UNIVERSITY OF TURKU
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Family Business investing in Finland

How Finnish Family Businesses allocate their portfolios?

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Author:
Oliver Sohlberg

Supervisor:
PhD Antti Miihkinen

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Investment activities of Finnish family businesses represent an under-researched phenomenon, despite their substantial role in the domestic economy and contribution to entrepreneurial financing. These businesses account for a significant share of private sector employment, value creation, and long-term capital provision, yet there is limited empirical knowledge about how they structure and manage their financial wealth.

This thesis investigates the investment behavior, portfolio composition, and governance practices of Finnish family businesses and family offices, with particular focus on asset allocation, alternative investments, and long-term wealth preservation. The study combines data from a survey conducted for this thesis with the Finnish Family Business Association's 2024 survey. This approach provides both quantitative insights into portfolio composition and asset allocation, and qualitative understanding of investment policies, governance structures, and strategic objectives.

Empirical findings show that Finnish family businesses maintain diversified portfolios with substantial allocations to alternative assets, including private equity, real estate, and unlisted equities. Larger portfolios exhibit higher exposure to alternatives, more formalized governance, and greater professionalization of investment processes. Direct equity holdings are strongly concentrated in Finland and other Nordic countries, reflecting a pronounced home bias.

Overall, the study demonstrates that Finnish family businesses combine entrepreneurial flexibility with increasingly institutionalized investment practices. The findings contribute to the limited literature on family business investing in Finland, providing insights into portfolio allocation, governance, and strategic investment decision-making.

Key words: Family office, Family businesses, Institutional investors, Alternative assets, Asset allocation

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Suomalaisten perheyritysten sijoitustoiminta on toistaiseksi vähän tutkittu aihe, vaikka niillä on merkittävä rooli kotimaisessa taloudessa ja yrittäjyyden rahoituksessa. Perheyritykset muodostavat huomattavan osan yksityisen sektorin työllisyydestä, arvonluonnista ja pitkäaikaisesta pääoman tarjonnasta. Silti niiden varallisuuden hallinnan rakenteista ja käytännöistä on saatavilla vain rajallisesti empiiristä tietoa.

Tämä tutkielma tarkastelee suomalaisten perheyritysten ja Family officeiden sijoituskäyttäytymistä, salkun koostumusta ja hallintokäytäntöjä. Erityistä huomiota kiinnitetään varojen allokointiin, vaihtoehtoisiin sijoituksiin sekä pitkäaikaiseen varallisuuden säilyttämiseen. Aineisto koostuu tätä tutkielmaa varten toteutetusta kyselystä sekä Suomen Perheyritysten Liiton vuoden 2024 sijoitustutkimuksesta. Yhdistämällä määrällistä ja laadullista aineistoa tutkimus tarjoaa kokonaisvaltaisen kuvan sijoituspolitiikoista, hallintorakenteista ja strategisista tavoitteista.

Tulokset osoittavat, että perheyritysten sijoitussalkut ovat monipuolisia ja sisältävät merkittäviä osuuksia vaihtoehtoisista sijoituksista, kuten pääomasijoituksista, kiinteistöistä ja listaamattomista osakkeista. Suuremmat salkut korreloivat vahvemmin vaihtoehtoisten sijoitusten kanssa, ja niissä sijoitustoiminta on ammattimaisempaa ja hallintokäytännöt muodollisempia. Suorat osakesijoitukset painottuvat vahvasti Suomeen ja muihin Pohjoismaihin, mikä viittaa selkeään kotimarkkinapainotukseen. Tutkimus osoittaa, että suomalaiset perheyritykset yhdistävät yrittäjämäisen joustavuuden yhä institutionaalisempiin sijoituskäytäntöihin. Tulokset täydentävät rajallista tutkimuskirjallisuutta perheyritysten sijoitustoiminnasta Suomessa ja tarjoavat uusia näkökulmia salkunrakennukseen, hallintoon ja strategiseen sijoituspäätöksentekoon.

Avainsanat: Family office, Perheyritys, Institutionaalinen sijoittaja, Vaihtoehtoiset sijoituskohteet, Asset allokaatio

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1 Introduction

1.1 Background

Finnish Family Business Association (Perheyritysten Liitto, later PL) released research on the state of family business investing in Finland in September 2024 (Suomen Perheyritysten Liitto 2024). The study showed that family businesses are active, long-term investors with diversified portfolios, a relatively high risk appetite, and a strong desire to support Finnish entrepreneurship. For example, 44% of the 92 respondents reported investing in private equity funds, and a third indicated plans to increase such allocations in the future. These findings highlight the role of family businesses not only as owners of operating companies but also as significant participants in the Finnish capital market.

Family businesses are of particular importance to the Finnish economy. According to PL, they account for a substantial share of private sector employment and value creation. Their long-term orientation and intergenerational perspective often distinguish them from other types of investors, particularly in their willingness to provide patient capital for entrepreneurial ventures. As a result, understanding how family businesses manage and allocate their financial wealth is relevant not only for individual families but also for broader economic considerations, including the availability of growth financing for Finnish companies.

International literature highlights that family businesses and Family Offices (FOs) display investment behaviors distinct from institutional investors. Schickinger, Bierl, Leitterstorf and Kammerlander (2023) show that in German-speaking countries, FOs combine private equity with financial instruments to balance family objectives with financial returns, while Block, Fisch, Vismara and Andres (2019) find that U.S. FOs tend to be more risk-averse, focusing on long-term preservation and often engaging in co-investments to mitigate risk.

In Finland, the role of FOs is still emerging. Traditionally, families have managed their investments through holding companies or informal structures. However, the gradual establishment of both Single Family Offices (SFOs) and Multi-Family Offices (MFOs) reflects a move toward professionalization, mirroring broader international trends. FOs enable families to centralize decision-making, introduce formal governance, and access specialized expertise in asset management. This development is particularly relevant in the Finnish context, where many family businesses are transitioning to second or third generations, and where rising portfolio sizes make professional wealth management increasingly attractive.

At the same time, the Finnish context has distinctive characteristics that may shape family investment behavior. The relatively small size of domestic capital markets limits opportunities for large-scale local investments, potentially encouraging greater international diversification. In addition, Finland's entrepreneurial ecosystem relies heavily on family-owned capital, making family businesses important actors in financing start-ups and growth companies. The intersection of these domestic conditions with global trends in professionalized wealth management raises important questions about how Finnish families approach investment allocation.

While the PL study provides valuable initial insights into these practices, existing academic research has focused predominantly on German-speaking and U.S. contexts. Schickinger et al. (2023) also note that the research on FOs more broadly remains underdeveloped. In Finland specifically, academic knowledge is particularly scarce, leaving questions about how family businesses structure their investment processes, balance risk and return, and integrate non-financial objectives into portfolio decisions. Given that family businesses account for a significant share of the Finnish economy, their investment strategies have implications not only for long-term wealth preservation but also for the wider entrepreneurial ecosystem.

1.2 Purpose of the study and research questions

Despite the insights offered by the PL study, it did not examine asset allocation. Yet, according to Ibbotson and Kaplan (2000), asset allocation explains around 90% of the variability of a fund's returns over time. Understanding how Finnish family businesses allocate capital across asset classes is therefore essential for assessing how family wealth is preserved, grown, and directed toward entrepreneurial activities. Moreover, asset allocation decisions can provide insight into the risk preferences and strategic priorities.

This study aims to address that gap by examining how Finnish family businesses structure their investment portfolios and how their allocation decisions reflect both financial and non-financial objectives. In doing so, it also considers whether the allocation patterns identified in international research are evident in Finland and how family-specific considerations shape investment practices. By focusing on both portfolio composition and the processes underlying investment decisions, the study seeks to provide a more comprehensive understanding of family business wealth management in the Finnish context.

