteristics of legal status, asset type, fairly intense R&D and market testing status, and stage and profitability status were assumed as variables that show different patterns on the other capital structure variables of internal sources and external sources of finance that hold equity finance, debt finance, and others. Researches made with similar variables were included in the empirical literature part to provide a well rounded picture of what has been studied in academia. The period of conducting this study is in the year 2022 and the actual data gathering instrument distribution and collection took place from March 1 to April 25, 2022.

1.8 Organization of the Study

This research is divided into five chapters. The first chapter holds the introductory and problem justification parts of the research. The second chapter is devoted to the literature reviewing section. The third chapter encompasses research design and methodology portions. The fourth chapter contains data result presentation, analysis, interpretation and discussion. The final chapter, which is chapter five, holds the summary, conclusion and recommendation parts.

CHAPTER 2: REVIEW OF RELATED LITERATURE

2.1 Introduction

The literature review part discusses the theoretical and empirical literature done in the area of startup finance. The researcher has taken Pecking Order Theory as it could sufficiently be used for assessing the capital structure decisions of startup firms. The theoretical literature part elaborates the Pecking Order Theory and also explains the contrasting, Reversed Pecking Order Theory, views that have been made public in innovative companies' context. Moreover, entrepreneurial finance providers are going to be discussed in-depth. The empirical literature justifies the theory and back the two opposing theories by empirical research findings conducted on the area so as to provide a perspective on what has been made in scholarship. At last, the research gap observed in academia will be discussed. The structure of the literature part is as follows: theoretical literature, empirical literature, and research gap.

2.2 Theoretical Literature

2.2.1 Startup Characteristics and their Lifecycle

Startups can be defined as high growth, innovative, and more often than not technology involving entrepreneurial ventures. In the case of startups, a mere idea develops into a high growth company and a successful startup would contain main entrepreneur and a team of colleagues with complementary skill sets (Markova & Perkovska-Mircevska, 2009). Startup companies create impact and through innovation and technology bring disruptive ideas to change lives, works, and communications (Magalhaes, 2019).

Startups and SMEs are two different kinds of entities. Ojaghiet. al., (2019) states that startups are not small versions of big companies. At the surface level startups and SMEs may seem small in organizational size. Nonetheless, SMEs are the ones that can be considered as small versions of big organizations for demonstrating completeness on their own. Ojaghiet. al., (2019) conversely consider startups as incomplete in terms of organizational structure, operations to be negligible, more time-constrained than SMEs, and for extremely challenging idea-to-market cycle. Moreover, according to Van Le & Suh (2019), startups set themselves apart from traditional businesses as they can grow quickly and since their operations and product/service provision are not confined to the national borders. By the same token, the paper also states that very large

market size can be addressed by startups whereas traditional businesses target and serve specific and smaller market size. The growth, border-crossing operation and reach to larger market size are imminent due to startups' strong utilization of technology and the internet. Most startups emerge from the ICT sector and the dotcom boom is mentioned as a reason for such development (Salamzadeh, 2018).

Innovation and technological aspects of startup firms differentiate them from micro, small and medium sized enterprises (MSMEs) and other less innovative organizations. Startups exhibit R&D and innovative intensive features, and these practices do not start to make revenues and profits in the short run. Financing of innovative projects might take years prior to generating financial profits, and firms that strive to come up with new outputs through innovation may not have the internal resources to cover the cost of the investment (Bartoloni, 2011). Lots of new startup companies in high-tech industries are characterized high risk for their uncertainty of returns, lack of considerable tangible assets, and lack of operations track record (Wang & Zhou, 2004). Such innovative and high growth companies rarely possess tangible assets that could be collateralized and be used to reel in debt financing. The unique assets include patents, intellectual property, trademarks, and human capital, which are intellectual capitals that can be classified as intangible assets.

Startups have their own lifecycles and go through common stages. As to BalaSubrahmanya (2017), the lifecycle of startups is categorized into three: Emergence, Survival, and Growth.

- **Emergence Stage**-As Kalyanasundaram et. al., (2021) explain, emergence stage is a stage whereby Proof of Concept (POC), a prototype, and a Minimum Viable Product (MVP) get developed; the startup is not generating revenue at this stage, instead it will only be making a strenuous effort to attain a product market fit.

- **Stability Stage:** is a stage in which the startup begins to work on keeping paying customers with steady product/service delivery, where the startup operates below break-even in earning revenue but incurring losses, according to Kalyanasundaram et. al., (2021).

- **Growth Stage:** Kalyanasundaram et. al., (2021) define this stage as the startup firm will have a firm standing and will focus on expanding market share. Scale of operations and market expansion are the benchmarks at this stage. The company will pass break-even point and will be acquiring decent profits.

2.2.2 Capital Structure Decisions and the Pecking Order Theory (POT)

Capital structure plays an integral role for firms' business strategy and engenders crucial implication on firm behavior (Sanayl & Mann, 2010). Firms take their capital structure decisions seriously understanding its ability of determining the fate that the future holds. Capital structure refers to debt and equity mix of finance which firms utilize for fulfilling long-term assets (Coleman & Robb, 2012). In 1984, Myers & Majluf developed a revolutionary financial theory: the Pecking Order Theory. Moreover, "Sunders & Myers (1999) conducted the capital structure research which focused on Pecking Order Theory and created the model to examine the funding of the company which experienced deficit and surplus of finance and found out the results that Pecking Order Theory is the best theory to explain the capital structure." (Simatupang et. al., 2019, pp 91).

A number of studies showed that Pecking Order Theory advances the view that companies will prioritize funding sources focusing on the one that aligns with their benefit (Kuma & Yosuff, 2020). The POT suggests that there is a hierarchical capital structure followed by companies when looking for finance options. The order that is said to benefit firms is first internal funding supplied from owners of the firm themselves. Then, if extra financial injection is required, firms will prefer debt financing for its advantages of tax shield and by the virtue of continuing to hold full ownership and control rights of the company. And only as a last resort, companies will eye to equity share issuance and acquiring finance in exchange.

The Pecking Order is justified by information asymmetry in between companies, banks, and external investors (Kedzior et. al., 2020). Information asymmetry entails that the information insiders have about a firm is not necessarily available for outsiders (Coleman & Robb, 2012).
This explains the owner-managers of the firms to have better knowledge of the value of the firm, its assets, and deficiencies more than external debtors and investors. Thus, decision of financing

the firm from outside will be based on mere speculation rather than substantive, reliable data. As a result, transparency of the company as an investment opportunity will be reduced and agency cost of outside finance will increase so as to compensate for the higher risk involved (Mina & Lahr, 2018). Therefore, debtors will require a collaterillizeable asset that could redeem the capital provided if the company defaults and fall short to meet the agreed upon credit terms. Similarly, investors will ask a higher risk premium for their equity-based investments that matches their risk capital injection. Even though both outside debt and equity finance proved themselves to be costly due to information asymmetry, external equity is more expensive to bear than external debt finance, since equity forces entrepreneurs to relinquish ownership and result in ownership stake dilution (Minnola et. al., 2013). Generally, companies follow a Pecking Order hierarchy of financing sources and prefer internal financing whenever possible, and then, if external financing is required, choose debt over equity (Prędkiewicz & Prędkiewicz, 2017). Hence, firms primarily turn to internal funds from own savings, family and friends' capital and retained earnings, as these are not subject to asymmetric information problems (Vanacker & Manigart, 2010).

As aforementioned, entrepreneurs loathe giving away their ownership entitlements to investors at a share price. Equity investors understand asymmetry of information and they assume that owner-managers will issue stock only when they perceive it to be overvalued (Hogan & Hutson, 2004). Mendez-Morales (2019) explains this phenomenon stating that managers will issue shares whether on public or over-the-counter markets when they can maximize cash received by the seller. The direct effect of equity issuance becomes a fall in stock price as a result. It was also proposed on the paper that, when a firm can use debt or equity, issuing equity signals the investors the firm is aspiring to transfer risk to new stakeholders, as managers of the firm understand risk cannot be transferred to lenders and lender right rank higher to equity holder rights. As Aghion et. al., (2004) express it, selling equity to outside investors may create a signal that company's future prospects are not rosy, if not the owners would have remained the full claimants of the firm by issuing debt rather than equity. They proposed that this signaling problem under-prices new shares and then produces dilution cost on the firm's initial owners.

According to all the above stated insights, it can be inferred that investors often realize equity acquisitions to be less promising. This conundrum will hold the Pecking Order Theory true and force firms to turn away from costly external finance means and explore first internal finance, and then resort to the safest and cheapest debt financing rather than equity.

2.2.3 Startups and the Reverse Pecking Order Theory

R&D involves atypical intangible capitals of intellectual property and talents, which, if the project fails and is curtailed from reaching its target, reselling the intangible capital on a secondary market being difficult (Mina & Lahr, 2018). Deferred profitability, information opacity due to home-based and idea stage, and asset intangibility are also the natures of most startups. The anomaly of assets and business character introduced a new form of Pecking Order Theory, Reversed or Altered Pecking Order, which restructured the hierarchy as: internal sources, equity finance, and then debt.

The Pecking Order Theory elucidates that companies opt external sources of debt and equity finance as a last option when internal funds are exhausted (Cordova et. al., 2015). Majority of high growth companies, nonetheless, showcase a significant outside finance needs (Vanacker & Manigart, 2010). However, growth options of companies are neither tangible nor collateralizeable, making banks reluctant to consider them for loan deals (Hogan & Hutson, 2004). On the contrary, innovation and fast growth attributes are incentives for external equity investors (Coleman & Robb, 2012). Furthermore, as to Mina & Lahr (2018), innovative firms might be invaluable investment opportunities but pose risks associated with undertaking R&D activities of uncertain outcomes (technology risk), disclosure of imitable innovation information of intangible assets instead of protecting them (value appropriation risk), and achieving R&D objectives alone do not guarantee marketplace success (market risk). Sunk costs of the R&D investments are higher than ordinary investments (Hall, 2010). This means that the risks embedded in highly innovative and high growth companies appear insufferable for debt financers since the capital given to such firms might be irredeemable because of the non-collateralizeable trait of their assets.

Economic literature considers tangible assets as important factors for financial leverage by their potential of being held as collateral guarantee (Kedzior et. al., 2020). Debt finance depends on collateral and debt covenants that are unavailable in early-stage companies with large R&D expenditures, intangible asset and scant cash flows (Mina & Lahr, 2018). As a result, companies with specific intangible assets have lower probability of acquiring external debt since intangible assets bring along high transaction costs and bankruptcy risk, necessitating rearrangement of the order of finance as equity to public offering to external debt (Fourati & Affes, 2013). Nevertheless, the debt and equity order shifts on startups, innovative, and technological companies differ from one empirical study to another. This paper will discuss the varied empirical literature outcomes in the empirical literature part.

Issuing share does not require tangible assets to be given as a security nor increase the threat of bankruptcy (Kedzior et. al., 2020). Firms of high degree of innovation with uncertain outcomes gravitate more towards equity finance and less to the debt counterpart (Mina & Lahr, 2018). Because of the innovative characteristic, these kinds of firms will have greater asymmetric information that leads to higher dilution costs when raising equity finance (Aghion, 2004). Angel and venture capital investors, potential external equity investors, might be able to access limited information about the founder, if he/she is not a serial entrepreneur, or the firm's future prospect, and may ask for high ownership stake for the financial outlay afforded as a consequence (Sanyal & Mann, 2010). To offset this scenario, founders must open up about their venture's practices, and for an innovative firm that aspires to challenge the status quo using inventions, doing so could amount to loss of inventive trade secret. However, venture capitalists are sensitive to signals of innovation potential (Mina & Lahr, 2018). This will minimize the need for letting outsiders learn about internal information. In addition, venture capital funds play a consequential role in supplying informed monitoring of early stage technology startups, but the experienced venture capitals also built a reputation of honoring the nondisclosure agreement signed in order to discover a project's insider realities (Hall, 2010).

Private equity in the forms of venture capital or angel investment probably is the most appropriate external finance source for high-technology firms as it is designed for overcoming information asymmetries (Hogan & Hutson, 2004). In the last 30 years, venture capital became

increasingly important source of innovative startup funding (Suting et. al., 2020). Firms seeking venture capital mostly are uncertainty and risk-driven startups and SMEs (Mihaela, 2017). By putting in their own funds in startups with no operating history, significant risk is taken by angel investors as well (Darian, 2008). On top of risk capital supply, venture capitalists and business angels bring other key elements of reputation, social capital, marketing capabilities that assist new technology based firms' innovative potentials, thus young entrepreneurs display sturdy willingness to assume equity capital (Minnola & Cassia, 2013).

Venture capitalists are keen to invest not only capital resources but also to devotedly participate in new technology based firms' activities by giving their time as opposed to debt holders, because these equity investors will become beneficiaries if the projects succeed (Hogan & Hutson, 2004). Startup founders and/or initial investors cede their ownership control for private equity investors to further their R&D, product testing, and marketing undertakings, considering both the capital resource as well as the non-financial value addition from investors. Paul et. al., (2007) stated that equity investment is sought on purpose by entrepreneurs for the sake of obtaining added value over and above the capital investment. It was discussed on this paper that external equity is not seen as expensive but considered as a plus as the right investor could contribute business skills and social capital. Angel investors and venture capital partners are individuals with prior serial entrepreneurship and investment backgrounds, so they manage to have the necessary resources of business experience, management skill, networks, and financial capability to steer startups to the right path.

2.2.4 Entrepreneurial Finance

Entrepreneurial Finance stands for many finance types given to entrepreneurial projects.

Entrepreneurial finance happens in an ecosystem startup companies acquire funding from multiple investors in multiple finance rounds (Hellmann et. al., 2013). Entrepreneurial finance encompasses a host of finance typologies: venture capital, private equity, private debt, trade credit, IPOs, business angel finance, crowd funding, grants, incubators or accelerators' funding, and family/friends support. The difference between entrepreneurial finance and corporate finance is that the former targets younger and private firms, whereas the latter focuses on established listed corporations.

