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EQUITY-BASED AND EQUITY-FREE FUNDING STRUCTURES IN ESTONIAN
E-COMMERCE STARTUPS

Bachelor's thesis
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I have written this bachelor's thesis independently. Any ideas or data taken from other authors or other sources have been fully referenced.

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Introduction

Access to finance shapes the emergence, growth, and survival of new businesses. In e-commerce, companies operate in a digital environment where rapid customer acquisition is important, reliance on technological systems is high, physical assets may remain limited, and changing market needs, competitive pressures, and costs create constant challenges. In this context, financing involves more than simply providing funds. It concerns decision-making patterns, expectations about the speed of expansion, and how risk is distributed between founders and external parties. Therefore, researchers, investors and policymakers increasingly examine startup financing because it can affect scale, governance, adaptability, and resilience under uncertainty (Hellmann & Puri, 2002; Kaplan & Strömberg, 2004; Kruja & Irimia-Diéguez, 2024).

Startups often structure their funding around two main approaches. The first is equity-based financing, which includes venture capital, angel investing, and equity crowdfunding and is directly tied to ownership. The second is equity-free funding, which includes founders' own funds, reinvested profits, early customer payments, loans, grants, and similar non-dilutive funding channels. These models differ in both financial terms and organizational effects. Previous research links equity-based funding with deeper investor engagement, clearer governance practices, faster expansion, improved network connections, and future financing opportunities, but also with reduced founder ownership, tighter oversight, and greater external influence on strategic choices (Hellmann & Puri, 2002; Kaplan & Strömberg, 2004; Ewens & Malenko, 2020). Under equity-free funding, founders typically retain stronger formal control, maintain greater discretion over operations, and face fewer institutional governance requirements. However, such paths can also slow growth, increase reliance on revenue, customers, suppliers, and digital infrastructure, and intensify execution-related vulnerability under adverse conditions (Vanacker et al., 2011; Vanacker et al., 2012; Mollick & Kuppuswamy, 2014).

Although many studies examine how startups raise funding, the literature on the topic remains fragmented. Most studies examine only one type of funding, one type of sponsor, or a narrow outcome, each using its own theoretical assumptions and methodological approach. Recent reviews note that startup funding research now spans a multitude of funding forms, countries, and research approaches, but still contains few attempts to compare different funding structures using a single analytical framework (Kruja & Irimia-Diéguez, 2024). Limited attention has been paid to comparing equity-based and equity-free funding within a

single framework that measures the same organizational dimensions across both financing structures. This gap is particularly relevant when examining e-commerce startups, where financing options can shape digital growth strategies, reliance on third-party platforms, customer acquisition costs, and volatility in daily operations. Existing empirical evidence also focuses mainly on larger startup ecosystems, while Estonian e-commerce startups remain less explored.

The aim of this thesis is to examine how funding structure, specifically equity-based versus equity-free funding, is associated with differences in decision-making autonomy, growth orientation, and resilience in Estonian e-commerce startups.

To achieve this aim, the thesis sets the following research tasks:

- To develop a comparative theoretical framework for analysing equity-based and equity-free funding in Estonian e-commerce startups.
- To systematize previous empirical research on startup financing through the dimensions of decision-making autonomy, growth orientation, and resilience.
- To collect empirical data on funding-related experiences in Estonian e-commerce startups by means of an online questionnaire and qualitative follow-up interviews.
- To analyse whether the patterns identified in earlier literature are observable in the reported experiences of founders and startup executives in the Estonian context.
- To compare the empirical findings with the reviewed literature and identify the main similarities, differences, and context-specific implications.

The study has several limitations. First, it focuses only on e-commerce startups and therefore does not aim to generalize its findings to all startup sectors. Second, Estonia is the only empirical context, which determines the scope of the collected data. Third, participation was limited by the availability of respondents and the time frame of the research process. Fourth, the empirical sample mainly represents early-stage and growth-stage companies, where financing decisions are particularly important for strategic and operational development. Finally, the empirical analysis is exploratory and descriptive in nature rather than hypothesis testing. The questionnaire was completed by a limited number of participants, and qualitative follow-up interviews were used to clarify and contextualize the survey responses rather than to draw statistically generalizable conclusions.

The thesis has both academic and practical relevance. Academically, the thesis brings together disparate research traditions into a single analytical framework and applies this framework to Estonian e-commerce startups. For founders, this provides a structured basis for

comparing external investment with alternatives that retain ownership. The results may also be useful for organizations supporting startups and policymakers interested in the development environment of young digital companies. Thus, the thesis demonstrates how funding decisions can affect autonomy, growth orientation, and resilience in digital business.

The thesis consists of two main chapters. The first section develops the theoretical foundation of the study, defining equity-based and equity-free funding models in the context of e-commerce startups. It then compares these models along three analytical dimensions: decision-making autonomy and dependency, growth orientation and performance logic, and resilience and execution risk. Chapter two presents the empirical analysis. It explains the methodology and analytical approach, presents the surveys and follow-up interviews, analyzes the results, and discusses them in relation to the theoretical framework.

Supplementary materials are presented in the appendices: the questionnaire is provided in Appendix A, the coding logic and dimension index construction in Appendix B, the qualitative follow-up interview guide in Appendix C, the AI-use documentation and representative prompts in Appendix D, the selected evidence base for the comparative framework in Appendix E, the respondent and startup profile in Appendix F, and the qualitative follow-up synthesis in Appendix G.

Keywords: startup financing; e-commerce startups; equity-based funding; equity-free funding; entrepreneurial resilience.

1. Equity-based and equity-free funding structures in e-commerce startups

1.1. Equity-based and equity-free funding as startup financing models

Startup funding is often discussed through clear either-or categories, although real companies frequently combine several funding sources across growth stages. Research on venture capital, bootstrapping, loans, crowdfunding, and digital finance has mostly developed separately, which makes direct comparison difficult. For e-commerce startups, funding structure matters because digital commerce often involves customer-acquisition pressure, platform dependence, fulfillment constraints, and volatile cash-flow timing.

Finance for new businesses extends beyond venture capital or bootstrapping alone. Academic reviews show that current research examines equity, loans, retained earnings, public support, crowdfunding, venture debt, family finance, accelerator support, fintech-enabled lending, and mixed models (Block et al., 2018; Kruja & Irimia-Diéguez, 2024; Miglo, 2022). Attention is also shifting to the structuring of resources, the obligations that follow their use, and the assumptions that shape ownership and control. Capital structure is

especially important in early stages, when routines are still fluid and strategic decisions shape future development.

Despite common assumptions, financing startups is subject to certain constraints. Information asymmetries are typically greater than in mature companies, meaning that standard models developed for established companies are only partially applicable to new ventures. Collateral is often limited, making access to traditional financing difficult. Volatility in customer demand adds uncertainty, and founder-specific and contextual factors can have a stronger impact on outcomes than in later-stage companies (Miglo, 2022). A synthesis of startup-financing research from 2010 to 2023 confirms this diversity. Uncertainty, limited prior performance data, restricted access to conventional finance, and reliance on support networks remain common conditions (Kruja & Irimia-Diéguez, 2024).

Separating finance by ownership involvement creates useful analytical categories. When investors receive ownership stakes, control rights, or return requirements tied to the enterprise value, this mechanism can be considered equity-based financing. Examples include venture capital, angel investing, equity-based crowdfunding, and similar models that dilute founders' ownership or create requirements similar to equity requirements. On the other hand, schemes that avoid the transfer of ownership can be considered equity-free funding. These include self-generated income, founders' own capital, bank loans, grants, customer prepayments, reward-based crowdfunding, supplier credit, and internal strategies intended to limit reliance on outside equity investment (Belleflamme et al., 2014; Robb & Robinson, 2010; Vanacker et al., 2011).

This distinction is analytically valuable because it reveals differences that go beyond legal classification. Equity financing redistributes rights to future profits and often involves outsiders in the decision-making process. In equity-free funding, formal ownership remains with the founders, but autonomy may be limited. Instead of disappearing, dependency may shift to retained earnings, loan obligations, customer demands, supplier relationships, or informal resource agreements. The focus is how financing models shape incentives, dependency, and long-term decision-making.

Contrary to the common assumption that startups rely primarily on personal capital or informal lending before approaching institutional investors, their evidence from the Kauffman Firm Survey shows that formal outside debt can appear early and play a central role in the initial capital structure (Robb & Robinson, 2010). This challenges approaches that treat formal funding as relevant only at later startup stages. Thus, equity-free funding

encompasses a variety of instruments, not only resources from friends and family, but also structured instruments reminiscent of traditional small business financing.

According to the OECD, small businesses and start-ups use a wide range of financing options, such as bank loans, asset-based financing, hybrid debt instruments, investor-backed equity, and crowdfunding platforms, although access to these is particularly difficult for fast-growing companies with limited collateral or a short credit history (Organisation for Economic Co-operation and Development [OECD], 2018).

Block et al. (2018) show that the entrepreneurial-finance landscape is broader than the traditional divide between banks and venture capital. Crowdfunding platforms, accelerators, family offices, venture debt providers, and public support schemes differ by debt or equity orientation, investment motives, target company and level of involvement. Thus, the equity and non-dilutive distinction remains relevant as a broader funding logic rather than a rigid category.

Belleflamme, Lambert and Schwienbacher distinguish between pre-order and profit-sharing models and show that the way money flows shapes what backers expect later. Pre-order allows founders to raise money without transferring ownership, while profit-sharing or equity financing schemes converge with investor expectations, as returns depend on the future performance of the company (Belleflamme et al., 2014). Camilleri and Bresciani similarly show that crowdfunding is not a single financing form. Donation-based, reward-based, lending-based, and equity-based crowdfunding each follow different logics and create different implications for founders and firms (Camilleri & Bresciani, 2022).

The distinction between equity and equity-free funding becomes more apparent in e-commerce, as online operations change financing decisions. These ventures typically require initial investments in technology platforms, interface design, databases, transaction processing systems, logistics management, customer service, and customer acquisition. While costs are incurred early on, revenues can be gradual and volatile. At the same time, the tangible collateral available for standard loans is often limited. Instead, value is often created through intangible assets such as reputation, software systems, customer data, and user traction. Early research in e-commerce has shown that online retail is changing the way transactions are conducted and intermediaries operate (Wigand, 1997). Later research also emphasized the connection between digital infrastructure, platforms, and firm behavior in markets, especially in relation to access, speed, and system responsiveness (Rédis, 2010).

Recent contextual sources strengthen this argument. ECLAC's work on digital transformation and e-commerce shows that online firms require not only market access but also digital capabilities, logistics integration, data use, and institutional support. It is a digitally coordinated business model in which funding conditions interact with technology adoption, infrastructure, regulation, and export capability. OECD work on SME digitalisation similarly shows that uneven access to digital tools, skills, and finance can limit smaller firms' competitiveness (Economic Commission for Latin America and the Caribbean [ECLAC], 2022; Organisation for Economic Co-operation and Development [OECD], 2024).