Based on this purpose, the research questions are formulated as follows:

1. How do Finnish family businesses allocate their investment portfolios across different asset classes?

2. How are investment activities organized and conducted within Finnish family businesses?

3. How do Finnish family businesses perceive the future of their investment activities?

Addressing these questions contributes to the literature by providing empirical evidence on family business investment practices in Finland, a context that remains underexplored in academic research. While the study specifically examines the role of Family Offices in organizing and managing wealth, it also explores three additional areas: institutional investing in general, asset allocation strategies, and the use of different asset classes, with a particular emphasis on alternative assets. The findings are expected to inform both scholars and practitioners about the current state of family business investments and the role of asset allocation in managing and preserving family wealth. Moreover, the information offers a unique benchmark on Family Office portfolio allocation, which is not available from any other source.

1.3 Study methodology

Given that most family businesses and FOs are privately held, detailed information about their investments is generally not publicly available. Consequently, empirical research on their investment behavior requires direct engagement with the companies themselves. To address this limitation and gain insight into their investment practices, a survey was conducted specifically for this thesis.

The survey focused on several key areas, including asset allocation, the organization and execution of investment activities, and the outlook for future investment strategies. Questions were designed to capture both quantitative information, such as the portfolio size and proportion of wealth allocated to different asset classes, and qualitative insights, including information on investment policies and investing activities in general.

Data collection involved reaching out directly to Finnish family businesses and FOs with the assistance of PL. The companies contacted were those that had previously participated in the PL 2024 survey, and access to the survey data was also provided for deeper analysis. All responses collected for the study were anonymized to ensure that the identities of the participating companies remained confidential.

By combining direct survey responses with the existing PL data, this methodology allowed to obtain information that is typically unavailable in public records. It also enabled exploration of not only current investment practices but also the strategic considerations and long-term objectives that guide these decisions. As a result, the study provides both a descriptive overview of portfolio allocations and a deeper understanding of the factors influencing family investment behavior in Finland.

1.4 Thesis structure

This thesis is organized into three main parts: Theoretical foundation, Empirical research, and Conclusions.

The theoretical foundation reviews existing literature and provides the conceptual basis for the study. It examines FOs, their structures, governance, and investment roles. It then discusses institutional investing, exploring the characteristics and strategies of institutional investors and highlighting the differences and similarities to FOs to better understand family business investment behavior. The framework further emphasizes the role of asset allocation in portfolio diversification and risk management, and focuses on alternative investments, highlighting their risk-return characteristics and the purposes for which investors typically allocate capital to them.

The empirical research section presents the formulation of research hypotheses based on the theoretical framework and prior literature. It details the research design, including data sources, survey methodology, and analytical techniques used to investigate asset allocation, investment activities, and the future outlook of Finnish family businesses. The results are then presented and analyzed, with particular focus on portfolio allocations and investment strategies. This section also addresses the validity and robustness of the findings.

The conclusion synthesizes the main findings and discusses their implications for both theory and practice. It compares the results with previous research, highlights the contribution of the study, and reflects on its limitations. The chapter concludes by suggesting avenues for future research and potential applications of the findings.

2 Theoretical Framework

2.1 Family offices

2.1.1 Family offices in general

The traditional concept of a Family Office (FO) is that it is a business managed by and for a family. Its primary function is to centralise the management of family assets and financial resources, which typically originate from entrepreneurial activities accumulated over multiple generations. Establishing an FO as a family asset management structure requires the family to have a high net worth to cover the costs and direct management involved. Broadly, the activities carried out by an FO can be divided into three categories:

1. Investment-related activities, i.e., asset allocation, selection of asset managers, and monitoring investment performance.

2. Family-related activities, i.e., philanthropy, risk management and insurance, educating the next generation, concierge services, security, and estate planning.

3. Administration-related activities, i.e., banking, financial administration, legal services, and accounting.

Each family decides which activities its FO will carry out based on its values, culture, and objectives. The structure of the FO is therefore determined by the family's mission and vision (Rivo-López, Villanueva-Villar, Vaquero-García and Lago-Peñas 2017).

From a governance perspective, as the management of the family firm grows and becomes more professional, family management is often separated from business management. Family management, sometimes organized as a Family Council, is responsible for managing the family's wealth and typically works in close collaboration with the Board of Directors of the family business. The family may choose to manage its wealth through an FO, which may have its own Board of Directors and professional management, or through direct decision-making by family members (Rivo-López et al. 2017).

There are several structures that can be used to professionally manage family wealth and related activities. The first is a Single Family Office (SFO), the second is a Multi-Family Office (MFO), and the third is an Affiliated Multi-Family Office (AMFO). As the name suggests, an SFO handles the affairs of a single family, providing complete confidentiality and tailored services. An MFO serves multiple families, each aware of the others sharing the services. The management costs are lower since one entity manages the assets of multiple families, which may be advantageous for families with fewer resources. An AMFO is an MFO affiliated with an institution, such as a bank or law firm (Rivo-López et al. 2017).

Gilding (2005) notes also a family holding companies as a legal and organizational structure used by wealthy families to manage, consolidate, and protect their assets across generations. In Gilding's study, family holding companies often emerge as fortunes grow and as families seek to facilitate both inheritance and management succession. These entities allow family members to pool resources, maintain control over core assets (such as shares in a public or private company), and coordinate investment decisions collectively. Holding companies also provide flexibility for dividing estates among heirs, help minimize tax liabilities, and can serve as vehicles for family governance—enabling regular board meetings and structured decision-making among family members. Importantly, while they promote cooperation and continuity, family holding companies are increasingly designed to be flexible ("loose structures"), allowing individual family members to pursue their own interests while still benefiting from shared wealth and collective administration.

In the U.S. the trend is toward the creation of MFO while in Asia it is the opposite with more focus on the SFOs, especially because cultural considerations. There is also differences in the minimum level of net wealth at which point the creation of an FO is recommended. In Europe the level of wealth is 200 to 300 million euros for SFO while 20 million would be sufficient for MFO. In the U.S. the level for SFO is usually 500 million dollars and 10 million dollars for MFO.(Rivo-López et al. 2017) This theses focuses mainly on SFOs and holding companies but as Schickinger et al. (2023) notes there is a gap in SFO research and therefore academic knowledge is farily limited.

SFOs operate under a unique regulatory framework that allows them to avoid registration as investment advisers under the US Investment Advisers Act, provided they meet the requirements of the "Family Office Rule". This rule mandates that SFOs serve only family clients, be wholly owned and controlled by family members or their entities, and not hold themselves out as investment advisers to the public. SFOs must also be mindful of other regulatory regimes, such as the Commodity Exchange Act, which provides similar exemptions for family-only investment pools and advisers. Despite these exclusions, SFOs are still subject to a range of securities law disclosure and reporting obligations, including beneficial ownership filings, institutional manager reporting, and compliance with antitrust and insider trading rules. Maintaining compliance requires careful structuring of investments and ongoing monitoring, especially as SFOs grow more institutional and complex in their activities. (Duval and Carlson 2025)

Dunn (1980) highlight that privacy and discretion are central to the function of FOs, particularly for families whose wealth and influence attract public attention. By consolidating sensitive financial, legal, and personal matters within a private organizational structure, FOs shield their clients from external scrutiny and potential reputational risk. This confidentiality allows for the discreet management of inheritance disputes, philanthropic strategies, political contributions, and lifestyle arrangements, ensuring that the family's internal affairs remain protected from media exposure and public interference.