Angel investors who are individual private investors and professional venture capitalists (VCs) are central pieces of entrepreneurial finance ecosystem (Hellmann et. al., 2013). According to Dutta and Folta (2016), entrepreneurs grapple with severe risks when innovating, conducting technology feasibility, and business model as well as product/service workability studies. This acute early-stage entrepreneurial risks push away finance suppliers, but angels and VCs mostly remain to fill the funding gap and take private equity stake and risks involved thereof. Moreover, as mentioned in this research, investors of private equity could accelerate innovation by providing an active strategic advice and network to founders, thus such private equity is assumed to offer more than just money. Following, selected and relevant entrepreneurial finance mechanisms will be elaborated by separating them into internal and external source subdivisions.

- **Internal Sources of Finance**

- **Founders, Family, and Friends (3Fs)**

Markova & Perkovska-Mircevska (2009) include founders, family, and friends (3Fs) and bootstrapping for representing internal finance sources. The 3Fs are defined as funds collected from the founder(s) personal savings, and family and/or friends or "love money." The researchers stated that if the entrepreneur uses personal funds, hard work (sweat equity), and internally amassed funds for an extended period, the cost of external risk capital that comes from external equity issuance will be low and the entrepreneur will act more autonomously (Salamzadeh & Kawamorita Kesim, 2015).Typically and regularly, initial financing of startups emanate from founders' pockets or families and friends (Ondas, 2021). They are informal investors that engage mostly in the initial startup phases and broadly give loan capital (Klein et. al., 2019). Friends and family might provide the capital in the form of equity, whereby the investors receive an ownership interest, but these kinds of deals are advised to be prepared in the same formal way as with external/outside investors.

- **Bootstrapping**

Bootstrapping is an early stage practice taken by an entrepreneur to turn a project idea to a profitable business. When bootstrapping an entrepreneur may look for capital from founder(s) pockets, family, friends (Salamzadeh & KawamoritaKesim, 2015), but additionally from retained earnings from the business, credit cards, home mortgages, and customer advance payments

(Markova & Perkovska-Mircevska, 2009). Many new businesses use bootstrapping for the benefits of holding entire ownership of a firm and for not having a cost of capital to worry about. However, bootstrapping is usually insufficient and limited fund source (Mustapha & Tlaty, 2018). It has a downside of failure to make money and thereby incapability of maintaining desired firm growth, difficulty to catch up with highly financed competitors, limited access on sales, market share, general competitiveness, and offers hindered contribution to high-growth firm's futurity (Markova & Perkovska-Mircevska, 2009). Accordingly, startups will shortly realize more financial support is required (Salamzadeh, 2018). Angel investors are observed investing at some point in this stage (Salamzadeh & KawamoritaKesim, 2015).

- **External Sources of Finance**

- **External Equity Finance Providers**

Nofsinger & Wang (2011) describe external investors loosely into institutional and individual investors. Institutional investors are the likes of venture capital funds, banks, and other governmental agencies. Whereas, individual investors are angel investors that conduct due diligence on companies, decide on deals, and write checks on an individual level.

- **Angel Investors (Business Angels, Angels)**

Angel investors are wealthy individuals that provide their private assets to startups with huge growth prospects (Klein et. al., 2019). Angel investors often come from heterogeneous backgrounds. Many of them are successful entrepreneurs turned investors, high net worth individuals, and influential personalities in the areas of entertainment, sports, academia, and etcetera. Angel investors can be one-time investors that put their money on a sole project or engage in serial angel investment where they participate in multiple deals. Angel investors usually take companies from the 3Fs and bootstrapping stages and provide their own money for a promisingly perceived startup. The investments angels make are mostly equity-based. Their provisions for startups are risk capital, which means their returns are not guaranteed for return since the ventures are very risky. Angel investors are individuals (groups of individuals) outside of the family and friend's circle of the entrepreneur.

Angels are seen imperative not just for the amount of finance they give to startups but for the decisive growth stage investment on startups, and this enables entrepreneurs to make it safely from friends-and-family finance to venture capital (Ibrahim, 2008). Traditionally, angel investors were thought to fill the chasm between friends and family financing, and formal venture capital investors. Basically, angels are considered as links to connect friends and family fund and venture capital (Dutta & Folta, 2016). For this reason, the venture capital model would have not existed in its current shape if angels were not there in the transition (Ibrahim, 2008).

Individual angel investors form Angel Syndicates or Angel Networks for joint deal searching and sourcing, performing due diligence, risk sharing, pooling their capital and co-investment purposes. Since angel investors and syndicates are seen as important investment sources for entrepreneurs, their investments are given tax benefits and supports from governments. However, lack of credible and organized data is the challenge encountered to analyze the role of angels in entrepreneurial finance (Hellmann et. al., 2013). This is because angels invest their own money on their own, not making it known to other concerned parties. Thus, accurately gauging their investment amounts and impacts at a countrywide level even in the highly developed countries has not been possible.

- **Accelerators, Incubators, and Hatcheries**

Accelerators are cohort-based programs that offer mentorship, work space, and funding mostly in exchange of equity share on the company (Drover et. al., 2017). Business accelerators are vital institutional parts of entrepreneurial ecosystems (Gonzalez-Uribe & Leatherbee, 2018). Entrepreneurs apply for accelerating their concepts on the acceleration programs for a period of 3 to 6 months (Drover et. al., 2017). Startups liaise with experts, fellow entrepreneurs, and prospective investors on acceleration workshops (Serwatka, 2018). This will add significant value to the startups in addition to the monetary investment made on the programs. Realizing accelerators positive contribution for startups, governments are establishing accelerators for startups (Al Sahaf & Al Tahoo, 2021). Similar variants of accelerators are business incubators and business hatcheries. These variants help startups with facilitating the environment, training, working space, advice, and resources, but to a lesser extent make a monetary funding and their investments are relatively smaller.

- **Venture Capital (VC)**

Venture Capital (VC) is the acquirement of minority stake in high growth potential early to late stage startup firms in order to finance them for their continued growth (Stahl, 2021).Venture capital is an institutional fund that is pooled together by venture capital firms from institutional investors and high net worth individuals for investment intention (Vijayalakshmi, 2020). The collected fund is to be invested on companies. Venture Capital is provided for companies in exchange for equity stake in the business instead of a loan (Vijayalakshmi, 2020).

"The Venture Capital Funds or the risk capital funds refer to a type of private equity of an investment company offering participation in financing especially the innovative, risk-bearing or creative companies with a high growth potential in the medium and long term timeframe (5 years on average) and with clearly defined exit strategy " (Dzeletovic et al 2017, pp.8). The exit strategy of venture capitals may take a private trade sale or going to public (Initial Public Offering-IPO) forms. Venture capital backs almost half of the IPOs in the United Stated (Janeway et. al., 2021). The high growth and innovative Amazon, Apple, Cisco, Genentech, and Google companies were all VC backed, and this showcases venture capital's role in stimulation of innovation (Ueda & Cumming, 2010).

VCs involve in investment on new technologies and innovative organizations that lack tangible assets which serve as prerequisites of traditional investment sources (Wilson et. al., 2018). Venture capital needing companies are mostly highly uncertain and risky startups or SMEs (Herciu, 2017). As to Ueda & Cumming (2010), innovations happen to pass through long periods of trials and errors without revenues and going to market. For this reason, they need to have "patient" capital investment that does not require payback before long and will not liquidate them prematurely without being fully formed. VCs are ideal in this regard for not seeking returns and paybacks for as long as 10 to 12 years from investment date. Moreover, portfolio companies also receive advises from venture capital firms on top of finance.

Given the uncertainty of the small business environment, VC deals are very selective (Narayansamy et. al., 2012). Venture capitalists require businesses to show staggering business traction (both financial such as internal rate of return, EBIT, annual recurring revenue as well as

non-financial subscribed customers or served customers' data) to achieve high rate of return from investments in the long haul. Many researches evidenced that most entrepreneurs fail to raise venture capital since these requirement bars are too high.

Investment ticket sizes differ from country to country, funds to funds, and stages to stages. Even though the entire fund raising for investment purpose is restricted in Ethiopia, VCs that raised funds and incorporated overseas and operating mainly in Addis Ababa and few and far between in regional states exist.

- **Private Equity**

Under Private Equity, a Private Equity Fund also exists along with VCs and other equity-based finance mechanisms. Private Equity Funds are those that collect capital funds from various parties for taking large equity stakes in sets of companies and sell them in later stages of the fund's lifecycle (Jenkinson et. al., 2022). Unlike VCs, private equity funds also provide debt finance to ventures.

Private equity funds targeting SMEs and, to some extent startups, are found in Ethiopia and their numbers and fund sizes have been increasing recently.

- **Crowd Funding (Crowd Sourcing)**

Crowd funding is a rather new funding source used by startups. In finance context, it is an organizational function linking networks of actors or the crowd using IT, enabling an open request for monetary contributions for commercial or social business cause (Sekliukiene et. al., 2018). People pool money together in crowd funding to invest and support individuals or organizations' endeavors (Rossi, 2014). According Paschen (2017), startups face fund raising challenges from banks, VCs, or angel investments because of lack of credit and operating history. Instead of the likes of banks, venture capitalists, business angels that are professional and accredited finance providers, crowd funding is about financing a project by a collective group of individuals (Mitra, 2012). In crowd funding, entrepreneurs use the internet to communicate cost effectively to millions of potential investors (Rossi, 2014). As a result, crowd

funding democratizes entrepreneur's access to seed funding and capacitates the crowd to be prospective retail venture capitalists (Wroldsen, 2012).

As to Lukkarinen et. al., (2016), crowd funding takes four different forms. One is donation-based crowd funding which is about the collection of charitable funding to underpin projects. The second is rewards-based crowd funding, wherein funders get non-monetary rewards for their provision. The third is debt-based crowd funding that offers a credit contract. And the last one is equity-based crowd funding which offers equity stake investment in the company.

Many starting out projects have been backed by crowd funding in the recent past across the globe. Purely for-profit, social cause, technology, real estate, music, and performing arts projects made crowd funding a reputed capital source (Paschen, 2017).

Crowd funding is considered an invaluable marketing tool as crowd validated products will likely get improved customer acceptance and awareness (Paschen, 2017). Debatably, crowd funding is said to allow startups maintain control over their businesses compared to other equity finance methods (Kuma & Yosuff, 2020). Nonetheless, crowd funding, particularly in the form of online equity-based crowd funding, is suspiciously seen by governments and security exchange bodies for its covert nature deals.

- **External Debt Finance Providers**
- **Debt (Bank and Microfinance Loans)**

Debt is a must-repay loan capital offered to companies by external parties. It is one of the outside sources of fund and is used to refer to the traditional bank and micro finance institution capital supply that requires asset collateralization in this research. Collateral is used in external debt contracts to alleviate information asymmetry which could bring about credit rationing or denial of credit (Coleman et. al., 2014).

Debt can be divided into two parts: secured and unsecured debt (loan). Secured debt (loan) is capital provisions for individuals and businesses after collateralizing a security tangible asset. Unsecured debt (loan) on the other hand entails financing without holding a tangible asset as

collateral but by prior credit worthiness that predicates upon previous commercial activities of borrowers. Since unsecured debt providers take a huge risk by issuing finance without guarantee, they ask for higher interest rates. As to Rampini & Viswanathan (2020), for the claim they have on assets, secured creditors extend more credit, but unsecured creditors constrain credit extension because of less well collateralized and weaker claim on assets.

Rossi (2014) stated that debt financiers take low risk due to collateral and seniority of claims over equity. Banks participate actively and provide fundamental finance for conventional, existing small companies (Kutsuna & Honjo, 2006). Conversely, bank finance is not the typical finance source of startup firms because of the high R&D, high risk, and tangible asset lacking venture traits. High-tech startups' risk profile keeps away bank loans (Clarysse & Bruneel, 2007).

- **Grants**

Startup grants are the other type of external finance source. Startup grants are critical provisions of finance and other resources to R&D intensive, innovative and high growth potential projects. They may come from governmental, non-governmental, individual, or corporate entities. Mostly, grants are afforded in terms of monetary reward not taking equity or debt forms. As a result of no cost of capital commitment, they are the most sought after sources of finance that many newborn startups apply and compete for. To identify the best project to assist, granters prepare competitions, but select limited amount of winners to get the rewards. The initial stages of startups are supported by public aids of direct subsidy and zero interest refundable loans (Mustapha & Tlaty, 2018). Grants may take different shapes as well. Government subsidies target R&D involving activities and grant them with indirect tax incentive schemes or direct public R&D subsidies (Falk & Svensson, 2018). The Ethiopian government and other stakeholders are seen preparing grants competition for startup firms and providing them with not only seed capital but also acceleration session.

2.3 Empirical Literature

This research has a theme of determining the finance sources, needs, and capital structure preferences of startup firms. The infant Ethiopian startup landscape could benefit from researches as such, since finance is the backbone of every commercial undertaking. The research

also envisioned inputting advantageous data resource to finance service providers about what kinds of finance are currently under use and which are sought after by Ethiopian startups. Financers could then adjust their strategies and policies to include the often excluded startup business space in Ethiopia and create a win-win situation between the demand and supplier sides of the finance spectrum. In order to conduct a research with the aforementioned long term themes and goals, learning and considering what has been done in the space is of paramount importance. The empirical evidence will discuss research results made in various countries. The startup and innovative industry has not been adequately researched in Ethiopia. Related empirical studies that could be found are not scholarly reviewed and published ones. Therefore, the researcher used other countries' empirical findings as a reference to explain the startup and innovative sector capital structure decisions. Different researches have been conducted on innovative, high-technology, and startup companies in other nations. Depending on the country and the financial services available, the results show divergence, in which ventures in some nations preferring debt finance before equity finance and the otherwise in some others. Hereafter, the empirical researches gathered from different countries and contrasting outcomes are to be discussed.