Growth among e-commerce startups can depend heavily on customer acquisition, including advertising, search visibility, conversion optimization, and retention systems. Equity-based funding can support faster spending in these areas, while equity-free funding may preserve ownership but limit the speed of customer acquisition, market entry, or delivery-capacity expansion.

Many online businesses rely on marketplaces, advertising systems, payment processors, delivery firms, or website infrastructure. Even without transferring shares, operational control may shift indirectly when a few external actors shape key activities. ECLAC's work on the digital economy supports analysing digital start-ups as interconnected systems rather than isolated companies (ECLAC, 2021).

The distinction is important for three reasons. First, it clarifies who gains claims on the company and who retains formal ownership. Second, it reveals how dependency is structured: through investors, creditors, customers, suppliers, or digital platforms. Third, it helps explain the growth patterns of e-commerce startups, where funding influences customer acquisition, technology development, and scalability more directly than in many traditional sectors. Because this thesis focuses on autonomy, growth orientation, and resilience rather than a single performance metric, equity and equity-free funding provide a useful analytical framework. In the empirical study of Estonian e-commerce companies, this theoretical distinction remains relevant, despite the fact that real companies often combine multiple funding sources.

1.2. Decision-making autonomy, growth orientation, and resilience under different funding structures

In startups, non-ownership sources of funding shape control structures differently than equity-based sources. These funding channels are associated with different patterns of power distribution, different expectations about the speed of expansion, and different

moments when organizational vulnerability may arise. Rather than treating them as equivalent, the analysis is conducted along three dimensions: decision-making autonomy and dependency, growth orientation and performance logic, and resilience and execution risk. The way power is organized affects the speed and conditions of strategic decision-making. The underlying growth logic determines how well the company can withstand periods of uncertainty. Resilience under pressure is also connected to where responsibilities, obligations, and influence are located within the organization.

Figure 1 presents the analytical framework. Rather than examining funding structure solely from the perspective of the underlying source of capital, the framework examines its relationship to three organizational outcomes. These relationships form the basis for an empirical analysis of Estonian e-commerce startups.



Figure 1. Analytical logic of the comparative framework

Source: Compiled by the author based on the reviewed literature.

Decision-making autonomy and dependency

Evidence about autonomy and dependency is clearest in studies of equity finance. Kaplan and Strömberg's research on venture-capital documents is important because it shows that such agreements allocate more than money: control rights, liquidation rights, and conditional terms are also distributed in response to agency problems and uncertainty (Kaplan & Strömberg, 2004). Raising funds through ownership stakes does not simply add resources. It reshapes who holds authority through structured contractual design. When outside investors are included in the capital structure, profit sharing is only one aspect of this relationship.

Governance mechanisms then change how decisions are made. Some decisions remain with the founders, while others are subject to board approval or influence.

Hellmann and Puri show that venture-backed firms tend to adopt more structured practices, including stock-option plans, specialized management, and earlier leadership changes (Hellmann & Puri, 2002). This suggests that equity funding can professionalize the firm while also shifting authority away from purely founder-centred control. Bonini, Alkan, and Salvi show that venture-capital involvement is associated with investor influence over CEO selection, compensation, board appointments, and incentive systems, although influence over long-term planning may be more limited (Bonini et al., 2012). This supports the view that equity-based governance is shared and conditional rather than a complete transfer of authority.

When venture capitalists take board seats, oversight responsibilities shift along with leadership and network connections. Appointments to management and boards are often made through investor networks, and in venture-backed companies, there are connections between leadership roles and acquisition patterns (Amornsiripanitch et al., 2019). Control tends to rest with founders at first. Later, independent directors usually become involved, often after the second funding round, with their role centred on mediating disagreements once authority is shared among several parties. As time passes, venture capitalists tend to obtain increased influence over board decisions, altering how board seats are held and used (Ewens & Malenko, 2020). These findings suggest that ownership control evolves. It shifts gradually over successive stages of investment as financial relationships become increasingly complex.

Broughman and Fried further show that founder authority may weaken over time in venture-backed firms that reach IPO, as founders often lose CEO roles or voting power after successive financing stages (Broughman & Fried, 2020) while Giudici, Agstner, and Capizzi provide European evidence that startup charters often use preferred shares, vesting clauses, drag-along rights, and tag-along rights to structure investor-founder relationships (Giudici et al., 2022).

Equity-free funding presents a different model. Founder ownership does not eliminate dependence on external forces. Vanacker, Manigart, Meuleman, and Sels treat self-financing as a method of managing resource dependency. The argument is not that startups without investors are free from pressure. Instead, dependence shifts away from dominant funders and may increase towards other actors, especially when firms rely on customer upfront payments, extended supplier terms, employee flexibility, or similar relationship-based support

(Vanacker et al., 2012). Independence therefore cannot be defined solely by shareholding or the absence of external financiers.

A long-term analysis of new ventures shows that different seed-capital methods lead to different development paths. Some methods are associated with greater growth in added value, while greater reliance on family and friends is associated with weaker growth in added value over time (Vanacker et al., 2011). This suggests that equity-free funding does not lead to a single outcome. Instead, it encompasses a range of models with different consequences in terms of autonomy and dependency. Some choices allow founders to retain control with relatively few trade-offs, while others create social or interpersonal obligations that can constrain choices at later stages. Thus, outcomes depend less on avoiding external capital itself and more on which non-shareholder mechanisms become important early.

Some investors may prefer founder-friendly arrangements that leave more discretion to founders when high-upside outcomes are the goal. Equity financing can therefore support different governance styles depending on incentive structures, investment strategy, and startup characteristics (Broughman & Wansley, 2023). However, the broader difference remains: equity-based financing typically involves formal governance influence, while equity-free funding preserves ownership autonomy but shifts dependence to operational and interpersonal relationships.

Growth orientation and performance logic

Funding structures also shape how growth is defined and evaluated. Equity-based funding tends to support milestone-driven expansion, external validation, and follow-on financing potential. Equity-free funding usually ties growth more closely to internal resources, repayment limits, customer payments, and operating efficiency.

Kaplan and Strömberg's findings also show how contractual terms reflect expected growth paths. Their research shows how venture capital contracts respond to uncertainty within and around the firm. Through staged funding rounds and control rights, investors adjust their involvement based on performance relative to expected trajectories. Such structures guide firm behavior toward outcomes that are consistent with ongoing investment and future liquidity events (Kaplan & Strömberg, 2004). When conditions justify continuation, the venture capitalist proceeds with funding across stages and reassesses progress at each step. Early failure is part of the calculation, provided that exceptional later-stage outcomes remain possible (Greenwood et al., 2018).

Research on signaling also supports the scale interpretation of equity financing. According to Chang, Lee, and Tien, raising venture capital appears to improve crowdfunding outcomes, suggesting that outside investment may act as a signal of trust to a broader target group of investors (Chang et al., 2021). In another context, Valenza, Balzano, Tani, and Caputo examine Italian equity crowdfunding campaigns and find that certain campaign characteristics are connected with later firm innovativeness. This indicates that equity-linked financing may affect firm development beyond immediate capital provision (Valenza et al., 2023). These studies do not imply that every equity-funded company grows rapidly, but they associate such funding with visible performance metrics and innovative development.

In digital markets, early visibility, brand awareness, customer reach, and user data can affect long-term competitive positioning. Equity funding allows companies to spend on customer acquisition, technology platforms, inventory management systems, delivery networks, and other expansion-focused priorities in addition to existing revenue streams. Additional funding can allow firms to absorb initial scaling losses. However, such support typically creates expectations of rapid progress and can prioritize speed over short-term profitability. This trade-off can be attractive when scale benefits are significant, but risky when margins are low.

Growth without equity financing follows a different pattern. When companies avoid external equity investments, scaling decisions tend to be closer to what internal resources allow. Research by Vanacker and colleagues shows that bootstrapping strategies can support growth in new ventures, although the results vary depending on the methods used and are often determined by careful resource allocation rather than aggressive scaling (Vanacker et al., 2011; Vanacker et al., 2012). This suggests that growth without ownership dilution does not simply mean slower progress. Instead, development relies more on conversion efficiency, financial discipline, working-capital management, and extending scarce resources.

Robb and Robinson similarly show that young firms often include debt in their initial capital structure. Debt creates constraints distinct from investor equity ownership. Because debt requires repayment, it can force early-stage firms to focus on profit generation and financial control at an earlier stage (Robb & Robinson, 2010). For e-commerce companies, this can mean more rigorous testing of customer acquisition methods, slower entry into unknown markets, and more limited commitments to inventory or delivery. Growth may be slower, but it is still more closely tied to actual operating performance.

Belleflamme and his colleagues explain how customer-linked financing fits into growth strategies that avoid diluting ownership. Their framework suggests that pre-orders are more attractive when capital requirements are relatively small relative to market size, while profit-sharing arrangements become more appropriate when capital requirements are larger (Belleflamme et al., 2014). This is relevant for e-commerce initiatives because financing choice is tied to market structure and investment requirements. If start-up costs remain limited, prepayments, subscription models, or reward-based advances can allow companies to test demand while supporting gradual expansion. However, these funds may be insufficient for companies with large initial technology or market-entry needs.

Nevertheless, the study further supports the notion that financial constraints, combined with digital transformation, can improve financial performance in resource-constrained environments (Rita & Nastiti, 2024). The study shows that non-dilutive funding logic can be compatible with lean digital adaptation.

The key distinction is not that one form of financing fosters growth while the other merely ensures survival. Rather, each model supports different ways of defining and measuring progress. Because equity financing is aligned with external metrics and time-bound goals, it promotes rapid expansion, external valuation, and growth based on reaching milestones. When ownership is not transferred, growth often follows a more disciplined path focused on cost control, cash flow management, and continuous improvement. For e-commerce startups, where delivery, retention, or margin failures can have immediate consequences, this strategic difference is especially important.

Resilience and execution risk

The third dimension addresses how financing affects resilience under uncertainty and allocates execution responsibility. Risk can arise in a number of ways: sudden drops in customer demand, unstable access to capital, operational disruptions, changes in regulations for digital platforms, and difficulties in translating concepts into achievable outcomes. Both equity and equity-free models do not eliminate risk. Instead, they shift the concentration of pressure within the organization.

Kacer, Wilson, Zouari, and Cowling provide evidence on equity financing and resilience. In their study of British entrepreneurial firms before and during the COVID-19 crisis, survival outcomes depended in part on the type of investor. Firms backed by foreign venture capital had a lower risk of failure than some other groups, while firms relying on equity crowdfunding, business angels, or public venture capital funds showed a higher risk of

failure. Guaranteed loan programs affected outcomes, but not uniformly across all investor categories. Outcomes depended on both company characteristics and investment sources (Kacer et al., 2025). This suggests that raising equity capital can enhance resilience, but its impact varies from case to case. Investor type, past financing patterns, and support structures also matter.