The origins of FOs can be traced back to the early 20th century, when wealthy families began formalizing the management of their estates to ensure intergenerational continuity and control. Dunn identified the FO as a key "coordinating mechanism of the ruling class," designed to perpetuate both internal cohesion and external influence. These early offices managed joint stock holdings, trusts, and philanthropic foundations, while also linking families to broader institutions such as corporations and political networks (Dunn 1980). Over time, FOs evolved from modest administrative setups into sophisticated entities that not only preserved wealth but also reinforced elite status. Gilding builds on this by showing how Australian FOs emerged as flexible, trust-based structures that allowed families to manage diversified portfolios, navigate tax regimes, and maintain dynastic ambitions without rigid control over business operations. These institutions reflect a shift from traditional hierarchical models to "network forms of organization," where personal trust and voluntary participation are central (Gilding 2005).

Rivo-López et al. (2017) analyzed scientific research on FOs from 1988 to 2016 and found 33 scientific contributions. From those publications they found that FOs pursue diverse objectives in managing family wealth, including capital growth, preservation of intergenerational wealth, and, in some cases, the provision of business education for successor generations. Investment strategies and asset allocations are determined in accordance with these objectives and typically encompass listed equities, fixed income, hedge funds, private equity, real estate, and other alternative assets. In recent years, FOs have increasingly diversified their portfolios and strengthened risk management practices, reflecting lessons learned from the 2008 financial crisis. Professional advisors play a critical role in guiding investment and taxation decisions, with their influence varying across generations; founders typically exert substantial control, whereas in subsequent generations the relationship between advisor involvement and investment performance is more nuanced and may be affected by intergenerational conflicts.

Schickinger et al. (2023) examine the investment behavior and governance mechanisms of German-speaking family businesses. SFOs invest their wealth in different ways depending on the generation and ownership structure. In earlier generations, and when the original family business is still owned by the family, SFOs often focus on entrepreneurial investments such as private equity, venture capital, and unlisted shares. In later generations, or when the original business is no longer owned by the family, the focus tends to be more conservative, emphasizing financial instruments, real estate, and wealth preservation. Often, SFOs combine these approaches to balance the family's non-financial objectives with financial returns. Thus, investment styles range from risk-seeking entrepreneurial activities to more institutional investment strategies.

Block et al. (2019) reports that SFOs apply slightly different criteria for private equity investments compared to other investor groups. They prioritize profitability as a selection criterion over growth, in contrast to venture capital funds, which place greater emphasis on growth. This approach reflects the fact that SFOs manage family wealth and aim to preserve it over the long term, making them more risk-averse. SFOs often invest in companies in the growth stage and prefer syndications, i.e., co-investments with other investors, to diversify risk. Furthermore, they tend to focus on sectors such as consumer goods, industrials, and financial services, and their investment strategies emphasize stability and capital preservation rather than rapid growth.

Duval and Carlson (2025) points out that SFOs are increasingly sophisticated investors, managing diversified portfolios across public and private equities, funds, real estate, and alternative assets. Their investment approach is often characterized by "patient capital", allowing them to take a long-term view and negotiate favorable deal terms. SFOs may participate in co-investments and club deals with other family offices, but must ensure that such activities do not inadvertently extend investment advice to non-family clients, which could jeopardize their regulatory status. They also value confidentiality and often negotiate structures or side letters to protect the privacy of their holdings. As SFOs expand their investment reach, they must balance the pursuit of attractive opportunities with the need to comply with complex regulatory and reporting requirements.

2.1.2 Wallenberg family

One notable example of a family that has successfully built and preserved wealth across generations near Finland is the Wallenberg family from Sweden. Today, the fifth generation oversees a business empire valued at approximately US$660 billion. However, the transition to the sixth generation has already begun. The current leaders, cousins Jacob and Marcus Wallenberg, both aged 69, have started involving members of the sixth generation in observer roles within the foundations and corporate boards(Milne 2024).

The Wallenberg family's history dates back to 1856, when André Oscar Wallenberg founded Stockholms Enskilda Bank (SEB). Initially, the bank operated as a traditional financial institution, but during downturns in the Swedish economy, it frequently faced a choice between declaring companies with outstanding loans bankrupt or taking them over and helping them recover. The latter approach was consistently chosen, leading the bank to become a major shareholder in several companies.

The second generation established Investor AB in 1916, following the introduction of new legislation in Sweden that restricted banks from holding long-term equity stakes. Consequently, SEB's shareholdings were transferred to the newly founded holding company, Investor AB. Later, in 1994, under the leadership of the fourth generation, the private equity firm EQT was founded, with Investor AB as one of its founding partners. EQT has since focused on private equity investments.(Wallenberg.com 2025; Jack and Nordqvist 2021)

The ownership structure illustrated in Figure 1 is rather uncommon. The family members themselves do not directly hold stakes in the companies. Instead, the entire ecosystem is governed through the Wallenberg Foundations, a collective term for 16 non-profit foundations established by previous generations of the family. The foundations own 100% of Wallenberg Investments, an unlisted industrial holding company, and 23.3% of Investor AB, a listed holding company that invests in both publicly traded and private firms, either wholly or partially. Wallenberg Investments is responsible for managing and developing the assets of the Wallenberg Foundations and wholly owns three unlisted holding companies: FAM, Navigare, and Nineteen Private Capital. An important aspect of the ownership structure is that both Investor AB and Wallenberg Investments distribute dividends to the Wallenberg Foundations, which in turn provide grants for research and other fields, as well as reinvest a portion of the funds back into the investment companies. (Wallenberg.com 2025; Milne 2024)

The sixth generation is being prepared for future leadership through appointments to observer roles. However, the family has chosen not to single out any individual as the next leader. Instead, all observer positions are rotated, allowing members of the sixth generation to gain exposure to various aspects of the family's business ecosystem and identify areas that best match their interests.

Succession planning is often one of the most challenging aspects of family business governance. In the case of the Wallenbergs, however, their distinctive ownership structure mitigates one of the primary sources of conflict, namely money and ownership. Legally, successive generations are not the actual owners of the wealth; rather, they act as stewards responsible for managing and preserving the family's assets for future generations (Milne 2024).

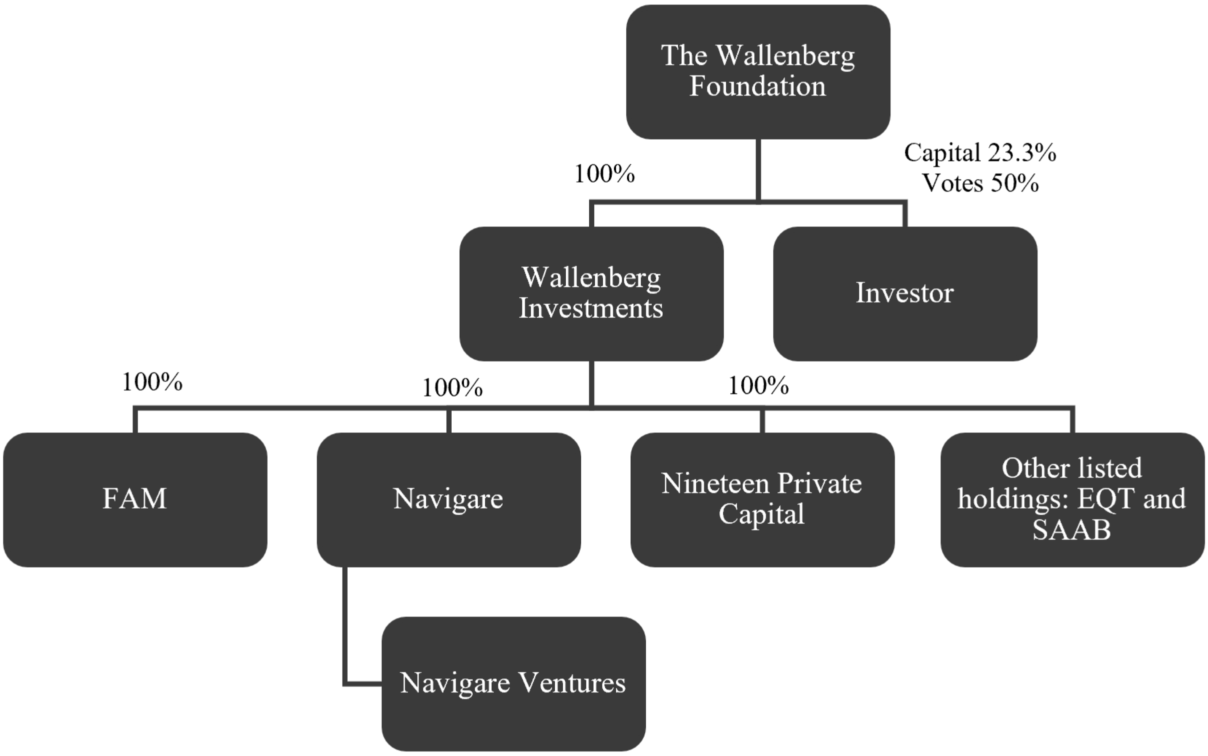

Figure 1: Wallenberg ownership structure (Wallenberg.com 2025)
Figure visualizes the general overview on the ownership structure of the Wallenberg family.