Based on the research conducted in Colombia, Mendez-Morales (2019) found that the capital structure of innovative firms in the country of research was aligned to the one predicted on the Pecking Order Theory, whereby firms strongly use internal funds, then banks, and then equity sources of finance. The paper used a multivariate probit model to find out whether Pecking Order Theory or Reversed (Altered) Pecking Order Theory exists in the sample 2621 Columbian firms. The paper explains that countries such as Colombia, which have underdeveloped capital market and private equity experience, the Reversed Pecking Order Theory, in which equity precedes debt in terms of funding preference, couldn't uphold.

Similarly, Predkiewicz & Predkiewicz (2017), with a descriptive statistics research made on 409 innovative companies concluded that the Pecking Order Theory is supported. The sample companies used retained earnings first. Secondly, bank finance or credit was the found to be the source of finance. And last place, new external equity finance was found to be the source of finance.

In another research, Coleman & Rob (2012) found through a survey conducted on a Kaufmann Firm Survey of 4000 firms in the USA using descriptive and multivariate analysis, technology-based firms have a different capital structure pattern. Even if the Pecking Order Theory applies to the entire companies, the Pecking Order Theory partially works in the case of technology-based firms. The technology-based and high-performing technology-based firms are able to attract huge external debt and equity finance.

Korityak & Fichtel (2012) through a qualitative interview conducted on 8 Swedish startups concluded that the startups have been financed in a Pecking Order, internal, external debt, and external equity hierarchy. However, it was discussed on the research that the startups have a preference for equity finance. But, since the Swedish government and other stakeholders jointly availed a special type of debt finance, Almi finance, which doesn't require collateral for loans contrary to typical bank finance, the standard Pecking Order has been followed by the startups.

Regarding Reversed Pecking Order reporting empirical studies, through a longitudinal research conducted in Belgium on 2077 high-growth companies, Vanacker & Manigart (2010) found that external equity was sought following retained earning finance (Internal Source of Finance) made by the sample firms. The result of the research explained that external equity has been instrumental for unprofitable firms, companies with high intangible asset investment, limited cash flows, and immensely susceptible to failure. Conversely, bank debt was linked to businesses with low risk.

In line with the previous research Ullahet. al., (2010) conducted a research on two highly innovative and technological industries. The research included 41 biotechnology and 42 software firms in the UK and the two industries showed slightly varied financial preferences. Biotechnology firms, due to their university, non-university and research institute spinoff natures, tend to be funded by public funds (External Sources of Finance) and be managed by non-founders, so that they accept outside equity finance. In dissimilarity with the standard Pecking Order, equity finance type venture capital finance was discovered to be the most important and firstly acquired source of finance followed by business angels. Then, personal savings and family (Internal Sources of Finance) have also been funding sources but not in equal

magnitude with that of software companies. Thus, it was found by the research that Pecking Order Theory might not be followed by biotechnology firms. The software firms included in the research illustrated an increased use of personal finance as a main funding source, then acquire their funding needs from venture capital (External Equity Finance Source). Mortgage or remortgage of family home was the third most reached out finance option for these companies.

On a research that investigated 117 Irish software companies through a questionnaire and descriptive statistics methodology, Hogan & Hutson (2004), came to the conclusion that, consistent with the POT and Reversed POT internal finance was utilized as a most important and initial source of finance by the firms, but contrary to the standard theory, equity was preferred and intensely used than debt as an external source of financing. The reasons indicated for the capital structure shape are the intangible feature of software companies' assets, which limit them from taking debt finance. In addition, it was evidenced by the research that software company founders had a different intent of founding a company than SMEs. According to the research, SME owners resist equity finance to hold the entirety of their company, however software company owners prefer to grow their company selling ownership stake and choose to be minority shareholders of a large company than a majority shareholder of a small one.

Following an in-depth interview with 20 Scotland-based entrepreneurs, Paul, et. al., (2007) explained entrepreneurs fund their ventures by their own internal resources first, but as opposed to the Pecking Order Theory, turn to equity than debt when external funding appeared needful. The respondents reasoned the value that can be added to a firm by an investor as a determinant for their preference of equity over debt. Moreover, the entrepreneurs were averse to finance their projects with debt, as doing so required them to offer personal assets as collateral. Thirdly, without impacting cash flow negatively as in the case of debt finance, equity capital for the long term was considered to cover the working capital needs. And lastly, high cash burn rates and the requirement of rounds of equity funding without realizing observed results character of especially high technology and growth firms was proposed as another factor for choosing equity finance.

With sample companies comprising 851 firms (454 from the USA and 397 from the UK), Mina & Lahr (2018) found that R&D is positively related to equity and negatively associated with debt

through regression analysis. Patents also show significant positive relationship on equity while having significant effect on debt. Moreover, firms with higher innovation inputs and uncertain outcomes had more equity finance rather than debt.

Fourati & Affes (2013) with a descriptive and inferential logistic regression model run on 1214 nascent entrepreneurs in a longitudinal database found that new entrepreneurial activities are most likely to have some external debt finance if they have more collaterallizeable tangible assets and legal form of incorporation. According to the research, human capital intensive companies are to be financed by internal sources of finance, as the asset type cannot qualify for debt finance. The research found that, home-based entrepreneurial activities are also to be financed largely by internal source and less by external debt and equity investors. Moreover, intellectual property is said to reduce external finance acquirement probability, and specifically decrease ventures' chances of accessing debt finance. Legally incorporated venture characteristics are claimed to lead to debt finance and the feature generally boosts the probability of acquiring external finance. The researchers found that for entrepreneurial activities with information opacity, Reversed Pecking Order Theory, where internal finance, external equity, and external debt exist consecutively, applies. Entrepreneurial practices with specific assets have also showed Reversed Pecking Order. Conversely, it was found by the research that, for ventures having entrepreneur's personal capital contribution and tangible assets, external debt has been preferred than external equity and the standard Pecking Order applies.

Through qualitative multiple case study conducted on 9 Austrian technology startups through interview, Dulovits & Tewelu (2020) found that majority of the startups showed Reversed Pecking Order funding, where internal sources of finance have been the initial source of finance for reasons related to lack of access to external sources instigated by early stage startups' characteristics of asymmetric information, short or no track record, and lack of collateral. Following the internal finance, majority of the sample startups have acquired equity finance prior to debt. Therefore, in terms of usage of finance, Reversed Pecking Order had been found to be the capital structure. However, when it comes to preference of finance, almost equal proportion of startups showed a Pecking Order and Reversed Pecking Order preferences. Equity was preferred by part of the startups largely due to the non-financial value addition equity financiers introduce. However, the Austrian companies that ranked debt before equity finance feared loss of

control in their company that could come with relinquishing startups' equity stake and taking equity finance.

Minnola et al., (2013) conducted a research to discover whether the Pecking Order Theory applies to new-technology based 2666 firms registered on Kauffman Field Survey. The new-technology based firms' asset is constituted with 59% of intangible assets than tangible, and most of the companies are characterized by innovativeness and newness to the market. The research found out that the first order of finance of the new-technology firms meet the classical Pecking Order assumption in drawing capital from internal sources. But when external finance was required, equity finance has been found to be the preferred capital source than debt finance.

On a different note, Cassar (2004) with a research made on 292 Australian startups employing multivariate analysis found that firms with little tangible assets are to source finance from less formal and non-banking debt finance means.

To conclude, many of the researches on the topic agree that companies that are R&D and market testing intensive, innovative and technological with fewer tangible assets under their names and extended positive cash inflow and profitability times are financed in the Reverse Pecking Order approach, meaning internal funding followed by equity and then debt. But this hierarchy shows a difference and it could also get jumbled case-by-case and country to country, as some places and conditions could provide much needed finance with improved debt finance scheme, such as the one indicated by the Swedish Almi case, and because of the capital market structure available.

2.3.1 Startup Characteristics and Capital Structure Variables

Startups that are highly innovative and scalable have different firm characteristics and their capital structure depends on many factors. The researches mentioned above included variables of non-legal incorporation status (being home-based) or having a legal registered shape and office, profitability status, asset type (whether having predominant tangible or intangible asset), and R&D and market testing cycle status of startup and highly innovative firms alike. These variables influence the decision of the sources of finance and determine where the firms go to from internal sources or external, and from debt or equity. And, as mentioned previously, it is assumed that internal finance, then equity, and as a last resort, debt finance is used and sought by

startups firms in majority of the circumstances. For this research similar variables are to be used. It is necessary to also understand that the startup characteristics are intertwined with each other, i.e., startups with much intangible asset and with R&D and market testing might make them unprofitable for extended period and the like.

- **Startup Characteristic Variables**

1. **Legally Registered/ Not Legally Registered or Home-based Nature**-startups and other innovative companies may be home-based and not yet legally incorporated. The process of idea generation and prototyping may take place from entrepreneur's home. However, such companies have a hard time acquiring the finance needed at this stage from external finance sources as a result of high level of information opacity. Theoretically, home-based and unincorporated companies source finance from internal means initially. Then they are assumed to go to equity finance providers, and late after incorporation seek debt finance. This is because equity finance providers are keen to judge high growth and potential company even though it is not organizationally structured. On the contrary, legally established and incorporated startups tend to acquire more finance from external sources since they are less opaque. This research considers startups as legally incorporated if the startups have been registered as business entities and not legally incorporated if not.

2. **Profitability Status**: when firms are profitable, they will be more able to finance themselves from both internal and external sources. Such companies could finance themselves through retained earnings, acquire more tangible assets, and engage in new product development, which are all ideal conditions for having internal sources of capital from retained earnings to be reinvested, collateral and personal guarantee requiring debt finance providers, and be investable for equity finance providers. However, startups have deferred and rare profitability track record due to intensive R&D and market testing cycle, which will limit them from fulfilling their capital needs from the aforementioned types of internal and external finance means, thus they rather finance their companies first with the internal capital sources: founders, friends, and family. And they are assumed to take equity, and lastly, debt. This research considers startups as profitable if they have passed the break-even point and begin to acquire financial returns more than

costs and unprofitable if they are not generating any money, having more cost than returns, or having equal costs and returns.

3. **Asset Type**: when companies have tangible assets, they will often be able to access debt finance since it will enable them provide collateral. However, startup companies are innovative and possess fewer tangible assets such as land, property, machineries, and equipment. They mostly have intangible assets of business idea, intellectual property, patents, trade mark prototype, and intellectual human capital. As a result, they are assumed to finance their projects first from internal sources and then look out for equity-based, innovation focused investors. This research distinguishes asset types as intangible assets intensive if they have predominant business idea, intellectual property, patents, trade mark prototype, and intellectual human capital than tangible assets such as premise, land, property, machineries, and equipment, and vice versa.

4. **Intensive R&D and Market Testing Cycle**: startup companies require intensive R&D and market testing since they will be developing innovative products and services often times new to the market. As a result, extensive finance is needed to support the R&D initiative and market testing prior to going to the market and succeeding. According to majority the above researches and assumptions, these kinds of activities are financed first by internal sources of funding and next to that, innovation-orientated equity funding, and then debt. This study takes startups as R&D and market testing intensive if the startups concur that their venture requires it and not if their startups do not require it.

- **Variables in Sources of Finance**

1. **Internal Finance**: are considered the most accessible and least costly finance sources on the empirical researches reviewed. On the most relevant empirical literatures, startup companies use founders', friends' and family's capital, and strive to survive with retained earnings and seek equity finance and debt finance later in a consecutive order later. This order is assumed to be the case for most of the empirical literatures mentioned above.

2. **Equity Finance**: are considered innovation supporting, "patient" and "generous" capital mostly for unincorporated, deferred profitability, asset intangibility, and intensive market

testing cycle exhibiting startups. Therefore, they are assumed to be capital sources that come after internal sources, and debt finance for the kind of ventures this research is dealing with.

3. **Debt Finance**: are considered risk averse on the many of the researches and hardly provide capital to companies characterized as unincorporated, unprofitable, with intangible assets, and intensive R&D and market testing cycle. As a result, they are assumed to engage in financing at later stages, where the startup firm is fully developed and garnered the necessary conditions such as debt repayment capacity and collatellizeable, tangible asset.

2.4. Research Gaps

The startup ecosystem in the world in its general sense is understudied. Regarding the financial structure of startup companies little has been known (Sanyal & Mann, 2010). The knowledge gap is even greater in Ethiopia. Published capital structure researches revolve mainly around MSMEs that are less innovative and with relatively constrained growth rates. The sources of startups finance are unidentified. Furthermore, there is a Pecking Order Theory empirical literature gap from the standpoint of startup firms and in less developed countries. In employing the selected theory and the variables that determine means of finance, this research determined whether standard Pecking Order or Reversed (Altered) Pecking Order applies on startups in Ethiopian context. Source of finance issues of Ethiopian startups have been addressed by this thesis also.

CHAPTER 3: RESEARCH METHODOLOGY

3.1. Introduction

This part of the research discusses the research methodologies that the researcher followed to meet the objectives of the study. It includes the research design, research approach, sample design, sources of data, data analysis and interpretation and ethical issue discussing parts.

3.2 Research Design

Descriptive study was conducted to describe the characteristics of startup firms' sources of finance, debt or equity finance preferences (Pecking Order or Reversed Pecking Order), the leading causes towards the type of debt/equity finance chosen, and the relationship between startup characteristics and debt/equity preferences. A cross-sectional study as opposed to a longitudinal one was devised in order to gauge the status of respondent companies' current conditions, past experiences, and future interests.

3.3 Research Approach

The research used a mixed research approach that combines both quantitative and qualitative instruments for data gathering purpose. Quantitative research using a larger sample size is a general rule that render more accurate results in a research (Dawson, 2002). Quantitative method was used for this research purpose due to this fact. Quantitative research was employed so as to acquire a measurable, objective, and quantifiable data from the startups regarding the research questions and objectives. The qualitative research is used to analyze and provide subjective, supplemental and deeper thoughts regarding the research questions.