External equity capital can mitigate direct financial constraints, as startups have greater reserves, better access to subsequent funding rounds, or management experience. At the same time, such financial support implies stricter oversight requirements. When conditions become uncertain, reduced performance can lead to stricter oversight, greater investor involvement, or pressure to favor alternative strategic directions. Under pressure, performance also depends on navigating stakeholder expectations and commitments.

Pollman defines startup resilience more broadly than avoiding formal insolvency. He argues that bankruptcy frameworks often fail to reflect early-stage company realities. Venture-backed companies are often structured to avoid formal bankruptcy proceedings except in the most extreme circumstances. More commonly, failure unfolds through soft-landing acquisitions, acqui-hires, or assignments for the benefit of creditors, which allow stakeholders to reallocate resources without abrupt systemic disruption. These paths allow stakeholders to adjust course while preserving some venture ecosystem value (Pollman, 2023). Thus, equity financing can indirectly increase resilience by providing alternatives to sudden closure, even if the startup does not survive as a standalone company.

In some cases, external investors can arrange for ownership transfers, talent acquisitions, or orderly exits while preserving elements such as software, customer relationships, data, or personnel. Thus, equity-linked resilience can involve both managed decline and continued operations. This is different from companies funded primarily with the founders' own savings or debt, where the lack of structured exit paths can make a crisis more sudden and concentrated on the founding team.

For equity-free funding, resilience evidence is less developed, while execution-risk research is more useful. Rather than focusing solely on funding success, this literature examines what happens after capital is raised, particularly in reward-based crowdfunding cases. Although ownership is not transferred in these schemes, risk remains after initial funding. After funding is received, many projects face delays, cost overruns, and difficulties in achieving promised results, despite the founders' considerable efforts. This shifts the focus from funding targets to post-funding outcomes. Undiluted funds raised do not eliminate risk.

Uncertainty often shifts into logistics, coordination, planning, and implementation (Mollick & Kuppuswamy, 2014).

Ownership can remain with the founder through retained earnings, customer advances, or alternative financing, while operational responsibility becomes more complex. Inventory forecasting, supplier reliability, delivery times, customer support, return management, and platform compliance are all crucial. Errors in demand estimation can create significant difficulties even when ownership remains untouched. Underestimating logistics can exacerbate these risks. External support may then be limited, placing the burden on internal resources.

If pre-ordering or customer-driven financing is more effective when investment requirements are relatively modest, the sustainability of ownership retention strategies may depend on keeping scale and complexity manageable. As capital needs increase, models avoiding external financing may become more vulnerable if performance expectations exceed organizational capabilities (Belleflamme et al., 2014). This risk is evident in e-commerce, where scale intensifies warehousing, delivery, returns, and customer-experience challenges. Small-volume operating models can become unsustainable when orders grow rapidly without the appropriate financial and organizational infrastructure.

Some equity structures may give founders greater discretion, but they also take on greater risk. While these structures offer the potential for higher returns, the consequences of a venture's failure can spill over to other stakeholders. Incentives also shape how financial structures encourage founders and investors to take risks, continue under uncertainty, or cope with failure (Broughman & Wansley, 2023).

Equity financing often lowers short-term liquidity risk and can provide structured support during difficult periods. However, shareholder participation also introduces oversight mechanisms under stress. Without shareholder dilution, founders retain more formal control but also face greater internal burdens related to strategy, organization, and day-to-day operations. Given the rapid changes and performance pressures typical of e-commerce businesses, resilience depends less on the overall funding level than on how funding mechanisms distribute rights, responsibilities, expectations, and operational burdens.

Table 1 summarizes the key differences identified in the reviewed literature. It is not intended to present a rigid binary distinction, but to highlight the dominant patterns emerging from the reviewed studies.

Table 1

Comparative framework for analysing equity-based and equity-free funding structures in e-commerce startups

Analytical dimension	Equity-based funding	Equity-free funding	Expected contrast in e-commerce startups
Decision-making autonomy and dependency	Outside investors usually receive ownership-linked control rights, board influence, and monitoring capacity. Governance becomes more formalized and authority is increasingly shared or renegotiated across financing rounds.	Founders preserve formal ownership and direct investor oversight is limited, but dependence often shifts toward customers, suppliers, lenders, or commercial platforms.	Equity-based ventures are more likely to face formal external influence over key decisions. Equity-free ventures are more likely to retain ownership while remaining operationally dependent on non-investor actors.
Growth orientation and performance logic	Growth tends to be evaluated through milestones, external validation, scale, and follow-on financing potential. Expansion can be pursued ahead of current cash flow.	Growth tends to be tied more closely to internally available resources, debt discipline, customer payments, and operating efficiency. Expansion is often more incremental.	Equity-based e-commerce startups are more likely to prioritize speed, visibility, and market capture. Equity-free e-commerce startups are more likely to prioritize unit economics, cash discipline, and controlled scaling.
Resilience and execution risk	Liquidity buffers, follow-on capital, investor networks, and structured exit routes can improve shock absorption, but governance complexity and performance pressure increase under stress.	Ownership retention reduces direct investor pressure, but resilience depends more heavily on planning discipline, operating execution, and the venture's own ability to absorb setbacks.	Equity-based ventures may be more resilient to financing shocks but more exposed to governance pressure. Equity-free ventures may be freer strategically but more fragile operationally if demand, fulfillment, or cash flow deteriorate.

Source: Compiled by the author based on the reviewed literature.

Table 1 highlights different organizational logics rather than a good-or-bad financing distinction.

1.3. Previous empirical studies and development of the comparative framework

Startup financing encompasses a variety of investment models, countries, outcome variables, and methods. When results are not systematically linked, they are difficult to compare directly.

Kruja and Irimia-Diéguez examined research on startup financing from 2010 to 2023. Their review identifies diverse financial approaches, empirical data, and regional coverage, but also fragmented research on startup characteristics, founder characteristics, and economic conditions without a unified analytical framework (Kruja & Irimia-Diéguez, 2024). Miglo reaches a parallel theoretical insight. Explanations such as credit rationing, signalling, learning, flexibility, and strategic options coexist in entrepreneurial finance, with no single theory becoming clearly dominant in the way traditional capital-structure theories often do for established companies (Miglo, 2022).

New entrepreneurial-finance actors have expanded startup funding options. Venture capital operates differently from angel investors, just as crowdfunding platforms differ from accelerators. Family investment funds pursue goals that differ from those of venture capital lenders or government initiatives. Each player has its own methods, goals, timelines, and levels of involvement. Some studies examine investor influence on management, others the factors that determine campaign outcomes, others post-funding performance, and still others company survival or access to capital. Research has deepened, but linking these areas has become more difficult (Block et al., 2018).

Camilleri and Bresciani similarly show fragmentation across reward-based, lending-based, and equity-based crowdfunding research (Camilleri & Bresciani, 2022). Fragmentation is compounded by geographic concentration. Research on governance and founder control is strongly concentrated in the United States, with additional attention to Western Europe. Hellmann and Puri study Silicon Valley startups. Kaplan and Strömberg focus on venture capital deals in the United States. Ewens and Malenko study the boards of American startups. Broughman and Fried analyze venture-backed companies that go public in the United States (Broughman & Fried, 2020; Ewens & Malenko, 2020; Hellmann & Puri, 2002; Kaplan & Strömberg, 2004). Giudici et al. add a specifically European perspective through the analysis of Italian startup charters (Bonini et al., 2012; Giudici et al., 2022). Evidence on governance effectiveness remains concentrated in ecosystems where venture capital markets and board

practices are well-established. As a result, small startup ecosystems like Estonia are rarely prominently represented in analyses.

Geographical characteristics and research methodologies also differ in studies that do not focus on equity. Vanacker and colleagues use a sample of Belgian startups and combine survey data with firm-level financial information, providing a rare opportunity to understand how bootstrapping and equity-free financing affect dependency and value-added growth (Vanacker et al., 2011; Vanacker et al., 2012). In contrast, Mollick and Kuppuswamy analyse crowdfunding outcomes through a different lens, shifting attention toward what happens after funding has been raised rather than toward internal control structures (Mollick & Kuppuswamy, 2014). Rita and Nastiti examine MSMEs in Indonesia, expanding the geographical range while moving outside a startup-core sample (Rita & Nastiti, 2024). Useful results exist, but they are based on different contexts, company sizes, and non-dilutive financing measures.

Venture capital and equity-based instruments are studied in greater detail than non-dilutive approaches, particularly in terms of governance mechanisms. Venture capital deals often include written agreements, board structures, staged funding rounds, and exit events, all of which are observable elements well-suited for empirical study. Equity-free funding, by contrast, is often part of everyday activities, not visible as a separate transaction. Research therefore focuses more on investor behavior, leaving gaps regarding founders' decisions to avoid equity deals. What happens with invoices, late payments, internal cost control, or customer-based financing rarely receives the same level of attention as formal funding rounds.

Attention to the three analytical dimensions is also uneven. Decision-making autonomy and dependency are most prominent in management research. Growth orientation and performance logic are present in studies of both equity and non-equity-based ventures, although they are measured by different metrics, such as innovativeness, added value, signaling effects, or campaign performance. Resilience and execution risk are studied less symmetrically. There is evidence on crisis survival among equity-based ventures and post-financing execution difficulties in reward-based crowdfunding, but limited research places both risks within a common framework (Kacer et al., 2025; Mollick & Kuppuswamy, 2014; Pollman, 2023).

The methods used in the studies reviewed vary widely. Some analyses rely on in-depth examination of contracts or charters, including those by Kaplan and Strömberg and

Giudici et al. Other findings, such as those by Bonini et al. and Vanacker et al., are based on survey responses. The studies by Ewens and Malenko, Robb and Robinson, and Mollick and Kuppuswamy draw on large administrative or platform data sets. Several key references are theoretical or review-based, including Greenwood et al., Block et al., Miglo, and Camilleri and Bresciani. However, synthesis is difficult because similar conclusions can come from different data structures.

Legal analysis of startup charters differs substantially from crisis-survival modelling or post-crowdfunding performance analysis. A broader conceptual framework is therefore needed for comparison, going beyond the individual measurement instruments used in the different studies. For this reason, the review groups studies by decision-making autonomy and dependency, growth orientation and performance logic, and resilience and execution risk. These categories cover a wide range of data while remaining sufficiently precise for systematic comparison. A condensed evidence map showing how the reviewed sources support the three analytical dimensions is provided in Appendix E.