2.2 Institutional investing

It can be viewed that financial markets have two main participant groups, retail investors: small individuals who invest capital for their personal account (Nasdaq 2024) and institutional investors. Langevoort (2009a) states that since 1980's financial markets in U.S. have faced rapid shift toward institutionalization.

In general institutional investing refers to the activities of large financial entities such as mutual funds and insurance companies, which have become dominant players in global financial markets. Over the past few decades, their ownership in publicly traded companies has grown substantially, with institutional investors collectively holding the majority of equity in many firms. These investors play critical roles in corporate finance, influencing decisions related to mergers and acquisitions, capital structure, governance, and market behavior. Their actions are often guided by access to superior information, strategic trading capabilities, and long-term investment horizons, making them key agents in shaping corporate outcomes and market dynamics Chemmanur, Hu and Wei (2021).

2.2.1 Institunional investors

Institutional investor as a term does not have a specific legal framework, but Basile, Ferrari et al. (2016) identifies all entities that professionally manage portfolios of assets, financial or real, on behalf of set of investors as institutional investors. Institutional investors are a group of professional clients for asset managers and financial companies. Accordign to MiFID (2014) professional clients posses the experience, expertise and knowledge to make its own investment decisions and properly asses the risk that it incurs. MiFID mentions "other institutional investors" as last on the list of entities that are regarded as professionals. Since the focus of MiFID is on the level of protection it does not identify their functional specialisation.

If we accept that the lowest common denominator among institutional investors is professional management of assets on behalf of a plurality of individuals, we can consider following as institutional investors: Collective investments vehicles (CIVs), Individual portfolio management based on mandates given by clients on a single and discretionary basis, Insurance companies, Pension funds, Institutions for occupational or personal retirement provisions, and Foundations and endowments (Basile et al. 2016).

2.2.2 History of institutional investing

Since the 1980s, institutional investors' assets under management have increased significantly, driven by both the expansion of equity markets and a structural shift in household investment behavior—away from direct stock ownership and toward investment through professional asset managers (Fichtner 2020). Institutional investors are major players both in developed and emerging markets. Between 1990 and 2005, the assets under management of institutional investors tripled, surpassing US$45 trillion (Ferreira and Matos 2008). In Finland, where pension funds represent one of the largest category of institutional investors, total pension fund assets reached approximately €274 billions in 2024, as illustrated in Figure 2.

The origins of modern institutional investors can be traced back to the late 1920s, with the establishment of some of the first mutual funds by firms such as State Street and Wellington. These open-ended funds allowed for the continuous issuance and redemption of shares, enhancing liquidity and accessibility for a broader range of investors. During the 1930s and 1940s, the United States implemented foundational regulatory frameworks for mutual funds and other investment instruments, most notably through the establishment of the Securities and Exchange Commission (SEC) via the Securities Exchange Act of 1934. Building on this foundation, the 1950s and 1960s saw the emergence of the first private equity and hedge funds in inchoate form. In the 1970s, Vanguard created the first

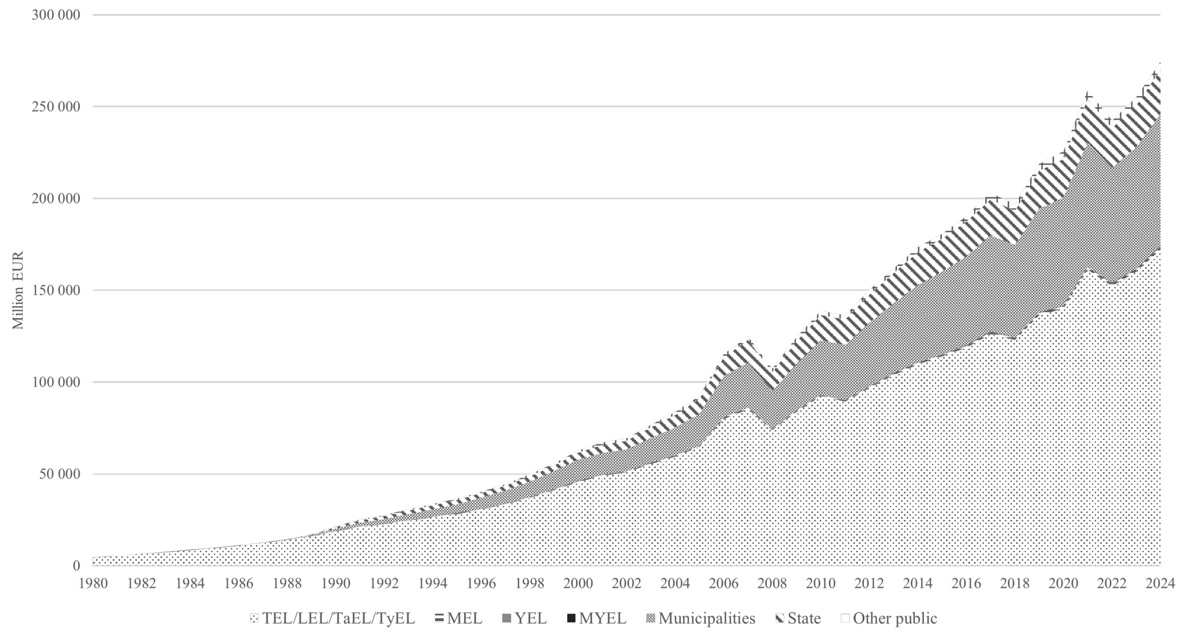

Figure 2: Accumulation of Finnish pension assets 1980-2024 (Finnish Centre for Pensions 2025)
Figure visualizes the cumulation of the different Finnish pension assets over the years.

index fund, enabling retail investors to achieve a diversified portfolio cost-efficiently for the first time. By the late 1970s, most major institutional investor types had already emerged.(Fichtner 2020)

2.2.3 Active market participation and corporate governance

Gillan and Starks (2003) consider the emergence of institutional investors an increasingly important external control mechanism influencing corporate governance worldwide. Institutions can influence management's activities both directly and indirectly—directly through ownership and voting rights, and indirectly through trading their shares. For example, institutions may act collectively to avoid investing in a company, thereby increasing its cost of capital.