3.3.1 Population

Startups are firms that exist across stages; some are based in their homes and are unregistered, while others have a formal, registered shape with offices. This gives them somewhat an elusive nature regarding their existence. A registration mechanism by classifying startups different from other types of companies is needful and this task is undertaken mostly by government bodies in the rest of the world. However, the total amount of startups operating in Ethiopia is not accurately known, as registration of startups as separate business entities by a government body has not begun yet, and that is expected only to happen when the Startup Act is put into effect. At

present, startups are getting legal business licenses and being incorporated as any other business entity in the country.

Recently, the FDRE Jobs Creation Commission in collaboration with the Mastercard foundation created a website portal, whereby startups and potential investors could register for their respective objectives. The platform was launched to promote innovative finance including angel investment and crowd fund sources in the Ethiopian context. It envisages mobilizing resources for entrepreneurs and startups resolve the financial acquirement challenges, enable investors find good deals, and inspire the public to donate to problem-solving startup projects (Yegara.org, 2021). The website can be counted the one and only organized startup catalogue in the country. It has 77 registered startups. These 77 startups were the population or universe of this study.

3.4 Sample Design

3.4.1 Sampling Frame

The entire startups managed to be listed at Yegara.org website, 77 in number as of the conduction of this research, are the sample frames for this research.

3.4.2 Sample Size and Sampling Technique

To calculate the sample from the total population of 77 startups, the formula of Yamane (1967) was used. The Taro Yamane formula is used for researches with relatively small and also large population sizes. It is advised in research to conduct a census survey instead of sampling when dealing with a population of less than 50. However, since the population size for this research was more than the suggested number, a representative sample size has been drawn from the population. The formula and the calculation are stated as follows:

Figure 3.1 Yamane's Sample Formula

$$n = \frac{N}{1 + N(e)^2}$$

Source: Taro Yamane (1967)

Where:

n= Sample Size Required

N=Population Size

e=5% Allowable Error or Level of Precision (5%); also meaning a 95% Confidence Level

1=Constant

By the formula, an approximate of 64 sample startups were addressed from the total population through the research work. A Probability, Systematic Random Sampling method was utilized to choose the 64 samples. Probability sampling was selected since it is necessary to give equal chances of inclusion for every startup to avoid non-representation aspect of a non-probability sampling. Systematic sampling helps in taking samples impartially and fairly.

3.5 Sources of Data

The startup space is understudied in Ethiopia and data about the startup population could not be found sufficiently in literature and publications. Thus, the research depended entirely on primary data sources gathered solely for this research purpose from sample respondents.

3.5.1 Primary Data Sources

The data gathering instruments employed for the research work are questionnaire and semi-structured interviews. The questionnaire was predominantly consisted with pre-structured and designed closed-ended questions to find objective replies to the questions and options prepared in line with the research's guiding questions and objectives. However, to enable respondents specify deviant answers, many of the questions left open spaces for the respondents to spell out their subjective responses. Answers to this kind of questions have been presented and analyzed with a word narration. The questionnaire had question types of categorical multiple choices, multiple response selection, dichotomous, ordinal ranking questions, and open-ended question to cover the research objectives and goals at best. The researcher adopted the structure and questionnaire design of Abdulsaleh (2015), which is a PhD dissertation made on Bank Finance for SMEs in Libya. The questionnaire was designed and adopted to Google Form Survey sheet for an online questionnaire distribution for some of the startups and has also been printed and distributed for drop and collect for others. The interviews have been semi-structured ones to enable the respondents partially be able to discuss their thoughts, feelings, and experiences,

while also enabling the researcher conduct the interview in a certain predetermined frame. The interviews have been conducted through online call with some of the respondents and in person with the remaining. The interview guide was prepared in English first and translated into Amharic, and for ease of communication, it was conducted in Amharic.

3.6 Data Analysis and Interpretation

For the quantitative data acquired from the data collection instruments, descriptive analysis was employed. And SPSS software (20) was utilized to effectively analyze the quantitative research outcomes through cross tab frequency, percentages, Garret Ranking, mean score, and chi square test of independence. To analyze and interpret the chi square test of independence results in APA format, the method indicated by Yockey (2011) has been adopted. To express the outcomes, frequencies, percentages, and written explanations have been utilized. The qualitative data gathered from the interview responses have been interpreted, condensed, and analyzed using thematic analysis. For this analysis method, inductive approach has been used and word narration has been employed to show the general premise of the interview responses.

3.7 Reliability and Validity of Instruments

Testing the reliability and validity of data gathering is an important part of researches. In order to fulfill this requirement, the research has run a reliability test of the questionnaire. The Cronbach's Alpha (α) has been in the ranges of 0.791 to 0.949. A Cronbach's Alpha coefficient of more than 0.7 is considered valid (Pallant, 2020).

Table 3.1 Reliability Test Results

Variable Constitute	Cronbach's Alpha (α)	No of Items
Asset Type	0.8	2
R&D and Market Testing	0.809	2
Legality Status	0.861	2
Startup's Stage and Profitability	0.899	2
Founder/s Saving Source	0.916	4
Family and Friends' Cap Source	0.892	4
Microfinance Source	0.915	4
Bank Finance Source	0.932	4
Equity Finance Source	0.949	4
Grants Source	0.921	4
No Capital Source	0.939	4

Founder/s Cap Preferred	0.91	2
Family and Friends Cap Preferred	0.886	2
Debt Finance Preferred	0.894	2
Equity Finance Preferred	0.934	2
Debt More Accessible	0.894	2
Debt More Terms and Conditions	0.886	2
Debt Close Relationship	0.791	2
Debt Least Costliness	0.876	2
Debt Non-financial	0.796	2
Equity More Accessible	0.851	2
Equity Terms and Conditions	0.895	2
Equity Close Relationship	0.812	2
Equity Least Costliness	0.876	2
Equity Non-financial Support	0.876	2

Source: Research's Data

The validity of the instruments have also been tested and approved with discussions and review sessions held with experts working in the startup space. The researcher restructured and reviewed the questionnaires and interview guides multiple times with the advice of the above mentioned individuals, to make sure questions ask for pertinent information.

3.8 Ethical Considerations

Startups are organizations with unique business model and innovation. As these companies are required to protect their business models, innovation, and trade secrets, this research anonymised the names of the startups, founder/owners/managers, and the finance providers involved. Ethicality of the research was maintained and the confidentiality of the information they provide to the researcher was used for this research purpose only.

CHAPTER 4: RESULTS AND DISCUSSION

4.1 Introduction

This chapter is dedicated for data result presentation, analysis, interpretation and discussion. The chapter is divided into different parts. Firstly, data acquired from the questionnaire and interview are to be presented, analyzed, interpreted and discussed according to the research questions and objectives of the entire research.

4.1.2 Response Rate

The sample size of this research was to reach to 64 startups. The actual data collection and analysis has been done on 64 startups, where 58 of them addressed with questionnaires and the remaining 6 with interviews. Thus, a 100% response rate has been achieved.

Figure 4.1: Yegara.org Website Home Page

Source: https://yegara.org

4.2 Data Presentation

This part of the research will show the results of the data collected. The data collection was conducted to identify the sources of finance, debt/equity preferences and rationales for the preference of these two broadly used external sources of finance, and relationship/association of startup characteristics and debt/equity finance preference. Next, the general startup organizations' profiles are to be dissected. The following tables and figures take into account the questionnaire, quantitatively addressed respondents only. But, since mixed research approach is employed, the qualitative research outcomes are to be presented and analyzed along with the quantitative.

4.2.1 Organizations' Profile

As the research is conducted to measure capital structure of startups, the startups' organizational status was measured by several questions. These questions were not only targeted at providing backdrop of the organizations but also to serve the purpose of the research in asking direct questions about the startups' characteristics, and thereby addressing issues pertinent to the variables of the research.

4.2.2 Startups' Location

Table 4.1 Startups' Location

	Frequency	**Percent**
Addis Ababa	49	84.5
Other	9	15.5
Total	58	100.0

Source: Research's Data Survey

As shown on Table 4.1 above, majority of the startups, 49 (84.5%) that were addressed through questionnaires are located in Addis Ababa. From a total of 58, 9 (15.5%) of the startups are located in other regional states, including Afar, Amhara, Oromia, and SNNPR.

4.2.3 Startups' Sector Breakdown

Table 4.2 Startup Sector Breakdown

	Frequency	Percent
Agriculture and Agri-prodcuts	5	8.6
Construction	2	3.4
Creative Arts	2	3.4
Education	1	1.7
Entertainment	1	1.7
Health	5	8.6
Logistics	1	1.7
ICT	18	31.0
Manufacturing	7	12.1
Renewable Energy	4	6.9
Tourism	2	3.4
Other	10	17.2
Total	58	100.0

Source: Research's Data Survey (2022)

Table 4.2shows that the predominant sector from all the 58 companies was ICT with 18 (31.0%) startups categorized under it. Startups from "Other" sectors were the second most chosen option with 10 frequencies (17.2%). The "Other" sectors specified by the startups are: Events, Internet of Things (IOT), Automation, Sales and Distribution, Labor Market, Research and Development and Robotics. From the 58 startups addressed, 7 (12.1%) are from the Manufacturing sector. Health and Agriculture and Agriculture- products represent an equal 5 (8.6%) of the startups. Startups under Renewable Energy sector are 4 (6.9%). Construction, Creative Arts, and Tourism sectors have equal 2 and each of them constitute 3.4% of the totality. Startups under Education, Entertainment and Logistics share 1.7% each in being selected only once from the entire respondents. The startup sector options included on the questionnaire were taken from Yegara.org. The website has 14 sector categories in total, but only 11 were selected by the questionnaire informants.

4.2.4 Startups' Asset Type

Table 4.3 Startups' Asset Type

	Frequency	Percent
Greater Intangible Asset	45	77.6
Greater Tangible Asset	13	22.4
Total	58	100.0

Source: Research's Data Survey (2022)

Determining starups' asset types was compulsory for undertaking further assessments about startups with relation to capital structure. This triggered the question linked to asset type. As shown on Table 4.3, from a total of 58 startups, 45 (77.6%) of the startups replied that their asset is largely constituted with intangible assets of business idea, intellectual property, patents, trade mark, prototype, intellectual human capital. The remaining 13 (22.4%) stated that their substantial asset is tangible, such as a premise, land, cars, machineries, equipment of the startup companies' own. The dominant intangible assets in the majority of the sample startups showcase startup features, characterized by innovation that can be tied to innovation driver intangible assets of business ideas, prototypes, patents, intellectual property, and intellectual human capital, which are most often non-collaterallizeable.

4.2.5 Startups' R&D and Market Testing

Table 4.4 Initial R&D and Market Testing

Does your startup firm require fairly intensive research and development and market testing?	**Frequency**	**Percent**
Yes	38	65.5
No	20	34.5
Total	58	100.0

Source: Research's Data Survey (2022)

Table 4.4 illustrates that from a total of 58 startups, 38 (65.5%) of the startups concurred and indicated that fairly intensive R&D and market testing is part of their startup company's journey. Conversely, the remaining 20 (34.5%) startups claimed that their startups need not R&D and market testing activity and phase. Therefore, it can be inferred from this scenario that the sizeable amount of the startups exhibit often attributed startup characteristics of initial R&D and market testing time and expenses.

4.2.6 Legally Registered or Home-based (Not Legally Registered) Status

Table 4.5 Startups' Legal/Not Legally Registered

	Frequency	**Percent**
Not Legally Registered Yet	25	43.1
Legally Registered	33	56.9
Total	58	100.0

Source: Research's Data Survey (2022)

Legality of organizations is a matter of concern for finance supply side, and also a factor that plays out on capital structure decisions of organizations from the finance demand side as well. For this reason learning about the legality status of the startups was needful. Table 4.5 shows that 33 (56.9%) startups are legally registered from the 58 total startup respondents. And 25 (43.1%) startups were not yet legally registered. The greater number of the startups are legally established and has incorporated natures. This phenomenon leads to the conclusion that majority of the startups are legally registered and incorporated, in which the home-based or not incorporated condition that is believed to increase the information opacity of companies is reduced. And

according to vast amounts of literature, external finance could be better garnered by legally registered ventures than the non-legal, since legal establishment renders firms more information symmetry.

4.2.7 Startups' Stage and Profitability

Table 4.6 Stage and Profitability

	Frequency	Percent
Idea Stage with Brainstorming ideas and business plan preparation, Not Generating Money	8	13.8
Emergence Stage with Prototype Product but not Generating Money	23	39.7
Stability Stage with Earnings but More Loss	7	12.1
Break-even with Equal Earning and a Loss	7	12.1
Growth Stage with Profitability and Expanding Market Share	13	22.4
Total	58	100.0

Source: Research's Data Survey (2022)

To assess the profitability level and stage of the startup firms and give an accurate picture of the startups' stage, five startup stage categories were created, adding break-even and idea stages on top of emergence, stability and growth stages discussed on the literature review part. Table 4.6 demonstrates that majority of the startups, 23 (39.7%), indicated that their startup projects are in the emergence stage with a developed prototype or product but not generating money. The second most indicated stage of the startups was growth stage with 13 (22.4%) of the total startups addressed. Consecutively, startups with a frequency of 8 (13.8%) expressed that their ventures are in idea stages with mere ideation and in the process of business plan preparation. In equal amount, 7 (12.1%) of the total startups expressed that they are in break-even stage and stability stage, respectively. This shows that out of the total 58 firms, only 13 are profitable at the moment. As mentioned on the literature review part of this research, deferred profitability is one characteristic of most startups that often results from intense R&D and market testing cycle companies take part in.