Targeted empirical research on e-commerce remains limited. Much of the existing literature covers start-ups broadly, including technology companies, small businesses or digital ventures, but fewer studies focus specifically on e-commerce start-ups. Some insights are derived indirectly from contextual reports. ECLAC's work on digital technologies and online markets shows how network access, operational infrastructure, platform ecosystems, data use and internal capabilities influence digital business models. The OECD's analysis of digitalisation also highlights how digital transformation is affecting market access, productivity and financing conditions for small businesses. These sources explain why e-commerce finance should be considered separately rather than as a direct reflection of traditional industries (ECLAC, 2021; ECLAC, 2022; OECD, 2024).

Governance evidence is strongest in equity-focused research, while equity-free studies are more relevant for bootstrapping, revenue-driven financing, customer-linked financing, and operational capacity. A financing structure can create advantages in one dimension and limitations in another. Equity-based financing can support expansion while simultaneously increasing formal external influence on founders. Equity-free funding approaches can avoid ownership dilution while simultaneously increasing exposure to operational demands and relative dependence. Because the reviewed studies use different measurement standards, the models cannot be reliably ranked. Instead, comparisons must be made across various dimensions.

It is based on patterns identified in the reviewed literature rather than externally imposed categories. Research on venture capital, bootstrapping, crowdfunding, and crisis-period survival repeatedly returns to questions of authority, expansion, and risk exposure. It also allows different studies to be interpreted within a common framework. Contract analysis, surveys, platform data, and crisis resilience modeling can contribute to the same analytical dimensions, despite the use of different outcome variables. The model is directly applicable to the empirical part of the thesis. The study and subsequent qualitative interviews are structured around the same three dimensions, allowing for a comparison of the experiences of Estonian e-commerce startup founders with patterns identified in international studies.

Most studies of startup financing treat startups as a broad category, but online businesses face unique challenges: customer acquisition can require significant resources, platforms can control market access, physical assets are often limited, the quality of fulfillment impacts performance, and digital demand can change rapidly. These factors can make the consequences of financing choices more immediate. Reduced autonomy can quickly manifest itself as dependence on investors, platforms, or other external actors. Slower expansion can expose the constraints of advertising budgets and profit margins. Poor sustainability can affect delivery quality and customer trust.

The reviewed literature supports the use of a shared comparative framework rather than a direct ranking of funding models. Since previous studies differ in context, method, and outcome measures, equity-based and equity-free funding cannot be compared reliably through a single performance indicator. The framework developed in this chapter therefore serves as the basis for the empirical analysis in Chapter 2, where the same logic is applied to founder and manager responses from Estonian e-commerce startups.

2. Funding structure, autonomy, growth orientation, and resilience in e-commerce startups: empirical analysis

2.1. Methodology and analytical approach

The empirical section explores how the framework from Chapter 1 appears in the experiences of Estonian e-commerce founders and managers. The aim is not to test the concept through statistical analysis, but to examine whether the same three dimensions, decision-making autonomy and dependency, growth orientation and performance logic, and resilience and execution risk, are manifested in a limited number of empirical cases.

The empirical design is exploratory and mixed-method. The main empirical component is an anonymous online questionnaire, which provides comparable descriptive

data across the three analytical dimensions. After the questionnaire responses were analysed, additional qualitative insight was collected through two semi-structured follow-up interview sessions. The questionnaire identifies patterns across respondents, while the interviews clarify how founders and startup executives interpret those patterns. The interviews are used as a contextual layer, not as statistical validation.

The target group consisted of founders and managers working at Estonian e-commerce startups. These respondents are relevant because they are involved in strategic decision-making, day-to-day operations, or both. The method of recruiting respondents was purposive and non-random. The questionnaire was distributed through targeted online outreach, public Telegram groups, emails, and direct requests. This limits the ability to draw broad conclusions beyond the respondent sample.

The survey was conducted anonymously online using the UT LimeSurvey platform. Completion of the anonymous questionnaire was treated as consent to use the responses in aggregated form for the thesis. The original questionnaire file contained 26 response lines. After applying the completeness criterion, only responses that reached the last page were selected for analysis. This resulted in 21 completed responses and five incomplete responses were excluded. The questionnaire is presented in Appendix A, the coding logic is summarized in Appendix B.

Of the selected sample, four respondents reported that their startup was primarily influenced by equity financing, six by equity-free funding, and eleven reported that both financing models influenced their startup equally. Thus, the mixed financing group constituted the largest group. This distribution suggests that the equity/equity-free distinction remains useful, although real startup practices often do not follow clear categories. This overlap matters when interpreting the empirical results.

The qualitative follow-up material consisted of two semi-structured interview sessions. The interview guide can be found in Appendix C. One interview was a paired interview with two participants and the other was an individual interview with one participant. Three participants took part, but the material is better described as two interviews rather than three independent interviews. In the paired session, one participant described a financing structure combining several sources, while the other discussed a mainly equity-free path. In the individual session, the participant also described experience with equity-free funding. The interviews followed the questionnaire themes but focused on respondents' interpretations and practical explanations for funding choices.

All interview materials were anonymized. Identifying data such as names, company references, product descriptions, monetary amounts, and the names of specific digital platforms were removed or summarized as necessary. Participation was voluntary, and respondents were informed of the option to terminate the interview. One interview session was conducted in Russian, then transcribed and translated into English for analysis in the thesis. The analysis therefore focuses on meaning rather than exact linguistic formulation.

The first dimension, decision-making autonomy and dependency, addressed the founder's discretion, external influence, management demands, and dependence on specific stakeholders. The second dimension, growth orientation and performance logic, addressed rapid growth, efficiency discipline, access to capital, and the balance between growth and short-term profitability. The third dimension, resilience and execution risk, concerned financial flexibility, pressure under uncertainty, implementation vulnerability, and perceived ability to respond to disruptions.

Most closed-ended questions used a six-point Likert scale without a neutral midpoint. Responses were coded on a scale of 1 to 6, with 1 indicating strong disagreement and 6 indicating strong agreement. The lack of a neutral midpoint encouraged respondents to take a specific position. After coding, responses were used for item summaries and group-level comparisons.

Three composite indices were constructed from the coded questionnaire items. Questions 5 to 8 formed the autonomy and dependency constraint index, with Question 5 reverse-coded so that higher values indicate stronger external influence, governance pressure, and dependency constraint. Questions 10 to 13 formed the growth orientation index, with Question 11 reverse-coded so that higher values indicate stronger growth orientation relative to efficiency logic. Questions 15 to 18 formed the resilience and execution risk exposure index, with Questions 15 and 18 reverse-coded so that higher values indicate greater pressure, vulnerability, and exposure to execution-related risk.

The analysis of the questionnaire was descriptive. The cleaned data set was used to calculate frequencies, percentages, group-level means and summary scores for individual parameters. No inferential statistics were used. Given the small sample and subgroup sizes, regression analysis, significance testing, or formal hypothesis testing would have created false precision. Therefore, the analysis focused on careful description, group comparisons and careful interpretation of patterns across the three analytical dimensions.

The interview materials were analyzed using a structured thematic approach based on the framework developed in Chapter 1 and used in the questionnaire. The analysis grouped interview material along the three predefined dimensions. Attention was paid to whether interviews supported, explained, or challenged questionnaire patterns.

The study was considered low-risk social science research. The questionnaire did not contain names, contact details, protected personal characteristics, or other direct identifiers. Interview transcripts were anonymized during processing, and potentially identifiable data was removed or aggregated. The study focused on business practices, financing structures, and organizational perceptions, not sensitive personal questions or vulnerable groups. Survey responses were analyzed in aggregate form, and interview materials were used only in anonymized form. Data were stored in a secure digital environment accessible only to the researcher.

AI-supported tools ChatGPT, Perplexity, and Grammarly were used as auxiliary instruments for language correction, structural review, academic quality-control checks, and supplementary literature discovery. Their outputs were critically reviewed by the author and were not used as independent empirical findings or as substitutes for academic sources (Grammarly, Inc., 2026; OpenAI, 2026; Perplexity AI, Inc., 2026). Representative prompts are presented in Appendix D.

The empirical study has several limitations. Although the questionnaire included 21 completed responses, the sample remains too small to generalize the results. The equity-based group includes four cases, the non-equity-based group includes six cases, and the mixed-financing group includes eleven cases, limiting comparisons between groups. The non-random sampling method may also overrepresent respondents reached through the author's networks and communication channels. The questionnaire also reflects respondents' perceptions rather than externally verified organizational performance. The qualitative component consists of only two interviews involving three participants. The interviews add depth but do not remove the sample limitations.

Table 2 summarizes the empirical material used in the analysis and clarifies the function of each component in the thesis.

Table 2

Empirical material and analytical function

Material	Format	Scope	Function in the thesis
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Questionnaire	Anonymous online questionnaire using UT LimeSurvey	26 raw rows; 21 completed responses retained; 5 incomplete responses excluded	Main descriptive base for comparing funding groups across the three dimensions
Follow-up interviews	Two semi-structured interview sessions conducted on May 5, 2026	3 participants in total; one paired interview and one individual interview	Qualitative contextualization of questionnaire findings
Analytical framework	Three dimensions derived from Chapter 1	Autonomy and dependency; growth orientation; resilience and execution risk	Common structure linking theory, survey, interviews, and discussion

Source: Compiled by the author based on questionnaire data and anonymized follow-up interviews.

2.2. Findings on funding structure, autonomy, growth orientation, and resilience

The results are presented through respondent profile, decision-making autonomy, growth orientation, and resilience. The study is based on 21 completed questionnaire responses and two follow-up interviews. The numerical values indicate descriptive trends in this sample rather than representative patterns of all Estonian e-commerce startups. The combination of questionnaire and interview data supports interpretation of these descriptive patterns.

The final sample consisted of 21 completed responses. Four respondents reported mainly equity-based funding, six reported mainly equity-free funding, and eleven reported both funding models to a similar extent. Most respondents represented early-stage or revenue-generating startups. Founders' own savings were the most frequent funding source, while weak demand was the most frequently reported current threat. A fuller respondent and startup profile is provided in Appendix F.

Figure 2 shows the distribution of respondents by funding model. The largest group is the mixed group, where 11 of the 21 respondents reported that equity and equity-free funding logics influence their startups equally.

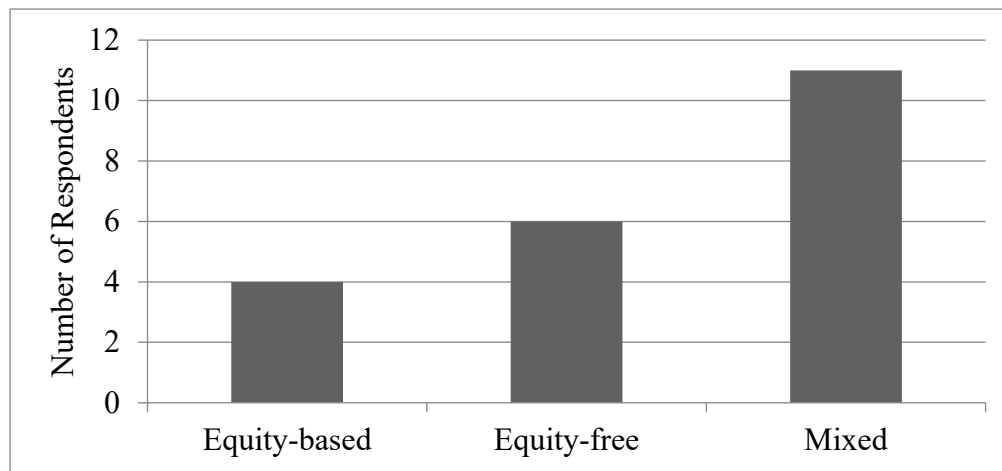


Figure 2. Distribution of respondents by main funding structure

Source: Compiled by the author based on questionnaire responses.