The principal-agent problem has been widely studied in the field of finance. In essence, it arises when one party, the agent, takes actions that the other party, the principal, cannot directly observe. In financial contexts, this typically refers to the relationship between business owners or shareholders (principals) and company management (agents). (Holmström 1979; Harris and Raviv 1979; Grossman and Hart 1992) When a company's ownership structure is widely dispersed, individual shareholders have little incentive to monitor management, as the costs of monitoring fall on the individual while the benefits are shared among all shareholders. Thus, the nature and severity of agency problems are closely tied to the structure of ownership. (Gillan and Starks 2003) Shleifer and Vishny

(1986); Admati, Pfleiderer and Zechner (1994); Maug (1998) argue that large shareholders mitigate the principal-agent problem through more concentrated ownership structure, as their substantial holdings provide both the incentive and capacity to monitor management effectively enabling them to profit despite bearing the costs of oversight and small shareholders free riding. Ferreira and Matos (2008) findings suggest that some, but not all, institutional investor groups effectively monitor the firms in which they invest, and that the presence of institutional investors is associated with enhanced shareholder value. Bethel, Liebeskind and Opler (1998) report that activist investors tend to target underperforming firms and are more likely to acquire significant shareholdings in companies with dispersed ownership structures. Following these block purchases, firms often experienced improvements in operating profitability and abnormal positive stock price reactions. Velte (2023) states that there are indications that long-term, sustainable, and foreign institutional investors enhance both ESG (Environmental, Social, and Governance) and CSR (Corporate Social Responsibility) performance. Additionally, there is some evidence suggesting a positive relationship between corporate sustainability and financial performance.

Ismail, Khalil, Safieddine and Titman (2019) finds that institutional investors tend to accumulate shares of companies announcing acquisitions, particularly when synergy forecasts are disclosed. The author interprets these findings as evidence that institutional investors are drawn to situations where their privileged access to management and analysts affords them an informational advantage.

2.2.4 Regulation

The regulation of institutional investors has evolved significantly to ensure that these entities act in the best interests of their beneficiaries while maintaining the stability and integrity of financial markets. Regulatory frameworks often impose fiduciary duties, disclosure requirements, and governance standards to protect investors and promote transparency (McCaffrey 2011; Langevoort 2009b; Strine Jr 2020). For example, comply-or-explain regulations allow institutional investors some flexibility in implementing investment strategies while requiring them to justify deviations from established best practices Bourveau (2025).

Regulators also aim to mitigate agency problems inherent in institutional investing. Conflicts can arise between fund managers' incentives and the long-term interests of beneficiaries, particularly regarding fee structures, investment horizon mismatches, or reliance on proxy advisors (Bebchuk, Cohen and Hirst 2017). Oversight ensures that institutional investors balance the pursuit of returns with adherence to regulatory obligations, safeguarding both the investors' assets and the broader market.

In addition, regulatory frameworks are designed to adapt to the increasing complexity of institutional portfolios, which often include alternative assets, private equity, and other non-traditional investments (Andonov 2021; Gibson, Glossner, Krueger, Matos, Steffen et al. 2020). By enforcing transparency, risk management standards, and reporting requirements, regulation provides guidance for institutional investors navigating these sophisticated investment strategies, ensuring that growth and innovation do not compromise investor protection or market stability.

A key aspect of regulation is the restriction on asset allocation. Institutional investors are often subject to rules that limit the share of certain asset classes in their portfolios, particularly higher-risk or illiquid investments such as private equity, hedge funds, and startups (Andonov 2021; Gibson et al. 2020). These restrictions aim to protect beneficiaries from excessive risk, ensure sufficient liquidity, and maintain diversification. At the same time, regulators seek to balance these constraints with the need for institutions to pursue attractive investment opportunities.

For European institutional investors, particularly insurance companies, the Solvency II regulatory framework plays a central role in shaping investment decisions. Solvency II establishes risk-based capital requirements and governance standards to ensure that insurers maintain adequate capital buffers to meet their liabilities. The framework directly affects asset allocation, as investments in higher-risk or less liquid assets require higher capital charges, thereby influencing the proportion of assets that can be allocated to private equity, hedge funds, or other alternative investments (Andonov 2021; Gibson et al. 2020). By enforcing these prudential requirements, Solvency II aims to safeguard policyholders while promoting the stability of the financial system.

2.3 Asset allocation

Asset allocation is the process by which investors distribute capital among different asset classes, such as equities, fixed income, real estate, commodities, and alternative investments. It is widely regarded as one of the most important determinants of portfolio performance, as it directly affects both risk and return (Campbell and Viceira 2002; Ibbotson and Kaplan 2000). The main goal of asset allocation is to optimize the trade-off between expected returns and risk, while taking into account investors' objectives, constraints, and investment horizon (Zhao and Zhou 2017). The process is inherently dynamic and multifaceted, reflecting both quantitative models and qualitative judgments.

The foundation of modern portfolio theory was established by Harry Markowitz in 1952, who introduced the concept of mean-variance optimization (Markowitz 1952). According to this framework, investors seek to construct portfolios that maximize expected return for a given level of risk, or equivalently, minimize risk for a given expected return. Risk is measured by the variance (or standard deviation) of portfolio returns, while return is measured by the expected value of portfolio performance. Markowitz demonstrated that diversification across assets with imperfectly correlated returns reduces overall portfolio risk, giving rise to the efficient frontier, a set of optimal portfolios that offer the highest expected return for each level of risk. This framework laid the groundwork for subsequent developments in strategic and tactical asset allocation, and remains a core principle in portfolio management today.

While mean-variance optimization provides a rigorous mathematical approach to portfolio construction, empirical evidence shows that investors often deviate from theoretical recommendations due to behavioral and practical constraints. In practice, the mean-variance framework continues to serve as the basis for strategic and tactical allocation decisions, although modifications are often introduced to account for behavioral biases, transaction costs, liquidity constraints, and regulatory restrictions (Campbell and Viceira 2002; Zhao and Zhou 2017). Understanding the interaction between theoretical models and investor behavior is critical for designing portfolios that achieve both diversification and alignment with long-term investment objectives.

There are several commonly employed strategies for asset allocation. Strategic asset allocation involves setting long-term target weights for each asset class based on historical risk and return characteristics, and periodically rebalancing to maintain those weights (Campbell and Viceira 2002). Tactical asset allocation allows for short-term deviations from strategic targets to exploit market opportunities or mitigate perceived risks (Su 2020). Dynamic asset allocation involves continuously adjusting portfolio weights in response to changes in market conditions, interest rates, and economic outlooks, aiming to capitalize on evolving opportunities while managing risk (Fortin and Hlouskova 2024). Another approach, core-satellite allocation, combines a core portfolio of broadly diversified, low-cost assets with satellite investments in high-conviction or alternative strategies, allowing for enhanced returns without substantially increasing overall risk (Smith 2022).

A common benchmark in traditional asset allocation is the 60/40 portfolio, which allocates 60% of assets to equities and 40% to fixed income. This allocation aims to balance growth potential with income stability and risk mitigation, providing moderate volatility while capturing long-term equity returns (Morningstar 2025). The 60/40 portfolio is often used as a reference point for performance comparison and as a starting framework for more sophisticated strategies, including tactical tilts, alternative investments, or dynamic adjustments based on market conditions. Despite its simplicity, it remains widely referenced in both academic literature and practical investment management, highlighting the enduring influence of traditional risk-return principles in portfolio construction.

Investors' asset allocation decisions are influenced by a range of behavioral biases. Loss aversion may lead investors to underweight risky assets, as potential losses are often perceived as more significant than equivalent gains (Fortin and Hlouskova 2024). Overconfidence can result in excessive trading or concentration in specific assets, while herding behavior may prompt investors to follow market trends rather than fundamentals (Zhao and Zhou 2017). Mental accounting and status quo bias can further distort portfolio composition and impede effective rebalancing (Campbell and Viceira 2002).

A particularly well-documented phenomenon is home bias, in which investors allocate disproportionately large shares of their portfolios to domestic assets, even when global diversification would offer superior risk-adjusted returns (French and Poterba 1991). This bias can arise from familiarity with local markets, information asymmetries, currency risk considerations, or perceived political and economic stability at home. Studies indicate that both individual and institutional investors consistently overweight domestic equities and bonds, which can reduce the benefits of international diversification (Covrig, Lau and Ng 2006). Home bias may interact with other behavioral tendencies, reinforcing preferences for familiar assets and potentially leading to suboptimal portfolio performance (Barberis and Thaler 2003).