4.2.8 Startups' Optimal Capital

Table 4.7 Optimal Capital Need

Optimal Capital Need in birr	Frequency	Percent
Less than 500,000	4	6.9
500,000 - 999,999	8	13.8
1,000,000 - 1, 499,999	12	20.7
1,500,000-1,999,999	8	13.8
2,000,000 - 2,499,999	10	17.2
2,500,000 and above	16	27.6
Total	58	100.0

Source: Research's Data Survey (2022)

To provide a perspective and well-rounded information about the theme of this research, which is assessing the capital structure of startups, the optimal capital need of the startups required to operate at their full scales has been raised on the questionnaire. Such questions could offer a general feel of what amount of finance is in need among the sample startups. Since these kinds of questions are very private and often covert, the researcher used categorical variable to give the range amounts rather than using specific, continuous variables. Table 4.7 displays the result of the optimal capital need of the startups. From the total 58, 16 (27.6%) startups showed a 2.5 million birr and above optimal capital need to run their startup with full capacity, while 12 (20.7%) indicated 1, 000,000 to 1, 499, 999 birr capital need. And only 4 (6.9%) showed a less than 500, 000 birr capital for their startups to operate at full potentials.

To summarize the organizational profile of the startups, the startups included in this research have been largely based in Addis Ababa. And they happen to be operating in wide variety of sectors. Regarding their internal organizational traits, all of them showcase different attributes. This is understandable, since startups are forms of organizations that vary in size, features, and types. But what holds the sample startups together is their fast growth trait and innovative and unique business models. In this sense, all the startups included in the research qualify and could be considered as startups, regardless of other disparities.

4.3 What Sources of Financing do the Startups Use?

4.3.1 Startups' Initial Source of Finance

Table 4.8 Initial Source of Finance

		Responses	
		N	**Percent**
Initial Source of Finance[a]	Founder/s Savings	48	50.0%
	Family and Friends' Capital	20	20.8%
	Microfinance Institution	4	4.2%
	Bank Finance	1	1.0%
	Equity Finance	4	4.2%
	Grants	13	13.5%
	No Capital Committed	6	6.3%
Total		96	100.0%

Source: Research's Data Survey (2022)

Table 4.8 compiles the data gathered regarding initial capital of the startup firms which have been deployed to begin initial startups activities. Since finance can be brought from multiple sources at the same time, the question was a multiple response one and there were 96 total responses. Many of the startups predominantly sourced capital from founder/s savings, constituting 48 (50%) of the total replies. Following that, capital from family and friends was the second most used initial source of finance for the startups with 20 frequency distributions (20.8%). Grant with no equity or capital return commitment has been found to be the third most used initial source of finance among the startups with 13 frequencies (13.5%). From the total responses recorded, 6 startups stated that no capital has been committed to their venture yet, and that is 6.3% of the entirety. Microfinance and equity finance are selected with equal 4 (4.2%) each from the total responses. And the least used initial source of the startup companies is bank finance in only being selected by 1 startup (1%) out of the 96 total responses. The general outcome aligns with the first order finance sequenced assumption of Pecking Order and Reversed Pecking Order Theory literatures, since, due to information opacity, information asymmetry, asset specificity and novel business model, many starting out, startup endeavors often source capital from founder/s savings or the other internal source of finance: family and friends.

4.3.2 Source of Finance Used Thus Far

Table 4.9 Source of Finance Used

		Responses	
		N	**Percent**
Source of Capital Used Thus Far[a]	Founder/s Savings	49	46.7%
	Family and Friends' Capital	23	21.9%
	Microfinance Institution	5	4.8%
	Bank Finance	2	1.9%
	Equity Finance	5	4.8%
	Grants	15	14.3%
	No Capital Committed	6	5.7%
Total		105	100.0%

Source: Research's Data Survey (2022)

Table 4.9 shows the entire sources of finance used by the startups up to the conduction of this research. It was needful to treat separately initial source of finance and startups' sources of finance used throughout their lifetime, since some startups could have evolved and graduated into more mature stages to compose their capital structure differently. This was done with multiple response set question and answer, and there have been 105 total responses. The findings show that internal sources of finance are the leading sources of capital used by the startups. More precisely, founder/s savings are still the primary source of capital where 49 (46.7%) startups used. Similar to the initial source of capital result, capital from family and friends is the second most used source of capital with 23 (21.9%) of startups employing it. Grants are the third sources of capital selected by 15 (14.3%) of the startups. And 6 (5.7%) of companies has no committed capital to their startups. Microfinance institutions and equity finance providers have equal frequencies in being used by 5 (4.8%) for each one of them. Bank finance is the least used source of capital by the startup companies with only 2 (1.9%) frequencies from the total105 multiple response selection set. The overall result indicates that founder/s savings, family and friends' capital, and grants are the highly used sources of finance.

With respect to the interview responses, all of the interviewed startups stated that there are no adequate sources of finance for startups in Ethiopia. In fact, the greater number of them opined that no finance is available for startups in the country. And for this reason, some of the startups

further claimed that they are struggling big time to sustain their startup ventures. One of the respondents explained the phenomenon as follows:

"…Even though the media and the government always suggest that entrepreneurship is the way forward for the country's development, in real terms and on the ground, startups are not encouraged and the financial sector excludes them…"

In addition, the interviewed respondents implied that founder/s savings and family's capital supply have been the major sources of finance used invariably among all the startups. In one case only, a startup claimed to have finance from an equity investment (from an angel investor) on top of founder/s and family's capital; similarly, one other startup mentioned use of trade credits from product suppliers as means of finance in addition to founder/s savings and family and friends' capital supply. Majority of the respondents made it clear that family members gave them non-returnable money, while couple of them stating return requirement of the capital taken from this source. However, all startups interviewed suggested that the needed capital for backing the startups' operations have not been fulfilled, and they stated that their startups are failing to realize the startup missions as a result. Majority of the startups raised the issue of severe financial lack that they are grappling with. One respondent put the grave condition his startup is facing in the following manner:

"…Our startup company used founder/s' savings and families' money collected from all the co-founders circles as a source of finance. But this was deployed just for meeting the initial startup expenses, nothing more. We have not been able to fulfill the entire need of capital for our startup firm. For this reason, we have not realized what we have envisioned for our startup company, and since the company is not generating money, we (the cofounders) have been compelled to work in our day jobs and give our extra time after regular work for the startup. And this is a huge hindrance for the startup, even if we invest small amount of money we get from our fulltime job to the startup and cover our personal expenses, a company could not grow and succeed with such little attention and capital input…"

Amazingly, all interviewed startups have also agreed that internal finance sources are not sufficient and external finance is a must-earn. As per the respondents, without the support of external finance that could be taken from banks, microfinance institutions, equity share

investments, grants, and others, the strenuous efforts of startups will remain in vain. One respondent stated that, startups' ideas are grand and their products are aimed at serving a huge market, thus this cannot be achieved with internal funds alone, unless the founders are very wealthy individuals to fund their projects plentifully. The need for covering expenses associated with launching, running, and expanding the startup projects is the other similar reason why majority of the startups opt external finance and see it as a necessity.

4.3.3 Startups' Asset Type and Sources of Finance

Table 4.10 Startups Asset Type vs. Sources of Finance Used

			Source of Finance Used Thus Far[a]							Total
			Founders Savings Capital	Family and Friends' Capital	Microfinance Institution Capital	Bank Capital	Equity Capital	Grant Capital	No Capital Committed	
Startups' Asset Type	Greater Intangible Asset	Count	36	16	1	0	4	14	6	45
	Greater Tangible Asset	Count	13	7	4	2	1	1	0	13
Total		Count	49	23	5	2	5	15	6	58

Source: Research's Data Survey (2022)

Table 4.10 illustrates the cross-tab interaction of startups asset type and sources of finance used by the startups. From a total of 45 startups with greater intangible assets than tangible, founder/s savings with 36, family and friends' capital with 16 and grant capital with 14 frequencies have been the predominant sources of finance. Six startups with such asset type claimed no capital commitment to their projects yet, while equity finance was indicated to be a finance source four times. And only 1 startup has taken capital from microfinance institution. No company with such specific asset type dominance has reported finance from bank. On the other hand, from a total of 13 startups that have greater tangible asset typed, founder/s savings is selected in 13, family and friends' capital in 7 and microfinance capital in 4 of the cases and represent a significant portion from their respective side.

4.3.4 R&D and Market Testing and Source of Finance Used

Table 4.11 R&D and Market Testing vs. Sources of Finance

			Source of Finance Used Thus Far[a]							Total
			Founders Savings Capital	Family and Friends' Capital	Microfinance Institution Capital	Bank Capital	Equity Capital	Grant Capital	No Capital Committed	
R&D and Market Testing	No	Count	19	8	4	1	2	4	1	20
	Yes	Count	30	15	1	1	3	11	5	38
Total		Count	49	23	5	2	5	15	6	58

Source: Research's Data Survey (2022)

Table 4.11 shows that from the 20 startups without R&D and market testing need, founder/s savings in 19 and family and friends' capital in 8 frequency distributions were predominantly used from the entire amount. And from 38 startups that require R&D and market testing significantly utilized founder/s savings in 30 and family and friends' capital in 15, and grant capital in 11 cases.

4.3.5 Legally Registered/ Not Legally Registered and Sources of Finance Used

Table 4.12 Legal/Not Registered vs. Sources of Finance

			Source of Finance Used Thus Far[a]							Total
			Founders Savings Capital	Family and Friends' Capital	Microfinance Institution Capital	Bank Capital	Equity Capital	Grant Capital	No Capital Committed	
Legally Registered or Not Registered Startup Character	Not Legal Yet	Count	16	6	0	1	1	6	6	25
	Legally Registered	Count	33	17	5	1	4	9	0	33
Total		Count	49	23	5	2	5	15	6	58

Source: Research's Data Survey (2022)

Table 4.12 presents that from a total of 25 not legally registered startups, largely used finance source have been found: founder/s savings with 16, family and friends' capital and grant capital with 6 frequencies. And with the same frequency, no capital has been achieved by 6 startups. From the 33 legally registered startups, the significantly utilized were founder/s savings with 33, family and friends' capital with 17, and grants finance with 9 consecutive case frequencies.

4.3.6 Startups' Stage and Sources of Finance

Table 4.13 Startups' Stage vs. Sources of Finance

			Source of Finance Used Thus Far[a]							Total
			Founders Savings Capital	Family and Friends' Capital	Microfinance Institution Capital	Bank Capital	Equity Capital	Grant Capital	No Capital Committed	
Startups' Stage And Profitability Status	Idea Stage with Brainstorming ideas and business plan preparation, Not Generating Money	Count	4	1	0	0	0	0	4	8
	Emergence Stage with Prototype Product but not Generating Money	Count	18	10	0	1	2	9	2	23
	Stability Stage with Earnings but More Loss	Count	7	3	0	0	0	3	0	7
	Break-even with Equal Earning and a Loss	Count	7	3	3	0	2	1	0	7
	Growth Stage with Profitability and Expanding Market Share	Count	13	6	2	1	1	2	0	13
Total		Count	49	23	5	2	5	15	6	58

Source: Research's Data Survey (2022)

Table 4.13 displays the startups' stage and sources of finance usage patterns. From a total of 8 startups in idea stage, in 4 cases finance was sourced from founder/s savings. And in only one case finance was taken from family and friends. And no capital was gotten from microfinance, banks, equity and grants. Four startups have not committed capital from any source to their idea stage ventures. From the 23 Startups in emergence stage, finance was sourced primarily from founder/s savings in 18, family and friends in 10, and grants in 9 cases. From the total 7 startups in stability stage, finance was taken mainly from founder/s savings in 7 cases, and with 3 each

cases from family and friends and grants. Among the 7 startups at break-even, founder/s saving was the highest source of capital with 7 frequencies. And with equal 3 cases, capital has been acquired from family and friends and microfinance institutions. From the growth stage startups that achieved profitability, founder/s savings has been the predominant source of finance showcasing 13 cases, and with 6 cases, family and friends capital has been the second highly utilized.

As capital structure is about sources and mixes of finance, tying startup characteristics and sources of finances used to the conduction of the research was imperative. Generally, similar patterns have been witnessed across the above interactions of startup characteristics and sources of finance. Finance is sourced mainly internally from founder/s savings and family and friends. External finance sources, particularly debt and equity capital, are scarcely used by the startups, irrespective of startups' asset types, R&D and market testing requirements, stage and profitability, and legal incorporation status. However, from the external sources, grant finance with no capital cost and commitment was used more frequently among the sample respondents.

4.3.7 Debt Finance Applied and Acquired Startups

Table 4.14 Debt Finance Applied and Acquired

			Debt Finance Acquired		
			No	Yes	Total
Debt Finance Applied	No	Count	43	0	43
		% of Total	74.1%	0.0%	74.1%
	Yes	Count	9	6	15
		% of Total	15.5%	10.3%	25.9%
Total		Count	52	6	58
		% of Total	89.7%	10.3%	100.0%

Source: Research's Data Survey (2022)

Table 4.14 reflects the debt finance application and acquirement status of the startups. To determine the debt finance application and acquirement status of the startups, a question was asked if the startups have applied and acquired debt finance. For this question, the term debt finance was used in its broadest sense rather than specifying it as bank and microfinance for ease

of interpretation. However, the questionnaire further explains what debt finance meant and put banks and microfinance institutions as examples to make the term clear to respondents. The outcome of the data summarized shows that, a significant majority of 43 (74.1%) startups from a total 58 never applied to any form of debt finance provider. And from the total number of the startups, 9 (15.5%) have applied for debt finance. From the entirety, 6 (10.3%) startups managed to acquire debt capital. In general, it can be said that the debt finance applicants are very tiny compared to the total samples, so as the number of startups that acquired this finance type.

4.3.8 Debt Finance Security Type

Table 4.15 Debt Security Type

Debt Security	Frequency	Percent
Asset Collateral	1	16.7
Personal Guarantee	5	83.3
Both Asset Collateral and Personal Guarantee	0	0
Total	6	100.0

Source: Research's Data Survey (2022)

Table 4.15 presents debt finance security types of the startups that managed to acquire debt finance. Debt security and debt finance appear inseparable, especially in Ethiopia. Therefore, learning about the debt security type of those that acquired the finance type was consequential. And according to the data, from the total of 6 startups that have managed to access debt finance, only 1 (16.7%) has done so using an asset collateral as debt security, while the overwhelming majority 5 (83.3%) startups used a personal guarantee debt security. It can be inferred from this result and also from the source of capital question raised in the earlier parts that, most of the startups have earned microfinance institution's debt capital, making a personal guarantee a debt security, whereas bank debt finance, which often requires asset collateral, is used rarely.