The sample focuses on early-stage and revenue-generating companies, consistent with the study's focus. Founders' own savings remain important, although the sample also includes bank loans, customer advances, revenue-based financing, angel investments, venture capital, and other sources. This indicates that the empirical setting is not a simple venture-capital versus bootstrapping comparison.

Decision-making autonomy and dependency

The equity-based-funded category has the highest level of constraints related to dependence on external factors, with a score of 4.19. In contrast, the equity-free-funded group scores 3.21, indicating the lowest external pressure. The mixed-financed group falls in between the two, with a score of 3.77. Since higher scores reflect greater dependency and autonomy constraint, equity-based-funded respondents appear more influenced by external conditions.

Item-level responses show that the gap is not primarily due to loss of founder control. Strategic freedom remains prominent across all categories. The item on the ability of founders to make important strategic decisions without external approval was scored 4.25 in the equity-based cases, 4.83 in the equity-free cases, and 4.09 in the mixed-financed cases.

The clearer difference concerns external pressure over decision-making. On the measure of external influence on strategic decisions, the equity-based group had an average score of 5.00, compared with 3.50 in the equity-free models and 4.18 in the mixed-financed models. Formal governance requirements show a similar trend: 4.25 in the equity-based models, 3.50 in the equity-free models, and 3.73 in the mixed-financed models. Dependence on external actors follows the same pattern: 4.75 for the equity-based group, 3.67 for the equity-free group, and 4.27 for the mixed-financed group.

Figures 3 and 4 show the aggregated and item-level autonomy results. These figures show that ventures funded through equity do not necessarily lack founder control outright. Instead, they appear to face greater external influence, stricter governance requirements, and greater dependence on external stakeholders. This suggests shared or limited autonomy, where founders retain decision-making freedom under stricter external constraints.

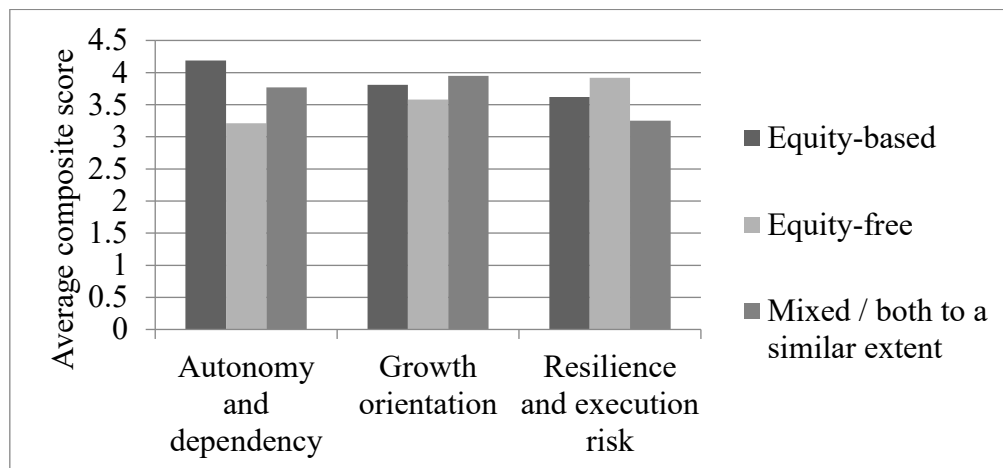


Figure 3. Composite dimension scores by funding-model group

Source: Compiled by the author based on questionnaire responses.

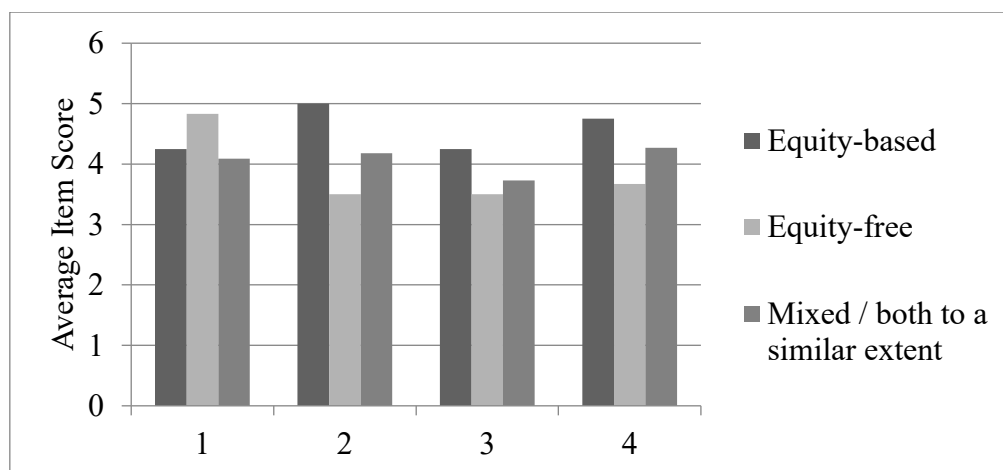


Figure 4. Selected autonomy and dependency item means by funding-model group

Note: For the decision-making freedom item, higher values indicate stronger perceived decision-making freedom. For the other three items, higher values indicate stronger perceived external influence, governance pressure, or dependency. Item numbers refer to the following questionnaire items: 1 = Decision-making freedom; 2 = External stakeholder influence; 3 = Formal governance requirements; 4 = Dependency on external actors.

Source: Compiled by the author based on questionnaire responses.

Interview material supports this interpretation. In a paired interview, one participant using blended financing explained that external investment creates flexibility, while day-to-day continuity remains partially dependent on personally covered operating expenses. Another participant, who relied primarily on equity-free funding, described a different form of dependency: decisions were made based on bank accounts, customer demand, and supplier conditions. This shows that ownership and practical operational independence are not identical. Formal autonomy does not necessarily guarantee freedom in day-to-day decision-making.

Some participants emphasized that margins, cash flow, and limited control over external conditions shape what founders perceive as real independence. Delivery failures, supplier delays, or platform-related limitations can impact entire campaigns, even without investors. In the absence of shareholders, dependence may shift to third parties, such as suppliers, platforms, customers, lenders, or regulatory conditions. Survey data support this interpretation: investors are not the only actors limiting growth or decision-making. Revenue cycles, customer behavior, credit availability, and supply chain relationships also shape the practical framework within which Estonian e-commerce startups operate.

Growth orientation and performance logic

Growth results are less consistent than autonomy results. The mixed financing group showed the highest overall score for growth orientation, 3.95, followed by the equity-based-funded group at 3.81 and the equity-free-funded group at 3.58. Although the differences are small, growth ambition is not limited to investor-backed models. The mixed group's higher score challenges the assumption that growth orientation is necessarily tied to equity financing.

Growth motivation appears across all funding groups, with similar scores on whether the current structure supports rapid growth and expansion: 4.25 for equity-based-funded startups, 4.00 for equity-free-funded startups, and 4.27 for mixed-financed startups. Despite these similarities, cost discipline is most evident in the equity-free-funded group, with an average score of 5.17. The mixed-financed group scored 4.45 and the equity-based-funded group scored 4.25. These figures suggest stricter financial discipline without ownership dilution. Growth ambition is also evident across categories, suggesting that cost control can coexist with expansion when capital does not require share sales. In the mixed-finance group, growth choices were particularly tied to access to funding, with the average score for hiring, marketing, and expansion decisions being 4.55. The same group also received a score of 4.45

for prioritizing growth over short-term profitability. This suggests that mixed-finance companies can combine ambitious growth goals with some cost discipline. Access to multiple sources of funding can create opportunities for expansion, while founders' equity, operating income, or debt repayment obligations can still pose constraints.

Eight respondents, or 38.1 percent, chose incremental growth based on existing resources as their top priority. Seven respondents, or 33.3 percent, chose balanced growth. Three respondents chose rapid scaling, and three more prioritized profitability and stability over expansion. The pattern suggests that caution outweighs aggressive expansion in the strategic outlook of the sample. The dominant trend is therefore measured growth rather than rapid scaling.

Resilience and execution risk

Exposure to resilience and execution risk appears greatest among respondents without equity involvement. The resilience and execution risk exposure index is highest in the equity-free group, at 3.92. In contrast, respondents who use equity financing average a score of 3.62, while the group using mixed financing has the lowest exposure score, 3.25. This suggests that founders who avoid equity financing may experience more direct exposure to uncertainty, while combining funding sources can mitigate some forms of instability.

In the face of a temporary revenue shock, the group using mixed financing has the strongest financial flexibility, with an average score of 4.36. The equity-based-funded group follows with a score of 4.00, while the equity-free-funded group scores 3.67. Under uncertainty, management pressure reaches a score of 4.50 for both the equity equity-based and equity-free-funded groups, while the mixed-financed group scores lower at 4.09. In terms of ability to respond to unexpected disruptions, non-equity structures perform the weakest, with a score of 2.83. Equity-based-funded structures score 4.25, while mixed-financed structures demonstrate the highest score, 4.36. These differences show that financing structure matters most under disruption or uncertainty.

Execution challenges are not limited to equity-free-funded projects. The equity-based-funded group reported the highest average execution risk score as a key vulnerability of 4.25 points, compared to 3.67 points for the non-equity group and 3.64 points for the mixed-finance group. This qualifies the assumption that equity-based funding automatically reduces risk. In e-commerce, additional capital can allow for expanded marketing, increased inventory, hiring staff, and geographical expansion, but these steps can also increase demands on logistics, order fulfillment, internal coordination, and customer expectations.

Nine respondents, or 42.9 percent, cited weak demand as the biggest threat at the moment. It was followed by platform dependence, mentioned by four respondents. Three respondents cited investor pressure, and two cited a lack of capital. While access to financing remains important, the most common challenge is insufficient market demand. The funding structure remains important because it determines how long a startup can withstand low sales, how quickly it can adapt, and where stress accumulates: internally, among external stakeholders, or in the operations network.

Table 3 summarizes the three composite dimension scores by funding-model group.