In addition to behavioral considerations, asset allocation must account for practical and institutional constraints. Regulatory limits, liquidity requirements, transaction costs, and investment mandates can all shape portfolio composition (Andonov, Rauh et al. 2020). Institutional investors, for example, often face restrictions on the share of illiquid or high-risk assets in their portfolios. The growing prominence of alternative investments, including private equity, hedge funds, and real estate, further increases the complexity of allocation decisions, requiring sophisticated risk assessment, monitoring, and governance structures (Cumming, Khan, Khan and Khan 2024; Gibson et al. 2020).

In conclusion, asset allocation is a dynamic and multidimensional process that integrates quantitative models, behavioral insights, and practical considerations. Effective allocation requires balancing risk and return, accounting for investor objectives and constraints, mitigating behavioral biases, and complying with regulatory and institutional requirements. By applying strategic, tactical, and dynamic approaches, investors can construct diversified portfolios capable of achieving long-term investment goals while managing uncertainty and market fluctuations.

2.4 Alternative investments

It seems that word ”alternative” does not have one single explanation among the investors. People can agree on examples such as private equity or hedge funds, but not on a universal definition. There are at least three different types of assets that the phrase ”alternative” is associated with. The first characteristic is *illiquid*, an asset that is not easily converted into cash. This characteristic is not without limitations. For instance, during certain market conditions—such as the 2008 financial crisis—even typically liquid assets like U.S. corporate bonds experienced periods of illiquidity, demonstrating that assets generally considered liquid may not always remain so. Another limitation is that certain highly liquid assets, such as currencies and gold, are nonetheless classified as alternative assets, which challenges the assumption that alternative assets are inherently illiquid. Second characteristic is *unquoted*, which typically refers to assets or securities that are not publicly listed and traded on an exchange, with readily available market prices. This holds for some assets like private equity and real estate, but how about commodities. Commodities are usually counted as alternative investments but they are quoted and traded in public markets like CME (Chicago Mercantile Exchange). This troubles the association that all alternative assets are unquoted. Last characteristic is *not bonds or equities*. Portfolios are often categorized into equities, fixed income, cash, and alternative assets. However, some investors may treat for example real estate as a distinct asset class, positioning alternatives alongside it, or may classify certain assets differently based on their investment strategy or institutional framework. It is a situation in which no sizeable group of people are ever going to agree on a common solution but the last definition is less open to debate. (Fraser-Sampson 2010)

In the absence of a single clear answer to the question of what alternative investments are, this thesis uses the commonly understood portfolio allocation split of equities, fixed income, cash and alternatives. Like stated in the Fraser-Sampson (2010).

Next, we will examine the most well-known alternative asset classes and their key characteristics:

2.4.1 Private Equity

Unlisted shares, also referred to as “unquoted” shares, are often broadly discussed under the umbrella of Private Equity. These instruments are not traded on a stock exchange, and as such, market prices are not readily observable on a daily basis. Investors holding unlisted shares do not benefit from the regulatory protections provided by stock exchanges, and the trading of such shares is typically illiquid and subject to significant constraints. Unlisted shares are issued by limited liability companies and confer upon holders the status of joint owners. These shares entitle investors to a proportionate share of the company's distributed profits as well as a share of its net assets in the event of liquidation.(International Monetary Fund and Bank for International Settlements and European Central Bank 2015)

Global private equity assets under management (AUM) amounted to approximately $0.7 trillion in 2000 (Preqin 2012) and had grown nearly sixfold to $4.1 trillion by January 2020 (Roberts and Naydenova 2020). The private equity market serves as a significant source of capital for start-up companies, privately held middle-market firms, financially distressed businesses, and publicly traded firms pursuing buyout financing. (Fenn, Liang and Prowse 1997) Private equity is a broad term encompassing all forms of equity investments in non-public companies. It is commonly understood to include several subcategories under its umbrella, such as venture capital, leveraged buyouts (LBOs), mezzanine debt, and, in some classifications, special situations. (Jobman 2002, 141)

Typical PE firms are organized as partnerships or limited liability companies (Kaplan and Strömberg 2009). In 2025 three largest PE firms globally by Assets Under Management (AUM) are based in United States. Their total AUM amounted $9.9 trillion. Clear leader with $8.2 trillion AUM is BlackRock. It was founded in 1988 with current CEO and Chair of the board Larry Fink and seven co-founders. Second biggest PE firm is Blackstone with $1.1 trillion AUM and third is Apollo Global Management with $600 billion AUM. In Europe largest PE firm is CVC Capital Partners with $180 billion AUM. CVC is globally sixth largest PE firm. (Patel 2025a)

PE firms raise equity capital through Private Equity funds. Most PE funds are closed-end vehicles in which investors commit a certain amount of capital to be used for investments in portfolio companies as well as for covering management fees of the PE firm. In closed-end funds, investors cannot withdraw their capital during the fund's life cycle. These investors are typically institutional investors, pension funds, endowments, insurance companies, and high-net-worth individuals.

Typically funds have a fixed life of ten years, but it can be extended for up to three additional years. Usually first five years of the fund are for investing and next five to eight years to return capital to its investors. Investors have little to no say how the PE firm invest the capital as long as the basic covenants and fund agreements are followed.

PE firms earn money in three different ways. First they earn annual management fee, usually as % of capital committed, second as share of profits referred as carried interest usually amounting 20% and lastly some firms charge deal and monitoring fees to the companies in which they invest. These deal and monitoring fees are usually split 50-50 among PE firms and investors. (Kaplan and Strömberg 2009)

Next we examine the key characteristics of the two most common PE asset classes, Venture Capital and Leveraged Buyout.

Venture Capital is usually associated with early stage companies in industries with high growth potential. Usually companies are in the product development phase and preparing to go to market. (Jobman 2002, 141) Due to their early stage of development, these companies often face difficulties in attracting other forms of financing. As a result, venture capital plays a crucial role in financial markets by supporting the growth and development of young firms through investments in high-risk, possible high-reward projects. (Gompers and Lerner 2001)

The first venture capital firm, American Research and Development Corporation (ARD), was established in 1946 by MIT President Karl Compton and General Georges F. Doriot. ARD aimed to make high-risk investments in emerging companies that leveraged technologies developed during World War II. The firm operated as a closed-end fund—meaning its shares were traded between investors on an exchange—and remained an independent entity for 26 years.(Gompers and Lerner 2001)

Acs and Audretsch (1988) show that smaller firms tend to contribute almost half of the innovations in their sample, but there was noticeable heterogeneity accros industries. In less concentrated immature industries smaller firms tended to be more important. New firms usually choose more riskier product strategies to enter new markets than established companies (Aron and Lazear 1990). Lerner and Tåg (2013) state that on one hand smaller firms fail more often, but on the other hand they more often successfully bring riskier high-impact innovations to the market. Thus small startups have a clear role bringing new innovations to the market with a help of VC investors.

Lerner and Tåg (2013) notes two reasons why young entrepreneurial firms may have troubles raising funding from equity investors or banks. First reason is moral hazard or conflict of interests between entrepreneur and investor. Entrepreneur faces incentives to spend the firm's money as the entrepreneur does not bear the full cost of expenditure. This also reflects on banks. Debt financing might not be available to entrepreneurs because they have to take excessive risk from the bank's perspective. The entrepreneur benefits if the firm succeeds but the bank stands to lose everything if the firm fails. The second reason is asymmetric information. Equity investor fears that entrepreneurs would only sell equity when the firm is overvalued. For the bank financing the banks fear that for a given interest rates, only high-risk firms would apply for loans. VC firms are there to bridge the gap between supply and demand and solve the problem with moral hazard and asymmetric information by screening the possible investments thoroughly, using different financial contracts and taking seat at the board of directors. By doing this, VC investors can closely monitor the company and provice advices on the development of the firm (Hellmann 1998).