Regarding the interviewed startups, majority of the startups state that bank finance targets big organizations and corporations and ignores startups. But microfinance was considered as a more fitting finance type for the needs and capabilities of startup firms by majority of the startups, as it has lesser interest rate compared to banks, less stringent debt security (collateral) requirements, less bureaucracy and queue to access finance, and more accessible trait for small companies.

When it comes to the repayment capacity of startups, the greater share of the startups' representatives suggest that, if their startups manage to get debt finance either from banks or microfinance institutions, they will be able to meet the debt repayment obligations. One startup founder, however, partially differed from the majority and stated his position by mainly mentioning the high interest rate of bank finance as a threat for repayment capacity of his startup, and implied that startups are small companies serving small markets, and with the ever-rising inflation going on in the country, startups will have a hard time of using the debt finance, make profits, and repay the principal and interest required. But this interviewee agreed with counterparts on microfinance loans, which he also perceives as more suitable for startups and debt obligations fairly simpler to fulfill. Most of the startup interviewees claimed that debt finance in its entirety could not be acquired easily, however. Collateral requirement, long process, long queues to finance, high competitiveness and favoritism and relationship based financing are there to hamper not only small and emerging companies but also big ones. Similar challenges have also been mentioned about microfinance by a smaller portion of the startups interviewed. Moreover, microfinance was said by couple of the startup interviewees that, the finance offered by this finance source are small and could not optimally satisfy the startups' financial need. Therefore, it can be concluded that many of the startups are not concerned about the repayment requirement, because almost all startups believe that, if they manage to get debt finance from banks and microfinance institutions, they could meet the debt obligations, but the question about how the money is to be accessed is the one daunting and challenging them.

When the issue of collateral was raised to the interviewees, majority of the startups interviewed considered asset collateral as a main roadblock for acquiring bank finance. Almost all of them stated that their startup could not offer collaterallizeable assets to qualify for bank finance. The remaining interviewee however, did not take collateral as a limiting factor. He argued that, if an entrepreneur believes on the business, collateral could be searched and found from elsewhere: from entrepreneur's own and/or family's assets.

4.3.9 Equity Finance Requested and Acquired Startups

Table 4.16 Equity Finance Requested and Acquired Startups

			Equity Finance Acquired		
			No	Yes	Total
Equity Finance Requested	No	Count	37	0	37
		% of Total	63.8%	0.0%	63.8%
	Yes	Count	16	5	21
		% of Total	27.6%	8.6%	36.2%
Total		Count	53	5	58
		% of Total	91.4%	8.6%	100.0%

Source: Research's Data Survey (2022)

Table 4.16 illustrates that the responses for the questions asked to quantify whether or not the startups have solicited equity finance and if they successfully gotten capital from this finance source. From the total 58 startups, a large proportion of 37 (63.8%) have not requested equity finance investment. Whereas, 16 (27.6%) have requested for equity-based capital provision. From the entire amount, 5 (8.6%) managed to acquire equity finance. This data shows that the startups infrequently apply for equity finance, and there is even smaller likelihood of equity finance acquirement success story among the extended requests.

4.3.10 Equity Finance Type

Table 4.17 Equity Finance Type

		Responses	
		N	**Percent**
Equity Finance Type[a]	Accelerator or Incubator	1	20.0%
	Angel Investors or Angel Networks	2	40.0%
	Private Equity	2	40.0%
Total		5	100.0%

Source: Research's Data Survey (2022)

Table 4.17 shows that among the 5 startups that took equity finance, angel investors and private equity financiers were selected 2 times each and constituted 40.0% each from the entirety. Accelerator/ incubator has been found to be equity finance supplier of 1 (20.0%) startup. Crowd funding and venture capital have not been used by any of the startups that acquired equity finance. As this research discussed and shone light on fundamental equity-based, entrepreneurial finance typologies, a question that addresses the specific type of equity finance was raised in a multiple response set question so that an understanding could originate as to which equity type is being used by the sample startups.

In addition, majority of the startups interviewed suggested that equity investment is what they have sought all the while. A respectable number from the total stated the purpose of registering at Yegara.org has also been about accessing equity-based finance. On top of this, other startup respondents made it clear that they have also been engaged in approaching/pitching investors to equity financiers for a longer period. Moreover, most of the startups happened to be willing to giveaway equity stake to equity investors. They stated that onboarding such investors could enable them tap into the finance that has always been in demand.

In relevance to the previous point, the dominant number of the respondents stated that relinquishing share stake is no concern for their startups if investors agree to work together and provide them with a fair deal for certain capital sum. As to them, giving share stake is not a challenge and a limitation; instead, they mentioned lack of finance to be the real problem for startups, not releasing part of ownership in order to garner investment. Nonetheless, on a rare

frequency, a startup representative partially contradicted the above views and explained that ownership dilution and loss of decision making right would definitely make his startup avoid equity investment at his startup's stage. He expressed that investors take advantage on startups in demanding disproportionately large equity stake in exchange for a small capital supply. And according to him, this made his startup shy away from unreasonable equity finance deals at this point of his startup's phase.

4.4 Which External Financing Methods the Startups Prefer to Acquire from Debt/Equity Finance?

Table 4.18 Sources of Finance Preference

	Founder/s Savings		**Family and Friends' Capital**		**Debt Finance**		**Equity Finance**	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Most Preferred	23	39.7	5	8.6	7	12.1	23	39.7
Second Choice	10	17.2	19	32.8	20	34.5	9	15.5
Third Choice	14	24.1	13	22.4	19	32.8	12	20.7
Least Preferred	11	19.0	21	36.2	12	20.7	14	24.1
Total	58	100.0	58	100.0	58	100.0	58	100.0

Source: Research's Data Survey (2022)

Table 4.18 presents the compiled responses of the startups given when asked to rank preferred finance sources. The startups were provided with a question that required them to rank their most preferred finance source (1st rank) to least preferred (4th rank). The question was asked so as to distinguish if the Pecking Order or Reversed Pecking Order Theory applies to the startups reached. To give an intelligible interpretation, the following table is used and the rank preference results are elaborated thereafter.

Table 4.19 Rank of Finance Sources

Most Preferred to Least Preferred	Founder/s Saving	Equity Finance	Debt Finance	Family & Friends Capital Supply
N	58	58	58	58
	0	0	0	0
Mean	2.2241	2.2931	2.6207	2.8621
Garret Ranking Result	54.7	53.6	48.6	44.9
Mode	1.00	1.00	2.00	4.00
Std. Deviation	1.17044	1.22844	.95196	1.01650
Variance	1.370	1.509	.906	1.033
Range	3.00	3.00	3.00	3.00
Minimum	1.00	1.00	1.00	1.00
Maximum	4.00	4.00	4.00	4.00

Source: Research's Data Survey (2022)

Table 4.19 illustrates that founder/s saving is the most preferred finance source among the startups with an ascending proximate mean score rank of 2.22 or a Garret Ranking Result of 54.7. Equity finance is the second most preferred source of finance with a proximate mean score of 2.29 or a Garret Rank Result of 53.6. Debt finance is the third choice in terms of preference with a proximate mean score of 2.62 or a Garret Rank Result of 48.6, while family and friends' ranks fourth is the least preferred with a proximate mean score of 2.86 (Garret Rank Result=44.9). From this it can be concluded that, in terms of preference, the Reversed Pecking Order Theory applies to the startups. The internal source of finance, namely founder/s savings, comes first. And then, equity finance precedes debt finance, contrary to the standard Pecking Order Theory assumption. But it should also be noted that, opposing both Pecking Order and Reversed Pecking Order theories, one internal finance form, family and friend's capital, happens to be the least preferred and ranked last, even after the oft-detested, theoretically speaking, external sources of finance by the sample startups.

Table 4.20 Debt or Equity Preference

	Frequency	Percent
Debt Finance	24	41.4
Equity Finance	34	58.6
Total	58	100.0

Source: Research's Data Survey (2022)

One objective of this study was to determine whether debt or equity is preferred by startups. From the previously presented and interpreted data, some inferences can be made about which capital type is sought by startups from debt or equity. However, it has been necessary to bring the question in another sense, so that a conclusion on finance source preference of debt or equity can be done more definitively. And a question was asked which finance source from debt and equity is preferred by startups. As shown on Table 4.20, from a total of 58 startups, majority of the startups expressed their preference for equity finance over debt with 34 frequencies (58.6%). The remaining 24 (41.4%) of the startups showed preference for debt finance instead of equity. This has been concomitant with the preference question on Table 4.19.Thus, equity is found to be more preferred finance type than debt as far as many of the startups addressed are concerned.

Similarly, majority of the interview respondents suggested that equity finance is the preferred capital type than debt finance. Equity finance has been considered as a source of capital that supplies huge sums of money for startups by putting into account only ideas, prototypes and future prospects of ventures. But, the startups suggested that debt finance operates contrarily, in which both bank and microfinance finance are provided when collateral or security that matches the capital can be offered. In addition, an interviewee also pointed out that an entrepreneur that acquired equity finance could solely be focused on operations of the startup, leaving aside worries of principal and interest repayment and loss of collateralized asset, which could interfere with normal work undertakings if debt capital is taken. Many startup interviewees also said equity financiers' value add to the company not only in financial terms but also in non-financial, co-working, strategy formulation, networking and overall startup support. Nonetheless, one of the respondents stated that his startup prefers debt finance in the form of microfinance than equity-based capital. The need of ceding equity share stake is the rationale behind his startup's preference of debt than its equity counterpart. Generally, the triangulated outcome aligns with Reversed Pecking Order reporting empirical research results (Hogan & Hutson, 2004; Minnola et

al., 2013; Paul, et. al., 2007; Vanacker & Manigart, 2010). However, it is important to note that this was done only in terms of preference of finance sources, not based on usage of finance.

4.5 What are the Reasons of the Startups for Preferring Debt or Equity Finance over one another?

4.5.1 Debt Finance Preference Reasons

Table 4.21 Debt Preference Reasons

		Responses	
		N	**Percent**
Debt Preference Reasons[a]	Debt's More Accessibility than Equity Finance	10	25.6%
	Debt's Appropriate Credit Terms and Conditions than Equity Financiers	13	33.3%
	Close Relationship with Debt Financiers than Equity Financiers	2	5.1%
	Debt's Less Costliness than Equity Finance	13	33.3%
	Debt Financiers' Non-financial Support such as Management Consulting, Strategy Formulation, and Any non-capital Assistance given by the Finance Provider than Equity Financiers'	1	2.6%
Total		39	100.0%

Source: Research's Data Survey (2022)

The debt or equity preference of the startups has been further explored by questioning the reason for preferring one over the other and this answers the research question relevant to the issue. From the 24 total debt preferring startups, as shown on Table 4.21 , an equal 13 (33.3%) of the total 39 multiple responses expressed the reason for preferring debt over equity are debt's appropriate credit terms and conditions and debt's least costliness compared to equity. Following these two reasons, 10 (25.6%) of the responses selected more accessibility of debt as a reason for preferring debt finance from debt finance. Close relationship with debt financiers and debt's non-

financial support were selected as reasons 2 (5.1%) and 1 (2.6%) times, respectively, from the total responses provided for preferring debt finance as opposed to equity.

4.5.2 Equity Finance Preference Reasons

Table 4.22 Equity Preference Reasons

		Responses	
		N	**Percent**
Equity Preference Reasons[a]	Equity's More Accessibility than Debt Finance	20	29.4%
	Equity's Appropriate Investment Terms and Conditions	13	19.1%
	Close Relationship with Equity Financiers than Debt Providers	6	8.8%
	Equity's Less Costliness than Debt Finance	10	14.7%
	Equity Financiers' Non-financial Support such as Management Consulting, Strategy Formulation, and any non-capital Assistance given by the Finance Provider than Debt Financiers'	19	27.9%
Total		68	100.0%

Source: Research's Data Survey (2022)

With a multiple response question similar to the one used previously, the reasons for preferring equity finance than debt by 34 total startups has been recorded. As shown on Table 4.22, equity's more accessibility than debt finance is found to be the reason for preferring equity finance than debt with 20 (29.4%) from 68 total selections. Next to that, equity financiers' non-financial support in management consulting, strategy formulation and any other non-capital assistance is the reason indicated 19 (27.9%) times from the total responses for preferring equity rather than debt. Thirdly, equity's appropriate investment terms and conditions are stated as reasons of preference 13 times (19.1%). Equity's less costliness and close relationship with equity finance providers than debt are found to be rationales 10 times (14.7%) and 6 times (8.8%) selected, respectively.

4.6 Is there a Relationship between Startup Characteristics and Debt/Equity Finance Preference?

4.6.1 Startups' Asset Type and Debt/Equity Preference

Table 4.23 Startups' Asset Type vs. Debt/Equity

			Debt or Equity Preference		
			Debt Finance	Equity Finance	Total
Startups' Asset Type	Greater Intangible Asset	Count	14	31	45
		Expected Count	18.6	26.4	45.0
		% within Startups' Dominant Asset Type	31.1%	68.9%	100.0%
		% of Total	24.1%	53.4%	77.6%
	Greater Tangible Asset	Count	10	3	13
		Expected Count	5.4	7.6	13.0
		% within Startups' Dominant Asset Type	76.9%	23.1%	100.0%
		% of Total	17.2%	5.2%	22.4%
Total		Count	24	34	58
		Expected Count	24.0	34.0	58.0
		% within Startups' Dominant Asset Type	41.4%	58.6%	100.0%
		% of Total	41.4%	58.6%	100.0%

Source: Research's Data Survey (2022)

According to the chi square test of independence result, it can be concluded that there is a significant association/relationship between asset type and debt/equity preference (1, N=58) X^2=8.72, P=.003, Cramer's V=.38. In other words, startups with greater intangible assets were more likely to prefer equity finance at a significantly higher rate as compared to those with larger tangible assets (68.9% to 23.1%); and startups with greater tangible assets were more likely to prefer debt finance than those with intangible assets (76.9% to 31.1%). From this it can be

concluded that, the more intangible assets startups have, they happen to prefer equity finance rather than debt. And the more tangible the assets of startups are, the preference shifts to debt finance. This converges with the assumption of companies with tangible asset go to debt finance providers first, since they can use their asset as collateral for accessing finance needed and also get a positive response from debt financiers, while companies with smaller to no tangible assets and equipped with intangible assets are compelled to approach equity financiers, that are known for innovation finance and no security or capital repayment requirement but only ask equity share stake for capital supply.