Table 3

Composite dimension scores by funding-model group

Dimension	Equity-based (n=4)	Equity-free (n=6)	Mixed (n=11)	Interpretation of higher score
Autonomy and dependency constraint index	4.19	3.21	3.77	Higher values indicate stronger constraint and dependency pressure
Growth orientation index	3.81	3.58	3.95	Higher values indicate stronger growth orientation relative to efficiency logic
Resilience and execution-risk exposure index	3.62	3.92	3.25	Higher values indicate stronger resilience and execution-risk exposure

Source: Compiled by the author based on questionnaire responses.

Interviews largely support and clarify this interpretation. One respondent in the paired interview argued that external financing provides a buffer in case of campaign failure or delivery delays, but investor money also creates expectations and makes it difficult to pause and rebuild quietly. Another respondent argued that with equity-free funding, execution risk is constant, as delivery issues must be resolved over time, with stress and sometimes with personal funds. These responses show that financial buffering and execution resilience are not identical.

Interviews add Estonian context to the weak-demand result. One respondent argued that weak demand in Estonian e-commerce may be seasonal, especially in January, February and partly in March, when households face higher winter spending and lower consumption after the holidays. This does not prove that seasonality explains all weak-demand responses, but it provides a plausible contextual interpretation.

The qualitative follow-up interviews supported the survey interpretation by showing that funding structure affects not only ownership relations but also everyday dependencies on cash flow, suppliers, platforms, advertising costs, logistics, and timing.

Overall, the interpretation is strongest when questionnaire and interview data are analysed together. The survey provides a numerical picture, while the interviews explain how the same funding model can create different forms of freedom, pressure, and risk. The key finding is that funding structure changes startup trade-offs. Equity-based funding is associated with more external influence and governance pressure, equity-free funding with stronger ownership retention and performance discipline, and mixed funding with a more layered, yet practically relevant, configuration of growth ambitions and risk sharing.

2.3. Discussion in relation to previous studies

Given the number of cases, this section does not statistically confirm or refute previous research. Instead, it considers whether the observed patterns align with, partly align with, or diverge from earlier findings.

The findings on decision-making autonomy and dependency align with startup governance research. From Kaplan and Strömberg's work on venture capital agreements to Broughman and Fried's analysis of founder control in IPOs, previous research shows that equity-based financing is associated with changes in decision-making power, structured oversight mechanisms, leadership dynamics, organizational professionalization, and founder control over time (Broughman & Fried, 2020; Kaplan & Strömberg, 2004). Respondents who relied primarily on equity funding had the highest scores for autonomy constraints, the highest perceived dependence on external parties, and the strongest demands for formal governance.

The equity-based-funded group did not report a lack of autonomy. On average, their ability to make important strategic decisions without external approval was above the midpoint of the six-point scale. This is consistent with equity-based funding creating shared or conditional leadership rather than fully removing founder authority. External funding may introduce reporting obligations and new levels of accountability, but founders can still exercise practical control over many decisions. Authority does not disappear, but becomes more open to scrutiny and stakeholder expectations.

The results of equity-free funding are also consistent with previous research on seed capital and resource dependence. Vanacker and his colleagues argue that such methods can reduce reliance on external financiers, but may instead introduce alternative constraints

(Vanacker et al., 2011; Vanacker et al., 2012). Respondents who primarily used equity-free funding expressed less concern about the constraints of formal control than those who used equity financing. However, interviews frequently noted tight revenue cycles, supplier dependency, advertising costs, platform dependency, and inflexible production or delivery schedules. Thus, avoiding equity-based financing can preserve legal ownership and direct decision-making power, but not complete practical independence.

Growth outcomes are consistent with theory to a more limited extent. Based on Chapter 1, equity financing is expected to facilitate faster expansion and milestone-oriented growth, while equity-free funding is expected to promote efficiency and cost discipline. The clearest support is observed for efficiency. The survey data show a stronger focus on cost control among respondents who primarily use equity-free funding. This pattern is also evident in the interview materials, where founders described slower or more cautious development as a conscious way to reduce external pressures and maintain flexibility. In this respect, the results align with literature on self-financing and resource discipline. However, the expected relationship between equity-based financing and a clearer growth orientation is less clear.

The highest overall growth orientation score was found in the mixed financing group, not in the pure equity-based group. This complicates a strictly binary interpretation. Robb and Robinson, as well as Block et al., show that new ventures often rely on multiple overlapping sources of financing, rather than one isolated method (Block et al., 2018; Robb & Robinson, 2010). In the sample, hybrid financing appears to combine broader resource access with cost containment and financial control. This may explain why hybrid-financed respondents reported stronger growth orientation without fully adopting an investor-driven growth model.

Resilience results are also partly consistent with Chapter 1. Kacer et al. show that the survival effects of equity financing can differ by investor type and organizational setting, while Pollman shows that venture-backed startups may also follow non-bankruptcy failure pathways such as soft-landing acquisitions, acqui-hires, or assignments for the benefit of creditors (Kacer et al., 2025; Pollman, 2023). Mollick and Kuppuswamy show that ventures using equity-free funding can still face significant execution difficulties after funds have been raised (Mollick & Kuppuswamy, 2014). Respondents who primarily used equity-free funding reported the highest resilience and execution-risk exposure and the weakest perceived ability to respond to disruptions. However, execution risk was not limited to equity-free cases, as the equity-based group also reported notable execution vulnerability.

External financing was not described as a complete solution to uncertainty. It can mitigate short-term setbacks, but it can also delay the emergence of weak demand or force companies to grow before the operating foundation is strong enough. One participant noted that financial support can help a startup survive setbacks such as missing deadlines or poor communication, but that this support can also raise investor expectations. In e-commerce, these issues are relevant because low demand, customer acquisition costs, supplier disruptions, and platform dependency quickly affect daily operations.

The empirical material also adds Estonia-specific context. One interviewee attributed weak online sales activity partly to seasonal spending patterns in Estonia. More broadly, weak demand being the most frequent current threat suggests that market demand plays a central role in this sample. This should not be generalized to all Estonian e-commerce startups, but it adds localized context not visible in international literature alone. Limited market size, household consumption patterns, advertising costs and financing structure may all together affect how Estonian e-commerce startups experience growth and sustainability.

A key empirical finding concerns the mixed financing group. 11 out of 21 respondents reported that equity and equity-free funding affected their startup to the same extent. The equity/equity-free distinction remains analytically useful because it clarifies influence, growth logic, and vulnerability. However, actual startup practices often combine these models rather than relying on one path. In this sample, the mixed group showed both strong growth orientation and the lowest resilience and execution-risk exposure score, suggesting that diversified funding structures may offer some practical flexibility.

Interview results suggest that funding structure matters less as a label than as strategic fit. Not every company will benefit from external investment in the early stages, as premature expansion without sufficient market validation can create additional problems. This is consistent with the argument that the key issue is fit between financing structure, development stage, industry conditions, margins, and operational readiness. A condensed synthesis of how the qualitative follow-up interviews supported, qualified, or complicated the questionnaire patterns is provided in Appendix G.

Overall, the results partially confirm previous research while clarifying some assumptions. Equity-based financing is associated with greater external influence and more formal governance requirements. Equity-free funding is associated with greater control over decision making and stricter performance discipline, as well as operational constraints and performance pressure. Blended financing complicates binary comparisons, demonstrating that

growth ambitions can arise outside of investor-only models, and that diverse financing structures can mitigate some forms of vulnerability. A three-dimensional framework is therefore more useful than classification by capital source alone.

Conclusion

This thesis examined how equity-based and equity-free funding structures are associated with decision-making autonomy and dependency, growth orientation and performance logic, and resilience and execution risk in Estonian e-commerce startups. Previous studies often treat these funding models separately, using different academic traditions, methods, and performance metrics.

The theoretical section showed that the equity/equity-free distinction is analytically useful because its implications extend beyond funding source. Equity-based funding often entails ownership dilution, contractual requirements, governance rights, investor oversight, and improved access to external support. Equity-free funding typically protects the founders' formal ownership and limits structured financier intervention, but can shift dependence toward internal revenues, customers, suppliers, creditors, digital platforms, or operating partners. Financing structure therefore shapes financial flows, power distribution, growth expectations, and risk exposure.

The framework was built around decision-making autonomy and dependency, growth orientation and performance logic, and resilience and execution risk. It allowed comparison across studies using different methods, settings, and outcome variables without reducing the thesis to a simple external-investment versus self-financing dichotomy. It also helped preserve sensitivity to the e-commerce context, particularly through factors such as platform dependence, customer acquisition, order fulfillment capabilities, digital infrastructure, and cash flow timing.

The literature shows that the clearest evidence on autonomy and dependency appears in studies of equity-based governance, where venture capital influences decision-making rights, board influence, professionalization, and founder control. Evidence on equity-free funding is more prominent in studies of bootstrapping and crowdfunding, where founders may retain ownership while remaining dependent on customers, suppliers, operating mechanisms, and project implementation capabilities. Previous research also shows that equity financing is often associated with stronger growth ambitions and a certain amount of financial slack, while equity-free funding is more associated with resource discipline and greater internal accountability for project implementation.

The empirical part involved an anonymous online questionnaire followed by qualitative follow-up interviews. After excluding five incomplete responses, the questionnaire dataset contained 21 complete responses. Two semi-structured interview sessions were then conducted with three participants. The exploratory questionnaire and interview design allowed numerical patterns to be interpreted in additional context.

The results were partly consistent with previous research, especially on autonomy and dependency. Respondents who used predominantly equity-based funding showed the highest autonomy and dependency constraint index score, at 4.19, while respondents who used predominantly equity-free funding showed the lowest score, at 3.21. The mixed financing group was in the middle, with a score of 3.77. The influence of external stakeholders showed a particularly clear contrast: the equity-based-funded group scored 5.00, compared to 3.50 for the equity-free-funded group. These results suggest that equity financing is associated with stronger external influence and governance pressure in this sample.

At the same time, equity financing does not eliminate founder control. Across all financing groups, respondents continued to report significant autonomy in decision-making. This suggests a more nuanced interpretation: decision-making becomes more structured and accountable, but does not disappear. Participants described investor funding as associated with accountability, documentation, and ongoing dialogue, while also indicating that founders retain practical power within these mechanisms. Growth results were more mixed. The equity-free-funded group showed the strongest tendency towards cost discipline, with a mean score of 5.17. This supports the view that non-dilutive financing is associated with stricter resource management. However, the highest composite score for growth orientation was recorded in the mixed financing group, 3.95, followed by the equity financing group with 3.81. This suggests that growth orientation depends on more than equity financing.

The group not using equity financing showed the highest resilience and execution-risk exposure score, at 3.92, while the group using mixed financing showed the lowest risk score of 3.25. This suggests that equity-free-funded startups may experience greater uncertainty pressure and weaker perceived support during disruptions. However, the group using equity financing reported the highest average execution risk score as a key vulnerability. External capital therefore does not eliminate operational risk. In e-commerce, additional financing can facilitate faster expansion, but it can also increase pressure on customer acquisition, inventory management, order fulfillment, coordination, and service quality.