Venture capital funds are usually structured as limited partnerships. Figure 3 visualize the main stakeholders and how they are organized in Venture Capital fund. (PwC Belgium 2023) It is made up of atleast one general partner (GP) and at least one limited partner (LP). GPs and LPs can be either individual people or legal entities. The limited partnership offers tax benefit for partners because it does not pay taxes itself, instead the partners pay taxes on proceeds they receive from the limited partnership. GPs are typically a legal entity established and run by the management of the VC firm. GP has unlimited liability for the business operations and assumes full responsibility for any debts of legal liabilities. LPs are the investors who supply the capital for the management to invest in early stage companies. They have limited liability that is limited to their stake in the partnertship. LPs are often institutional investors but also VC funds can make outside investments to other VC funds as LPs.(Astoor and Koh 2022)

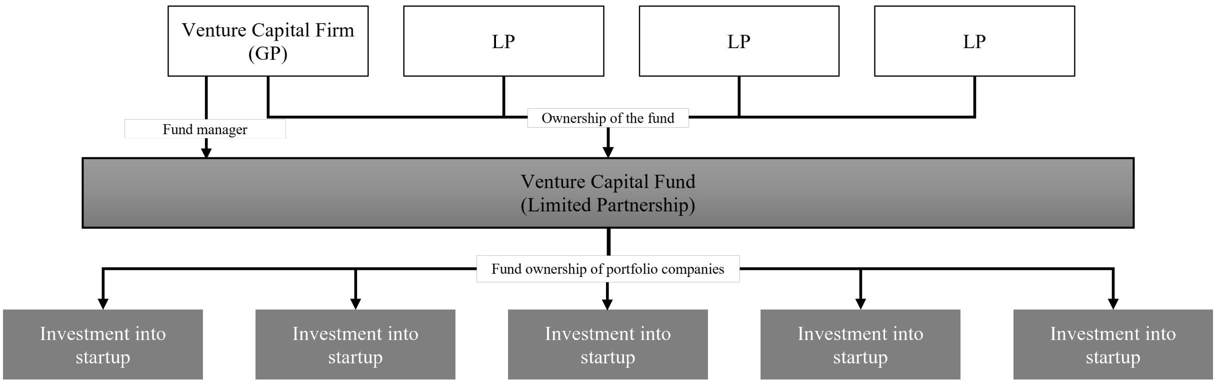

Figure 3: VC fund structure
Figure visualizes generally used VC fund structure and all the key stakeholders.

The early stage of the company and the riskiness means that more than half of the companies in VC fund's portfolio return only the original investment at best and loses all at worst. However given the VC's portfolio stucture, only 10% to 20% of the companies need to be real winners and return the invested capital multiple times. (Sahlman 1998) This is visualised in Table 1.

Leveraged Buyouts (LBOs) are the primary strategy employed by most firms commonly referred to as Private Equity firms. In a typical LBO transaction, a company is acquired by a specialized investment firm using a relatively small portion of equity combined with a substantial amount of debt financing. This strategy differs from that of VC firms, as LBOs involve acquiring a majority stake in an already mature company, rather

Table 1: VC portfolio performance per $1,000 invested

Table visualizes how the typical VC porfolio is estimated to perform (Sahlman 1998).

	Bad	Alive	Okay	Good	Great	Total
Invested	$200	$400	$200	$100	$100	$1,000
Payout year 5	0x	1x	5x	10x	20x	
Gross return	$0	$400	$1,000	$1,000	$2,000	$4,400
Net return	($200)	$0	$800	$900	$1,900	$3,400

than investing small stake in early-stage businesses. (Kaplan and Strömberg 2009)

LBOs first emerged as a significant phenomenon in the 1980s. Jensen (1989) notes that in 1979, there were a total of 75 buyouts with a combined value of $1.3 billion. By 1988, the number of LBO transactions had increased to 214, with a total deal value exceeding $77 billion, accounting for nearly one third of all mergers and acquisitions that year. Jensen also predicted that the LBO model would become the dominant form of corporate organization. This view was based on several factors: concentrated ownership stakes in portfolio companies, strong performance-based incentives for investment professionals, and lean and efficient organizational structures with minimal overhead. Manager compensation in LBO firms was primarily performance driven, capital structures were highly leveraged and often involved the use of junk bonds, and firms exercised active governance over their portfolio companies.

However, Kaplan and Strömberg (2009) notes that Jensen's predictions were somewhat premature. In the early 1990s, the junk bond market collapsed, and several high profile LBO transactions ended in default or bankruptcy. As a result, public to private LBO activity largely disappeared during that period. LBO market in the 1990s was mainly on private transactions and public to private transactions reappeared in the mid-2000s with record amount of capital commited to Private Equity and LBO deals in 2006 and 2007. After financial crisis in 2008 the LBO market appeared to decline again.

In a typical LBO transaction, the PE firm agrees to acquire a company for a specified amount. If the target is a public company (listed on a stock exchange), the PE firm typically pays a premium of 15 to 50 percent above the current stock price (Kaplan 1989; Bargeron, Schlingemann, Stulz and Zutter 2008). The acquisition is generally financed with a high level of debt, ranging from 60 to 90 percent of the purchase price, while the remainder is contributed as equity by the PE fund executing the transaction. The new management team may also invest a small portion of equity, although this amount is usually modest relative to the total deal size (Kaplan and Strömberg 2009).

Seel (2010) provides an in-depth look into the capital structure of a typical LBO deal.

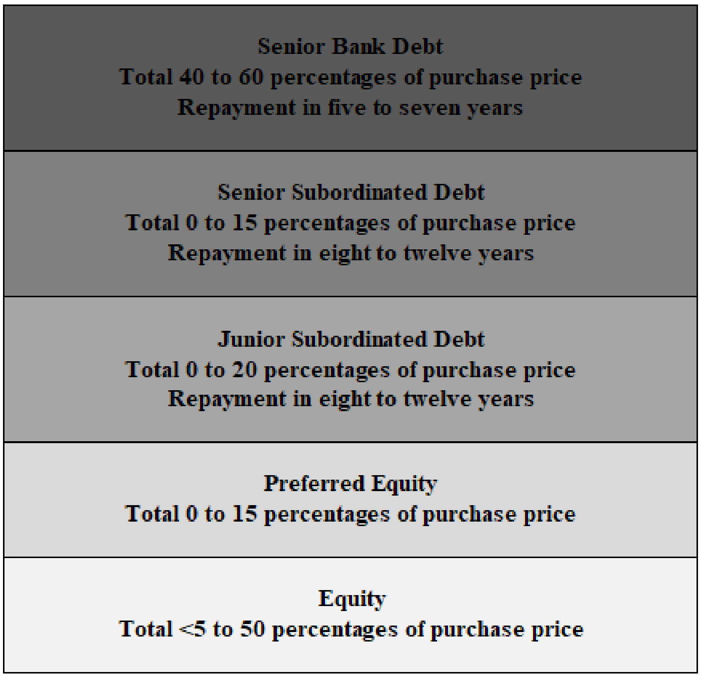

Figure 4: LBO transaction capital structure (Seel 2010)
Figure visualizes the capital structure generally used in LBO transactions. On top of the list is the most senior debt instrument.

When properly structured, private equity firms can acquire the common equity of a target company with relatively low levels of their own equity capital. Although each transaction is unique, the target leverage in an LBO is typically between three to seven times earnings before interest, taxes, depreciation, and amortization (EBITDA), resulting in a post-closing debt-to-capital ratio ranging from 50% up to 95%.

The debt used in LBOs is structured as nonrecourse[1], and is often divided into multiple tranches (see Figure 4). These tranches generally consist of senior bank debt, senior subordinated debt, junior subordinated debt, and/or mezzanine financing. In the case of bankruptcy or liquidation, the repayment priority follows the capital stack from top to bottom, depending on what remains available for distribution.