4.6.2 R&D and Market Testing and Debt/Equity Preference

Table 4.24 R&D, Market Testing vs. Debt/Equity

			Debt or Equity Preference		
			Debt Finance	Equity Finance	Total
R&D and Market Test in Startup's Stage	No	Count	12	8	20
		Expected Count	8.3	11.7	20.0
		% within R&D and Market Test in Startup's Initial Stage	60.0%	40.0%	100.0%
	Yes	Count	12	26	38
		Expected Count	15.7	22.3	38.0
		% within R&D and Market Test in Startup's Initial Stage	31.6%	68.4%	100.0%
Total		Count	24	34	58
		Expected Count	24.0	34.0	58.0
		% within R&D and Market Test in Startup's Initial Stage	41.4%	58.6%	100.0%

Source: Research's Data Survey (2022)

As the cross tabulated Table 4.24 shows, it can be concluded from the chi square test of independence result that there is a significant association/relationship between R&D and market testing and debt/equity preference (1, N=58) X^2=4.36, P=.037, Cramer's V=.27. In other words, startups with no R&D and market test character were more likely to prefer debt finance as

compared to those that exhibited R&D and market testing character (60.0% to 31.6%). On the flip side, startups with R&D and market testing cycle were more likely to prefer equity finance than startups that do not require R&D and market testing (68.4% to 40%). This outcome corresponds to the result of Mina & Lahr (2018), in a way that R&D and innovation are positively related with equity finance. It also converges with the assumption of, innovation, R&D, and market test intensive firms are to be financed mainly by equity financiers that are able discover the worth and foretell the prospect of such ventures, even though the positive expectation might turn out the otherwise.

4.6.3 Legally/Not Legally Registered and Debt/Equity Preference

Table 4.25 Legally/Not Legal Registry vs. Debt/Equity

			Debt or Equity Preference		
			Debt Finance	Equity Finance	Total
Legal Registration or Not Legally Registered Status of Startups	Not Legal Yet	Count	7	18	25
		Expected Count	10.3	14.7	25.0
		% within Legal Incorporation or Unincorporated Startup Character	28.0%	72.0%	100.0%
	Legally Registered	Count	17	16	33
		Expected Count	13.7	19.3	33.0
		% within Legal Incorporation or Unincorporated Startup Character	51.5%	48.5%	100.0%
Total		Count	24	34	58
		Expected Count	24.0	34.0	58.0
		% within Legal Incorporation or Unincorporated Startup Character	41.4%	58.6%	100.0%

Source: Research's Data Survey (2022)

And it can be concluded from the chi square test of independence result that there is no significant association/relationship between legal status and debt/equity preference (1, *N*=58) X^2=3.24, P=.072, Cramer's V= .23. What this means is that legal registration or not legal registration character of startups does not favor one finance source (debt or equity) over another. To elaborate the outcome, from a total of 25 not legally registered startups, a larger portion of 18 (72.0%) have preference for equity finance rather than debt. The smaller number of the totality, 7 (28.0%) preferred debt over equity finance. On the other hand, from a total of 33 legally registered startups, 17 (51.5%) preferred debt than equity finance. And a comparable of 16 (48.5%) startups preferred equity finance than debt. The total data suggests that the sample startups prefer equity finance to a larger degree when they are not legally registered and unincorporated. And when the startups are legal and incorporated, the finance preference happens to be comparably distributed between debt and equity finance.

4.6.4 Startups' Stage and Profitability Status and Debt/Equity Preference

Table 4.26 Startups' Stage/Profitability Status vs. Debt/Equity

			Debt or Equity Preference		
			Debt Finance	Equity Finance	Total
Stage and Profitability Status	Not Profitable	Count	15	30	45
		Expected Count	18.6	26.4	45.0
		% within Stage and Profitability Status	33.3%	66.7%	100.0%
	Profitable	Count	9	4	13
		Expected Count	5.4	7.6	13.0
		% within Stage and Profitability Status	69.2%	30.8%	100.0%
Total		Count	24	34	58
		Expected Count	24.0	34.0	58.0
		% within Stage and Profitability Status	41.4%	58.6%	100.0%

Source: Research's Data Survey (2022)

Table 4.26 cross-tabulated profitability status of startups across debt/equity finance preference. The startup stages have been summed up as not profitable if the startups are in the stages of idea, emergence, stability and break-even, as these stages exhibit no money generation, cash loss or burning, or equal incomes and costs. This has a total number of 45, while only 13 startups stated that they are profitable. As to the chi square test of independence result, more generally, it was found that there is a significant association/relationship between profitability status and debt/equity preference (1, N=58), X^2= 5.35, P=.021, Cramer's V=.30. To put it bluntly, non-profitable startups were more likely to prefer equity finance at a significantly higher rate as compared to the profitable (66.7% to 30.8%). And the other side shows that profitable startups were more likely to prefer debt finance at a significantly higher rate than the non-profitable (69.2% to 33.3%). From this, it can be concluded that most of the sample startups in early and unprofitable stages, this means that in idea stage, emergence stage, stability stage, and break-even stages, preferred equity finance over debt finance. Oppositely, the profitable startups showed preference to debt finance than equity. This pattern implies that non-profitable companies are to prefer equity financers, that are known to be risk takers and bet on ideas, prototypes, and cash burning ventures, whereas, companies that are more matured in terms of stage and profitability, turn to debt finance, since they could afford to commit to principal and interest repayments with their cash flows and be taken as credit worthy by debt capital providers.

On the other hand, as to the interview question that asked the kind of challenges the startups have been facing in startup financing, all the startups interviewed unanimously agreed that the single most challenge they have encountered in startup financing is a shortage of sufficient finance providers. It was stated by the informants that equity investors are scarce in the country, and these few supply finance to the lucky few. And it was claimed by one startup respondent that the greater number of equity finance companies and investors reside in Addis Ababa and their capital provision is targeted towards Addis-based startups, not for those in regional states. According to this interviewee, grants and awards are also concentrated in the capital and regional states have been excluded. Regarding bank and microfinance debt instruments, the scarcity of this finance types was also reported by majority of the startups as a problem faced in the startup financing process.

On the space provided to let startup representatives discuss open-ended, written responses regarding the issues raised on the questionnaire, several respondents expressed their feelings, experiences and complaints regarding startup financing. The researcher compiled and condensed the responses and presents them in the following way.

Some of the startups' representatives exclaimed on the lack of finance sources in the country and the challenge encountered when searching for capital. Debt finance providers were mentioned as sources of finance that stand for companies other than startups. Banks, in particular, were said to avoid gearing their credit terms and conditions to the startups' characters and financial needs. A "no collateral, no finance" approach, high interest rates and short payback periods were among the reasons why debt finance is not the right resource for the startups. Many of the startups that have put written comments suggested that the asset collateral requirement should be removed and startups and other companies with ideas need to be backed by banks and other debt financiers, so that new and innovative ideas could fructify.

The challenge of the startups have not been related to debt finance and its major type bank finance only. A number of startups wrote on the space provided that equity investment is inaccessible for startup companies in the country also. The reasons indicated are different ones, nonetheless. Some stated that limited number of equity finance providers are available in the country, while others complained that the equity finance is not fairly distributed and only few with personal connections with the financiers manage to access it.

The standing Startup Act of Ethiopia was the other matter of concern for the startups reached. The draft document has been released back in 2020 but didn't pass into policy for two years. Some startups claimed that such policy matters should get full support from the government and turn to practice shortly. The startups explained that, privileges must be given to startups, as these ventures are striving to create jobs for the founders and others, serve the community, and operate internationally. Lack of working capital, machinery and equipment finance, capital for employee salaries and wages, legal fees when incorporating, and taxes are discouraging the startups immensely. In dealing with such insurmountable seeming challenges, the startup respondents stated that some of their friends engaged in similar startup activities are feeling hopeless and some others' startups have ceased to exist.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

Contrary to the centuries old business launching and growing trend, startup companies with brilliant and innovative ideas but very little resources managed to achieve new heights in the business realm in a short period, despite their humble beginnings of starting out from home garages and college dormitories. This happens to be the case for companies such as Apple, Facebook, Microsoft, and many more. Startup is a highly discussed topic, a buzzword, and a common language spoken among political leaders, high net worth individuals, corporates, educators, and the youth alike at every corner presently. By being cognizant of their multifaceted benefits they bring to the founders, investors, finance providers, the macroeconomy, and the world at large, startups and their underpinning ecosystem actors are mushrooming across the board. Similarly in Ethiopia, startups founded mainly by the youth are growing in number and industrial diversity. As the country is constituted largely with young blood, such developments are vital not only from the standpoints of venturing but also from job creation and poverty alleviation; the young startup founders and entrepreneurs are expected to form companies to create employment opportunities for themselves and also their jobless contemporaries. This research strived to study the finance sources and capital structure of sample Ethiopian startups. In this final chapter of the paper, summary of the entire work, the major findings, conclusion, and recommendation parts are included and discussed as follows.

5.2 Summary of Findings

This research entitled, Assessment of Capital Structure of Startup Firms: The Case of Ethiopian Startups, was conducted to assess key financial elements of startups. Startups are peculiar forms of companies different from traditionally known SMEs. Startups contain unique business model, innovation, and fast scalability, which differentiate them from other enterprises. This research took four startup characteristic variables: asset type, legal status, profitability status, and R&D and market testing features. These were then used to determine the patterns of other variables and most important sources of finance: debt and equity finance. Furthermore, the sources of finance of the startups have also been discovered. The research results can be summarized as follows:

- **Sources of Finance Startups Used:**

- In terms of initial sources of finance, majority of the capital used to kickoff startups' activities have been from founder/s savings, family and friends, and granters' finance.
- In the same vein, the entire sources of finance used up to the conduction of this research have also been largely acquired from founder/s savings, family and friends, and grants.
- Majority of the startups used internal finance sources beginning from their starting points. This applies to the entire sample startups with varied characteristics, and significant difference has not been observed on their financial sourcing patterns across them.
- No adequate sources of finance are available in the country for startups. Startups are far from capital sources. Even though internal finance is considered insufficient to realize startups' purpose of establishments and external sources are immensely sought to do so, external finance providers are not widely available.
- External finance providers, especially bank finance, were said to have stringent financial provision requirements, which startups are not able to meet. Consequently, startups are dealing with extensive financial lack and their experiences of applying to external sources of finance and acquiring debt and equity capital have been very much limited.

- **External Financing Methods the Startups Prefer to Acquire from Debt and Equity Finance:**

- On the basis of finance preference, the data showed a Reversed Pecking Order, where sample respondents showing preference to equity finance over debt finance.

- The consecutive preferences could be generalized as: founder/s savings is the most preferred, equity finance ranked second, debt finance ranked third, and capital from family and friends has been the least preferred.

- **Reasons of the Startups for Preferring Debt or Equity Finance over one another:**

- The equity preferring startups that make up majority of the data gathered indicated reasons of equity finance's more accessibility than debt finance, non-financial support such as management consulting, strategy formulation, co-working, networking and overall startup support, and equity finance's appropriate investment terms and conditions than the debt counterpart.
- Furthermore, equity finance showed a strong preference among the startups because of its patient and future-orientated capital supply that transcends current startup situations of unprofitability and/or little to no fully developed idea, products and market.
- Debt finance, particularly in the form of bank finance, was considered as a capital source that targets big organizations instead of startups. Its collateral requirement has been mentioned as a main deterrent for many of the startups that hold them back from using the finance source. But microfinance was stated as a more inclusive debt finance source for startups.

- **Relationship between Startup Characteristics and Debt/Equity Finance Preference:**

- There is a significant association/relationship between asset type and debt/equity preference. The more intangible assets startups possess, their preference gravitates to equity finance rather than debt. Whereas, the more tangible assets startups have, they happen to prefer debt finance over equity finance than those with intangible assets.
- There is a significant association/relationship between R&D and market testing and debt/equity preference. Startups that do not require R&D and market testing character showed preference for debt finance than equity finance at a higher rate than R&D and market test requiring others; while, the R&D and market testing needing startups more likely exhibited preference for equity finance over debt finance when compared to non-R & D and market testing requiring equivalents.

- There is no significant association/relationship between legal status and debt/equity preference.Whether startups are legally registered or not in terms of incorporation, it will not influence their preference of debt or equity finance. But the data showed that when startups are not legally registered, they prefer equity finance. And when startups are legally registered, an insignificant preference change exists between debt and equity finance.
- There is a significant association/relationship between profitability status and debt/equity finance preference. When startups are unprofitable and in earlier phases, they prefer equity finance rather than debt, compared to their profitable counterparts. In contrast, the profitable others preferred debt finance over equity compared to the unprofitable startups.

5.3 Conclusions

Ethiopian startup registrants at Yegara.org and 64 in number have been researched with an objective of assessing capital structure of startups in this thesis. To render a wide capital structure scope to the research, the study was made both on present sources of finance used so far by startups and future finance preferences.

The Pecking Order Theory which hypothesizes a hierarchical order of finance, beginning from internal sources, then debt finance, and lastly equity finance in calculating cost of capital and information asymmetry of companies have been employed as a major research theory anchor. According to literatures, the POT is said to apply to tangible asset owning, less innovative and less risky enterprises, whereas innovative and failure-prone organizations such as startups are considered to Reverse the Pecking Order and alter the order of finance.