The comparison shows that the framework is useful, but startup practices are more complex than a simple two-category model suggests. Eleven of twenty-one respondents reported that equity and equity-free funding had similar impact, making mixed funding the largest group. Interviews supported this interpretation, showing that founders often combine funding sources and view funding as practical tools rather than a fixed identity. Thus, while the distinction between equity and equity-free funding is analytically useful, the actual practice of startups often involves integration rather than separation.

The findings show that funding choices are linked not only to funds but also to decision-making power, growth logic, and vulnerability under uncertainty. The empirical sample was small and collected using a non-random sampling method, meaning the results cannot be generalized to all Estonian e-commerce startups. Subgroup sizes were uneven, especially given that the equity-financed group included only four cases. Interviews added depth to the interpretation, but consisted of only two interviews with three participants. The study also relied on respondents' perceptions rather than externally validated company performance data. Therefore, causal or representative claims cannot be made.

Future research could use extended interviews or case studies to examine funding decisions across startup stages. Another direction is to investigate mixed funding models, as hybrid schemes appeared central in this sample.

In conclusion, funding structure matters because it relates to governance models, growth logics, and vulnerabilities. Equity-based financing typically involves stronger external influence, more formal governance, and better access to structured support. Equity-free funding typically preserves ownership and promotes financial discipline, but may increase susceptibility to operational difficulties. Blended financing blurs the two models and offers flexibility through multiple resource channels. Thus, e-commerce startups do not choose between a universally better or worse financing model. Instead, they choose between trade-offs in how resources shift power, shape goals, and allocate risks.

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Appendix A

Questionnaire

Please answer the following questions based on the funding structure that currently has the greatest influence on your startup's development.

1. Which funding model currently has the strongest influence on your startup's development?

- Equity-based funding
- Equity-free funding
- Both to a similar extent

2. Which funding sources has your startup used so far? Select all that apply.

- Founders' own savings
- Reinvested operating cash flow
- Grants or public support
- Customer prepayments
- Reward-based crowdfunding
- Revenue-based financing
- Bank loan or credit line
- Angel investment
- Venture capital
- Equity crowdfunding
- Other

3. Which funding source has had the greatest influence on the startup's development so far?

- Founders' own savings
- Customer prepayments
- Revenue-based financing
- Bank loan or credit line
- Angel investment
- Venture capital
- Other

4. Which stage best describes the startup today?

- Early stage

- Revenue-generating
- Scaling
- Mature growth

For Questions 5 to 18, use the following six-point scale:

1. Strongly disagree

2. Disagree

3. Somewhat disagree

4. Somewhat agree

5. Agree

6. Strongly agree

5. The founders can make major strategic decisions without external approval.

6. External stakeholders have meaningful influence over the startup's strategic decisions.

7. The current funding structure has increased formal governance requirements, such as reporting, oversight, or approval processes.

8. The startup is strongly dependent on specific external actors, such as investors, major customers, suppliers, or platforms.

9. Which external actor currently constrains the startup the most?

- Investors
- Lenders
- Suppliers
- Platforms or marketplaces
- No strong external constraint
- Other

10. The current funding structure encourages rapid growth and expansion.

11. The current funding structure encourages efficiency and cost discipline.

12. Capital availability strongly affects hiring, marketing, and expansion decisions.

13. The startup prioritizes growth over short-term profitability.

14. Which statement best describes your startup's growth logic?

- Rapid scaling is the main priority
- Balanced growth is the main priority
- Gradual growth based on available resources is the main priority
- Profitability and stability are prioritized over expansion

- Other

15. The startup has sufficient financial flexibility to withstand a temporary revenue shock.

16. Under uncertainty, the current funding structure increases pressure on management.

17. Execution risk, such as delivery, fulfillment, scaling, or coordination, is one of the startup's main vulnerabilities.

18. The current funding structure improves the startup's ability to respond to unexpected disruption.

19. Which risk currently represents the greatest threat to the startup?

- Weak demand
- Lack of capital
- Platform dependence
- Supplier dependence
- Investor pressure
- Other

20. If you could restart the startup with the same information, would you choose the same funding structure again?

- Yes
- No
- Not sure

21. In one or two sentences, what is the main trade-off created by your current funding structure?

- Open-ended short answer

Source: Compiled by the author.

Appendix B

Coding logic and dimension index construction

The table below summarizes how the questionnaire items were collapsed into the three analytical dimensions used in the thesis. Higher scores indicate greater levels of the stated construct.

Dimension	Items used	Reverse-coded item(s)	Interpretation of higher score
Decision-making autonomy and dependency	Questions 5 to 8	Question 5	Higher score indicates stronger external influence, governance pressure, and dependency constraint.
Growth orientation and performance logic	Questions 10 to 13	Question 11	Higher score indicates stronger growth orientation relative to efficiency logic.
Resilience and execution risk	Questions 15 to 18	Questions 15 and 18	Higher score indicates greater exposure to pressure, vulnerability, and execution-related risk.

Source: Compiled by the author based on the questionnaire design and the cleaned analytical workbook.

Appendix C

Qualitative follow-up interviews

The semi-structured interview guide was used as a qualitative follow-up to the questionnaire. Its purpose was to contextualize the questionnaire findings and to examine whether founders and startup executives recognized, challenged, or qualified the patterns observed in the survey. The interviews followed the same three analytical dimensions used in the thesis: decision-making autonomy and dependency, growth orientation and performance logic, and resilience and execution risk.

Opening script

Thank you for agreeing to participate in this follow-up interview. The purpose of this interview is to better understand the questionnaire results from an exploratory study on equity-based and equity-free funding structures in Estonian e-commerce startups. The interview focuses on whether the survey findings reflect your experience, where you agree or disagree with them, and which contextual factors may explain the observed patterns.

Participation is voluntary. You may skip any question or stop the interview at any time. Your answers will be used anonymously and only for the bachelor's thesis. No personal or company-identifying information will be included in the thesis.

Section 1. Background and funding context

1. Could you briefly describe your role in the startup and the type of e-commerce activity the company is involved in?
2. Which funding structure best describes your startup so far: mainly equity-based, mainly equity-free, or a combination of both?
3. What were the main reasons for choosing this funding path?
4. Has your funding structure changed over time? If yes, what caused the change?
5. In your view, is it realistic to divide e-commerce startups into equity-based and equity-free categories, or do many firms operate with mixed funding in practice?

Section 2. Reaction to questionnaire findings

6. The questionnaire results showed that many respondents did not fit neatly into one funding category, and the largest group used both equity-based and equity-free funding to a similar extent. Does this reflect how startup financing works in practice?
7. The survey suggested that funding structure is associated less with a complete loss of founder decision-making power and more with different forms of influence and dependency. Do you agree with this interpretation?

8. The survey showed that decision-making freedom remained relatively high in all funding groups, but equity-based respondents reported stronger external stakeholder influence. Does this match your experience?

9. The survey indicated that equity-based startups experienced stronger formal governance requirements than equity-free startups. In your view, is this a realistic difference?

10. The questionnaire showed that equity-free startups may retain ownership but still face dependencies on customers, suppliers, platforms, lenders, or cash flow. Would you say that equity-free funding gives founders more real autonomy, or does it mainly replace investor dependency with operational dependency?

Section 3. Growth orientation and performance logic

11. The questionnaire results suggested that equity-based and mixed-funded startups may be more growth-oriented, while equity-free startups may be more efficiency-oriented. Does this reflect your experience?

12. In your view, does external investment push e-commerce startups toward faster scaling? If yes, how does this appear in hiring, marketing, product development, or market expansion?

13. Does equity-free funding force startups to become more disciplined with costs and operational efficiency?

14. Is slower growth under equity-free funding necessarily a weakness, or can it be a rational strategy in e-commerce?

15. The mixed-funding group showed strong growth orientation in the questionnaire. Why might startups using both funding types report stronger growth ambitions?

Section 4. Resilience and execution risk

16. The questionnaire suggested that equity-free startups may experience higher exposure to pressure and execution risk, while equity-based funding may provide more financial buffering. Does this match your experience?

17. In a period of weak demand, rising costs, or operational disruption, which funding structure would make an e-commerce startup more resilient?

18. What risks are most difficult for e-commerce startups to manage without external investment?

19. What risks are created by external equity funding?

20. The survey showed that weak demand was one of the most frequently mentioned threats. In your view, why is weak demand so central for e-commerce startups?

21. Does funding structure help a startup survive weak demand, or does it mainly delay the consequences?

Section 5. Overall interpretation

22. If you had to summarize the main difference between equity-based and equity-free funding from a founder's perspective, what would it be?

23. The questionnaire did not show a simple conclusion that one funding model is better than the other. Instead, it suggested different trade-offs. Do you agree with that conclusion?

24. Based on your experience, what should an early-stage e-commerce founder consider before choosing between investor funding and self-funded growth?

25. If you were starting again, would you choose the same funding structure? Why or why not?

26. Is there any important issue about funding, autonomy, growth, or resilience that the questionnaire did not capture well?

Source: Compiled by the author.

Appendix D

Use of AI-supported tools and prompts

This appendix documents the main AI-supported tools and representative prompts used during the preparation of the thesis. The tools were used as auxiliary instruments for research discovery, language correction, structural review, and quality-control checks. The outputs were critically reviewed by the author and were not used as independent empirical findings or as substitutes for academic sources.

Tool 1: ChatGPT based on GPT-5.5

Purpose of use: language correction, structural review, thesis audit, academic quality-control checks, and controlled revision support.

Representative prompt 1: Academic audit and quality review

You are acting as a strict academic reviewer for a University of Tartu SEBA bachelor thesis. I will provide a section or full draft of thesis text. Your task is to audit it critically and identify strengths, weaknesses, and issues that need correction before submission. Check the text for academic structure, logical flow, repetition, unclear argumentation, unsupported hard claims, overstatements, citation problems, incorrect or weak use of references, APA-style issues, thesis-format problems, and wording that sounds too generic, or inappropriate for academic writing. Pay special attention to whether each citation supports the claim attached to it, whether any factual statement needs additional referencing, whether any empirical interpretation overclaims the available data, and whether the text remains aligned with the thesis aim and analytical framework. Provide concrete comments and, where useful, quote the problematic sentence or phrase and suggest the type of fix needed, such as soften, cite, verify, delete, restructure, or rewrite. Do not invent sources, facts, findings, data, or interpretations. Do not rewrite the text. Return a structured audit with the main strengths, main weaknesses, specific issues, and recommended corrections.

Representative prompt 2: SEBA thesis structure and requirements audit

You are acting as a strict academic auditor for a University of Tartu School of Economics and Business Administration bachelor's thesis. I will provide the full thesis draft. Your task is not to rewrite the thesis. Your task is to check whether the document follows SEBA bachelor thesis requirements, the expected thesis structure, methodological standards, formatting logic, and academic submission rules.