The research predicated upon four research questions. The first research question emphasized on gaining knowledge of how startups finance themselves both initially and throughout their operational periods spanned thus far. At early stage and up until this moment, majority of the startups sourced finance from internal funds, mainly from founder/s own savings and family and friends. Under external finance sources, grant finance has been the widely used external source of capital. In terms of usage of finance, a clear hierarchy of finance could not emanate from the outcome. However, it can be inferred that the first order assumption of the POT of acquiring internal finance at initial stage has been fulfilled. It was also found that the startups are facing severe funding gaps no matter they show strong desire for having external sources of finance from whatever capital source. Moreover, even though it is highly used among the startups, family and friends' capital was observed to be the least preferred. Therefore, it can be inferred that the highly tapped internal sources of finance showed such pattern due to the extreme unavailability of external sources of finance and restrictive financial preconditions in place, such as asset collateral for debt finance.

The second and third research questions scrutinized the external finance methods the startups prefer to acquire from debt and equity finance and the reasons for preference of the chosen finance type. These questions were not designed to reach to a conclusion of superiorly treating one finance source. Rather, it was intended to identify the finance source sought by startups and the finance supplier condition taken as a plus by the startups. Majority of the startups showed

preference to equity finance because of its accessibility compared to debt finance, non-financial support, and more appropriate finance terms and conditions. The finding indicates the existence of Reversed Pecking Order. From this it can be concluded that the predominant startups need a finance source that values innovation, considers upcoming prospects, risk-sharing, and a capital source that could offer more than just finance.

The fourth and final research question dealt with checking relationships between startup characteristics and debt/equity preference. From the four startup characteristic variables, the finding showed relationship of profitability status, intensive R&D and market testing status, and asset type status with debt/equity preference of finance type variables. Thus, as per their preferences, startups with unprofitability track record, with intensive R&D and market testing, and dominant intangible assets seek the access of risk-sharing and willingly investing equity finance providers than debt financiers. The more stable and profitable, with dominant tangible assets, and no need of R&D and market testing inclined to debt finance, as these startups could be eligible and able to qualify for asset collateral and interest and principal repayment requirements. Whereas legal status that concerns itself with incorporation or the otherwise did not imply significant debt/equity finance preference relationship. All in all, this paper contributes to empirical literature of the Ethiopian startup space, which is often disregarded from academic study. In this respect, the research could serve as a guide and stepping stone for further studies.

5.4. Recommendations

The study revealed that capital structure of startups is constituted with internal sources of finance, while there is a preference and a strong need of external sources of finance. Thus, the following recommendations are proposed:

- The government of Ethiopia should consider putting the long-overdue Startup Act into policy. As the draft document vows the provision of government grants, budgets, loans, tax relieves and exemptions, and other external donations to startups, the severe finance problems could be resolved to some degree.
- The National Bank of Ethiopia should consider creating a more enabling environment and legal condition for the establishment of Private Equity and Venture Capital funds. These are innovation and risk-taking capital sources that many startups desire to have for the sake of the risk-capital and also the non-financial benefits of professional business advice provision.
- Banks, microfinance, and other debt finance institutions should consider introducing unsecured loans to be given without asking for tangible, collaterallizeable assets to promising startups with dependable business ideas, business models and business plans.
- Startup registration platforms such as Yegara.org should proliferate in order to connect finance requiring projects with finance providers, countrywide. In addition, since investing on risky startup projects might make investors refrain from taking part in such practice, a risk-sharing investment mechanisms of crowd funding shall be developed, legalized and effected.
- Just as seen in other countries, the government of Ethiopia should consider accrediting high net worth individuals as angel investors and incentivize them with tax benefits, work space provision for the investee company, and the like, so that individual investors get attracted to invest their fortunes in startup ventures. This will be extremely important as startups have shown interest of acquiring finance from successful business people who could offer business guidance in addition to capital.

5.5 Limitations of the Study and Further Research

This study collected data from 64 startups registered at an Ethiopian startup registering website. The researcher was compelled to narrow the scope of the research due to resource constraints. Further studies should be conducted in a way that will include more startups at a nationwide level. In addition, the variables included to convey startup characteristics were only 4 in number, while many other variables such as startup owner-managers' experience, educational attainment, gender, age of firm, number of employees (size), product type in relevance with finance structures are also related variables. Future researches need to encompass these variables in order to give foundational insights on startups and support the embryonic Ethiopian startup landscape with data and academic work.

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APPENDICES

Id No_____

Questionnaire

Thank you for agreeing to respond to this questionnaire. This Master's of Business Administration research paper entitled, "Assessment of Capital Structure of Startup Firms: The Case of Ethiopian Startups," has an objective of gathering dependable information from selected startup informants, so that the startup ecosystem players, including startups, finance providers, and beyond, get a primary input for their respective demands regarding finance. Please take your time to complete the questions with the most accuracy possible and according to the question-specific instructions. All your responses will be kept confidential and anonymity of founders, owners, managers, and finance providers will be maintained. The data provided is to be used for this academic research work only. Thanks again for your cooperation!

Part I: Organizations' Profile

1. In which geographic area is your startup located? (*Only Select One Option)*

Addis Ababa ☐ Other Regional State ☐

If your startup is located in "Other" regional states, please specify_____

2. In which sector can your startup be best classified in? *(Only Select One Option)*

Agriculture and Agri-prodcuts	☐	Health	☐
Cleaning	☐	Logistic	☐
Construction	☐	ICT	☐
Creative Arts	☐	Manufacturing	☐
Education	☐	Mining	☐
Entertainment	☐	Renewable Energy	☐
Fintech	☐	Tourism	☐
		Other	☐

If you answered "Other," please specify the sector_____

3. Which sort of asset does your startup possess more? *(Only Select One Option)*

Asset Type	**(Tick)**
Greater intangible assets such as business idea, intellectual property, patents, trade mark, prototype, intellectual human capital	
Greater tangible assets such as a premise, land, cars, machineries, equipment of the company's own	

4. Does your startup firm require fairly intensive research and development and market testing?

Yes ☐ No ☐

5. Has your startup been legally registered as a business company or not yet?

   No, Not Legally Registered ☐ Yes, Legally Registered ☐

6. At which stage is your startup company now? *(Only Select One Option)*

Startup Stage	**(Tick)**
Idea stage with brainstorming ideas and business plan preparation	
Emergence stage having prototype or product but not generating money	
Stability stage with paying customers and generating earnings but incurring loss	
Break-even point with equal earnings and cost	
Growth stage with profitability and expanding market share	

7. How much capital will your startup company need to operate at full scale, please indicate the range that best describes your optimal capital need? *(Only Select One Option)*

   Less than 500,000 ☐

   500,000-999,999 ☐

   1,000,000-1, 499,999 ☐

   1,500,000-1,999,999 ☐

   2,000,000-2,499,999 ☐

   2,500,000 and above ☐

Part II: Sources of Finance

8. From where did the initial source of finance for your startup company come from? *(It is Possible Select More Than One Option for this Question)*

Source of Finance	(Tick)
Founder/s Own Savings	
Capital from Family and Friends	
Microfinance Institution	
Bank finance with principal and interest repayment	
Company Share Stake Taking Equity Investor	
Startup Grants/Competition Financial Awards Provided without Capital Repayment or Share Stake Preconditions	
Other	
No Capital has been Committed to the Company Yet	

If you answered "Other" for Q no.8, please specify the type of finance provider here_____

9. Which sources of capital have you used so far?*(It is Possible Select More Than One Option for this Question)*

Source of Finance	**(Tick)**
Founder/s Own Savings	
Capital from Family and Friends	
Microfinance Institution	
Bank finance with principal and interest repayment	
Company Share Stake Taking Equity Investor	
Startup Grants/Competition Financial Awards Provided without Capital Repayment or Share Stake Preconditions	
Other	
No Capital has been Committed to the Company Yet	

If you answered "Other" for Q no.9, please specify the type of finance provider here_____

10. Has your firm applied for debt finance to get finance from banks or microfinance institutions?

Yes ☐ No ☐

If you answered this question "No," please jump to question number 11.

10a. Has your firm acquired debt finance from banks or microfinance institutions?

Yes ☐ No ☐

10b. If you have acquired debt finance, what was the security?

If your firm has not acquired debt finance so far, please proceed to question number 12

Type of Debt Security	(Tick)
Collateral asset such as land, premise, machineries, equipment and the like	
Personal or individual guarantee for the finance provided	
Both Asset Collateral and Personal Guarantee	
Other	

If you answered "Other", please specify_____

11. Has your firm applied for equity finance investments that provide finance by taking share stake in your organization?

Yes ☐ No ☐

If you answered this question "No," please jump to question number 16.

12. Has your firm acquired equity finance investment by issuing share stake of your organization in exchange for capital provided?

Yes ☐ No ☐

13. If you have ever acquired equity finance by issuing share stake of your venture to investors for your startup, which of the following was the equity finance provider?

Equity Finance Types	(Tick)
Accelerator/incubator programs	
Angel investors/angels networks, who are individual high net worth individuals outside of family and friends' circle	
Crowdfunding investors	
Private equity firm	
Venture capital firm	
I cannot indicate where the finance provider could be categorized under	
Other	

If you answered "Other," please specify_____

Part III: Debt or Equity

14. Rank consecutively the capital sources most preferred by your startup. Rank all four from **1st= Most Preferred- up to - 4th= Least Preferred***(Only One Option could be Selected Per Column)*

Finance Sources	1st	2nd	3rd	4th
Founder's own savings	1st	2nd	3rd	4th
Family and friends' capital	1st	2nd	3rd	4th
Debt finance	1st	2nd	3rd	4th
Equity share stake investment	1st	2nd	3rd	4th

15. Which source of capital do you prioritize to get finance from for your startup?*(Only Select One Option)*

Debt Finance ☐ Equity Finance ☐

16. What is the reason for the choice of the finance provider you selected on question **number 15**, which was from debt or equity? *(Select One Option for Every Column Below)*

Reason for Preference	(Tick)
More accessible source of finance than the other one	
Offers more appropriate credit /investment terms and conditions than the other one	
Close relationship with the chosen finance provider than the other one	

Less costly type of finance, in terms of my company's cost of capital calculation than the other one	
Non-financial support that it could offer to my company such as management consulting, strategy formulation, and any non-capital assistance given by the finance provider than the other one	
Other	

If you answered "Other," please specify_____

Finally, if you have any comments relevant to the topic raised on the questionnaire, please discuss it on the space provided below:

_____

_____

_____

_____

_____

_____

Semi-structured Interview Guiding Questions

1. Do you think that adequate sources of finance are available for startups companies like yours in Ethiopia?
2. What sources of finance has your startup used so far? And has your startup been able to access most of the needed capital required to realize the startups' operations?
3. Is internal finance such as founder/s savings, family and friends' capital and retained earnings able to fulfill the finance need of your startup, or are external sources, such as bank and microfinance loans, equity share investments, grants and more are needed?
4. How would you explain bank and microfinance loans from your startups' perspective? Is your startup able to fulfill the demands of making the principal and interest payments if it manages to take such loans?
5. What do you think about asset collateral debt security that is necessary for acquiring bank loans? Does it limit your startup from accessing bank loans?
6. How do you see equity finance investment from your startups' perspective? Is your startup willing to giveaway share stakes for such investors?
7. Will the concern of giving share stake for investors hold you back from considering equity-based finance source?
8. Which source of finance do you prefer from debt finance which is like bank or microfinance loan that require principal and interest repayment and equity that requires giving away share stake of your company in exchange for capital? Explain your reason for the preference.
9. What are the major challenges you encounter in startup financing?

Startups' Asset Type and Debt/Equity Finance Preference

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	8.727[a]	1	.003	.004	.004	
Continuity Correction[b]	6.940	1	.008			
Likelihood Ratio	8.828	1	.003	.009	.004	
Fisher's Exact Test				.004	.004	
Linear-by-Linear Association	8.576[c]	1	.003	.004	.004	.004
N of Valid Cases	58					

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.38.
b. Computed only for a 2x2 table
c. The standardized statistic is -2.929.

Symmetric Measures

		Value	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	-.388	.003	.004
	Cramer's V	.388	.003	.004
	Contingency Coefficient	.362	.003	.004
N of Valid Cases		58		

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.

R&D and Market Testing and Debt/Equity Finance Preference

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	4.363[a]	1	.037	.051	.035	
Continuity Correction[b]	3.270	1	.071			
Likelihood Ratio	4.354	1	.037	.051	.035	
Fisher's Exact Test				.051	.035	
Linear-by-Linear Association	4.288[c]	1	.038	.051	.035	.027
N of Valid Cases	58					

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.28.
b. Computed only for a 2x2 table
c. The standardized statistic is 2.071.

Symmetric Measures

		Value	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	.274	.037	.051
	Cramer's V	.274	.037	.051
	Contingency Coefficient	.265	.037	.051
N of Valid Cases		58		

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.

Legal Registration Status and Debt/Equity Finance Preference

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	3.243[a]	1	.072	.107	.062	
Continuity Correction[b]	2.346	1	.126			
Likelihood Ratio	3.307	1	.069	.107	.062	
Fisher's Exact Test				.107	.062	
Linear-by-Linear Association	3.187[c]	1	.074	.107	.062	.044
N of Valid Cases	58					

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.34.
b. Computed only for a 2x2 table
c. The standardized statistic is -1.785.

Symmetric Measures

		Value	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	-.236	.072	.107
	Cramer's V	.236	.072	.107
	Contingency Coefficient	.230	.072	.107
N of Valid Cases		58		

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.

Startups' Stage/Profitability Status and Debt/Equity Finance Preference

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5.358[a]	1	.021		
Continuity Correction[b]	3.981	1	.046		
Likelihood Ratio	5.338	1	.021		
Fisher's Exact Test				.028	.023
Linear-by-Linear Association	5.266	1	.022		
N of Valid Cases	58				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.38.
b. Computed only for a 2x2 table

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	-.304	.021
	Cramer's V	.304	.021
N of Valid Cases		58	

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.