Audit whether the thesis contains all required parts in the correct order: title page, author's declaration, table of contents, introduction, theoretical chapter, empirical chapter,

conclusion, list of references, appendices, résumé, and non-exclusive licence. Check whether the introduction includes topicality, research problem, research gap, aim, research tasks, limitations, relevance, methodology overview, thesis structure, and keywords. Check whether the theoretical chapter builds a clear conceptual framework, whether the empirical chapter follows from that framework, whether the conclusion answers the aim and research tasks, and whether appendices support the methodology.

Check table of contents accuracy, chapter and subchapter numbering, heading hierarchy, table and figure numbering, appendix labelling, source lines under tables and figures, résumé placement, and the presence of the non-exclusive licence. Also check whether the methodology explains research design, target respondents, recruitment, data collection, data cleaning, coding logic, analytical approach, ethics, anonymity, limitations, and any qualitative follow-up component.

Identify all missing, misplaced, outdated, inconsistent, or incorrectly formatted thesis parts. Provide concrete issues and recommended fixes. Do not invent missing information. If something cannot be verified from the provided draft, state that it requires manual verification.

Tool 2: Perplexity

Purpose of use: supplementary research discovery and identification of potentially relevant academic or institutional sources. Perplexity outputs were not cited directly as academic evidence. When a source found through Perplexity was used, the original academic article, institutional report, DOI, or publisher page was checked and cited instead.

Representative prompt 1: Literature discovery

Find peer-reviewed academic sources on startup financing models, especially equity-based funding, equity-free funding, venture capital, bootstrapping, crowdfunding, founder autonomy, growth orientation, and startup resilience. Prioritize journal articles, systematic reviews, and institutional reports. Provide DOI or official publisher links where available.

Representative prompt 2: E-commerce and digital context source search

Find reliable academic or institutional sources on e-commerce startups, SME digitalisation, platform dependence, digital infrastructure, customer acquisition, and financing constraints in digital businesses. Prioritize OECD, World Bank, European Commission, ECLAC, and peer-reviewed journal sources. Provide official URLs or DOI links where available.

Representative prompt 3: Source verification

Check whether the following source details are accurate and provide the strongest available version of the source: author names, year, title, journal or report publisher, volume, issue, pages, DOI, and official URL. Do not invent missing bibliographic details. Mark uncertain details as requiring verification.

Tool 3: Grammarly

Purpose of use: grammar, spelling, punctuation, and language-polishing support. Grammarly was not used as a source of academic claims, empirical findings, or literature interpretation.

Source: Compiled by the author based on the thesis preparation process.

Appendix E

Selected evidence base for the comparative framework

Evidence block	Representative sources	Main contribution	Dimension supported
Venture governance and control	Hellmann & Puri (2002); Kaplan & Strömberg (2004); Bonini et al. (2012); Ewens & Malenko (2020); Broughman & Fried (2020); Giudici et al. (2022)	Shows that equity-based funding is linked to professionalization, investor control rights, board influence, and changing founder authority over time.	Autonomy and dependency
Bootstrapping and non-dilutive finance	Vanacker et al. (2011); Vanacker et al. (2012); Robb & Robinson (2010)	Shows that equity-free and non-dilutive finance can preserve ownership but may shift dependence toward cash flow, debt, customers, suppliers, or other resource providers.	Autonomy and dependency; growth logic
Growth, signalling, and performance	Chang et al. (2021); Valenza et al. (2023); Greenwood et al. (2018); Rita & Nastiti (2024)	Shows that equity-linked funding can support scale and external validation, while bootstrapping and digital transformation can support efficiency-oriented performance.	Growth orientation and performance logic
Resilience, failure, and execution risk	Kacer et al. (2025); Pollman (2023); Mollick & Kuppuswamy (2014); Broughman & Wansley (2023)	Shows that equity can provide financial buffering and structured failure paths, while equity-free models often concentrate risk in execution, fulfillment, and internal managerial capacity.	Resilience and execution risk
Digital and e-commerce context	Wigand (1997); Rédis (2010); ECLAC (2021,	Shows that digital commerce depends on platforms, logistics, data,	Contextual support across all dimensions

2022); OECD (2024)	infrastructure, and market access, which makes funding consequences especially relevant in e-commerce.
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Source: Compiled by the author based on the reviewed literature.

Appendix F

Profile of respondents and startups in the final questionnaire sample

Category	Response option	n	%
Main funding model	Equity-based funding	4	19.0
Main funding model	Equity-free funding	6	28.6
Main funding model	Both to a similar extent	11	52.4
Startup stage	Early stage	11	52.4
Startup stage	Revenue-generating	7	33.3
Startup stage	Scaling or mature growth	3	14.3
Most frequent funding sources used	Founders' own savings	19	90.5
Most frequent funding sources used	Bank loan or credit line	10	47.6
Most frequent funding sources used	Reinvested operating cash flow / customer prepayments	7 each	33.3 each
Greatest-influence funding source	Founders' own savings	10	47.6
Most constraining external actor	Investors	6	28.6
Most constraining external actor	Suppliers	5	23.8
Most frequent current threat	Weak demand	9	42.9
Would choose same funding structure again	Yes	9	42.9
Would choose same funding structure again	No	7	33.3
Would choose same funding structure again	Not sure	5	23.8

Source: Compiled by the author based on questionnaire responses.

Appendix G

Qualitative follow-up synthesis by analytical dimension

Dimension	Survey pattern discussed in interviews	Main qualitative qualification	Relevance for interpretation
Autonomy and dependency	Interviewees broadly agreed that equity-based funding increases outside influence, but not necessarily by removing all founder decision-making power.	Equity-free funding was described as preserving ownership while creating dependence on cash flow, suppliers, advertising platforms, logistics, and timing.	Supports the survey pattern that autonomy is shaped by both formal ownership and operational dependencies.
Growth orientation	Participants stated that external capital usually pushes faster scaling because marketing, inventory, hiring, and market testing absorb capital quickly.	Equity-free growth was described as more disciplined and often more gradual, but not necessarily anti-growth.	Qualifies the survey result by showing that growth depends on timing, unit economics, and the maturity of the business model.
Resilience and execution risk	Funding was described as a buffer that can help absorb temporary disruption, but also as a source of expectations and pressure.	Equity-free funding was associated with direct exposure to cash-flow pressure and execution problems, although it may encourage discipline.	Supports the finding that resilience is not only financial. It also depends on execution capacity and market demand.
Estonian e-commerce context	Weak demand and platform/supplier dependence were repeatedly discussed as practical constraints.	Seasonality, winter expenses, advertising costs, and fulfillment issues were mentioned as context-specific factors.	Strengthens the Estonia-specific interpretation of the empirical results.

Source: Compiled by the author based on anonymized follow-up interviews.

Résumé

OMAKAPITALIPÕHISED JA OMAKAPITALIVABAD RAHASTAMISSTRUKTUURID EESTI E-KAUBANDUSE IDUETTEVÕTETES

Edhar Older

Antud bakalaureusetöö eesmärk oli uurida, kuidas rahastamisstruktuur, täpsemalt omakapitalipõhine ja omakapitalivaba rahastamine, on seotud otsustusautonoomia, kasvuorientatsiooni ning vastupidavuse erinevustega e-kaubanduse iduettevõtetes.

Töö teoreetiline osa lähtus tähelepanekust, et iduettevõtete rahastamist käsitlev kirjandus on sisult rikkalik, kuid killustunud. Omakapitalipõhist rahastamist käsitlevad uuringud keskenduvad enamasti investorite mõjule, juhtimisstruktuurile ja skaleerimisele, samal ajal kui omakapitalivaba rahastamist käsitlev kirjandus rõhutab sagedamini bootstrap-rahastamist, kuludistsipliini, sisemist paindlikkust ja teostusriski. Selle killustatuse ületamiseks koondas töö varasema kirjanduse kolme analüütilisse mõõtmesse: otsustusautonoomia ja sõltuvus, kasvuorientatsioon ja tulemusloogika ning vastupidavus ja teostusrisk.

Teoreetiline analüüs näitas, et omakapitalipõhine rahastamine on enamasti seotud tugevama välise mõjuga, formaalsema juhtimisega, verstaapostidel põhineva kasvuloogikaga ning mõnel juhul suurema finantsilise puhvri olemasoluga. Omakapitalivaba rahastamine säilitab tavaliselt asutajate omandiõiguse otsesemalt, kuid võib samal ajal nihutada sõltuvuse klientidele, tarnijatele, laenuandjatele või platvormidele ning suurendada survet sisemisele teostusvõimekusele.

Empiiriline osa põhines anonüümsel veebiküsitlusel ja kvalitatiivsetel järelintervjuudel. Pärast mittetäielike vastuste eemaldamist jäi analüüsi 21 täielikku küsitlusvastust. Lisaks viidi läbi kaks poolstruktureeritud järelintervjuud, milles osales kokku kolm inimest. Andmeid analüüsiti kirjeldavalt. Vastused kodeeriti kuuepallisel skaalal ning koondati samade kolme mõõtme alusel, mida kasutati teoreetilises osas. Valim oli väike ja mittejuhuslik, mistõttu ei võimalda tulemused üldistusi kogu populatsiooni kohta. Siiski võimaldasid küsitlus ja intervjuud hinnata, kas varasemas kirjanduses kirjeldatud mustrid ilmnevad ka vastajate kogemustes.

Empiirilised tulemused olid otsustusautonoomia mõõtmes üldjoontes kooskõlas teooriaga. Omakapitalipõhise rahastamisega seotud vastajad tajusid rohkem välist mõju ja formaalsemaid juhtimisnõudeid. Omakapitalivaba rahastamise puhul oli formaalne väline

piirang väiksem, kuid sõltuvus ei kadunud, vaid avaldus sagedamini suhetes tarnijate, platvormide või teiste väliste osapooltega.

Kasvuorientatsiooni tulemused olid segasemad. Analüüsis ei ilmnenud jäika jaotust, mille järgi omakapitalipõhine rahastamine tähendaks alati kiiremat kasvu ning omakapitalivaba rahastamine üksnes kuludistsipliini. Tugevaim kasvuorientatsioon ilmnas hoopis segarahastusega ettevõtete rühmas, samal ajal kui omakapitalivaba rahastamise rühmas avaldus kõige selgem kuludistsipliini ja järkjärgulise arengu loogika.

Vastupidavuse ja teostusriski mõõtmis näitasid tulemused, et omakapitalivaba rahastamine võib olla seotud suurema survega ebakindluse tingimustes ja nõrgema tajutud võimega häiretele reageerida. Samas ei kadunud teostusrisk ka omakapitalipõhise rahastamise puhul, eriti olukordades, kus kapital võimaldas kiiremat laienemist ja suurendas tegevuslikku keerukust.

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