Since equity constitutes only a small portion of the post-transaction capital structure, the associated debt is typically rated as high-yield or "junk," reflecting the elevated risk of default. As a result, the debt is not usually provided by a single lender but rather by a group of lenders known as a syndicate. Each syndicate member typically possesses specific expertise related to the type of debt instrument they are providing. This structure limits the exposure of individual members, thereby enhancing the risk-adjusted safety of their investment. After the transaction, syndicate members may choose to retain the debt on their own balance sheets or sell it to external investors. To compensate for the heightened

[1]"The creditor may only look to the collateral to satisfy the unpaid loan, and not the debtor's personal assets" (Legal Information Institute, Cornell Law School)

credit risk, these debt instruments offer higher interest margins—typically ranging from 400 to 800 basis points above government bond yields. The exact spread depends on the credit profile of the target company and prevailing market conditions. (Seel 2010)

The mechanism behind a LBO transaction is based on the assumption that the acquired firm generates sufficient free cash flow (FCF) over the holding period to first service interest and principal payments, and subsequently distribute dividends or reinvest in operations. This dynamic is illustrated in a simplified example adapted from Seel (2010): the target company produces $200 in FCF over the last twelve months and is acquired for $1,000, corresponding to a purchase multiple of 5x FCF. The capital structure of the transaction is outlined in Table 2. Assuming FCF grows at an annual rate of 5% during the investment period, the cash flows are sufficient to fully service the bank debt and pay a steady dividend (assuming all post-tax profits are distributed), as shown in the projections in Table 3. Over the five-year holding period, debt amortization significantly increases the equity portion, which accounts for 87.50% of the capital structure by the end of year five. If the investment is exited at the same multiple of 5x, the total return would amount to an internal rate of return (IRR) of 36.94% per annum, or a cumulative return of 286.25%.

Table 2: LBO example deal capital structure

Table visualizes an example on possible capital structure used in LBO transaction. On the first column are the instruments and interest paid, second column is the $ amount and last column is the % of total.

Capital Structure	$ amount	% of total
Bank Debt @ 7%	$450	45%
Senior Sub @ 10%	$150	15%
Junior Sub @ 13%	$100	10%
Equuity	$300	30%

As the example illustrates, there are two critical components in leveraged buyout (LBO) transactions. First, the acquired company must generate sufficient free cash flow to cover both interest and principal payments. Second, there must be a successful exit to realize the investment's returns. Timely exits are also important because most private equity funds have a limited contractual lifetime. Between 1970 and 2007 the most common exit route for private equity portfolio companies, accounting for 38 percent of exits, was a sale to a strategic buyer. These are typically corporations operating in the same industry or in a closely related field. The second most common exit, representing 24 percent, was a secondary buyout where the company was sold to another PE fund. The third most frequent method was an initial public offering (IPO), which accounted for 14 percent of exits and allowed the fund to sell its shares on the public market. Due to the high leverage involved, bankruptcy was also a possible outcome and constituted 6 percent of all exits during this period (Kaplan and Strömberg 2009). For example the largest LBO deal ever

Table 3: Example LBO Deal

Table visualizes the example LBO deal presented by Seel (2010). First section are the projections for the future, second one is the debt payments and third is the capitalization. On the bottom is the IRR calculation for the total investment.

Projections	Year 1	Year 2	Year 3	Year 4	Year 5
FCF (5% growth)	\$200.00	\$210.00	\$220.50	\$231.53	\$243.10
Service bank debt	\$121.50	\$115.20	\$108.90	\$102.60	\$96.30
Service senior sub	\$30.00	\$28.50	\$27.00	\$25.50	\$24.00
Service junior sub	3.00	\$21.70	\$20.40	\$19.10	\$17.80
Pre-tax earnings	\$25.50	\$44.60	\$64.20	\$84.33	\$105.00
Tax @ 35%	\$8.93	\$15.61	\$22.47	\$29.51	\$36.75
Cash available to distribute	**\$16.58**	**\$28.99**	**\$41.73**	**\$54.81**	**\$68.25**

Debt schedule	Year 1	Year 2	Year 3	Year 4	Year 5
Senior debt (beg. balance)	\$450.00	\$360.00	\$270.00	\$180.00	\$90.00
Interest	\$31.50	\$25.20	\$18.90	\$12.60	\$6.30
Pricipal	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00
Senior debt (end. balance)	\$360.00	\$270.00	\$180.00	\$90.00	\$0.00
Senior sub (beg. balance)	\$150.00	\$135.00	\$120.00	\$105.00	\$90.00
Interest	\$15.00	\$13.50	\$12.00	\$10.50	\$9.00
Pricipal	\$15.00	\$15.00	\$15.00	\$15.00	\$15.00
Senior sub (end. balance)	\$135.00	\$120.00	\$105.00	\$90.00	\$75.00
Junior sub (beg. balance)	\$100.00	\$90.00	\$80.00	\$70.00	\$60.00
Interest	\$13.00	\$11.70	\$10.40	\$9.10	\$7.80
Pricipal	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00
Junior sub (end. balance)	\$90.00	\$80.00	\$70.00	\$60.00	\$50.00

Capitalization	Year 1	Year 2	Year 3	Year 4	Year 5
Bank debt	36.00%	27.00%	18.00%	9.00%	0.00%
Senior sub	13.50%	12.00%	10.50%	9.00%	7.50%
Junior sub	9.00%	8.00%	7.00%	6.00%	5.00%
Equity	41.50%	53.00%	64.50%	76.00%	87.50%

IRR Analysis

Assuming exit multiple:	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	IRR
5.0x	-\$300	\$16.58	\$28.99	\$41.73	\$54.81	\$1,158.76	36.94%
6.0x	-\$300	\$16.58	\$28.99	\$41.73	\$54.81	\$1,401.86	41.68%
7.0x	-\$300	\$16.58	\$28.99	\$41.73	\$54.81	\$1,644.96	45.83%

ended in bankruptcy. TXU (now Energy Future Holdings) was bought in 2007 by KKR, TPG Capital and Goldman Sachs for \$45 billion. Due the financial crisis and falling natural gas prices, TXU failed to meet its interest payments and declared bankruptcy in 2014. (Patel 2025b)

2.4.2 Private Credit

AUM in Private Credit funds has increased from about $0.2 billion in the early 2000s to over $2,500 billion in March 2025 (Avalos, Doerr and Pinter 2025). Private credit or private debt (instrument itself) investments are non-publicly traded instruments provided by non-bank entities, such as credit funds or business development companies (BDCs). These are used to fund private businesses in the middle market with annual revenues from $10 million to $1 billion. A recent trend has been the increased use of private credit to fund larger companies that were traditionally financed by leveraged loans. Loans are typically negotiated bilaterally with the borrower to meet the specific needs and requirements of both parties. This type of loan between a single borrower and a single lender is often referred to as direct lending. Deals that involve a small group of lenders can also be considered direct lending. These direct lending loans are usually on the more senior level of the capital structure, while other private credit strategies might invest in more junior parts of the capital structure. (Cai and Haque 2024)

Other private debt strategies include distressed debt, special situations, structured debt, mezzanine debt and asset based lending (or specialty finance). In distressed debt and special situations, investors target companies undergoing financial difficulties such as bankruptcy proceedings with the aim of gaining control and increasing value through various strategies including restructuring. These debt investments can be made across different levels of the capital structure. Structured debt is typically used by companies with highly specific financing needs and can also mitigate the risk of the underlying asset for the borrower through securitization. Mezzanine debt offers higher yields through fixed interest payments and equity linked instruments such as warrants. In the capital structure, mezzanine debt ranks between senior debt and equity. Asset based lending strategies use a borrower's assets or cash flows generated by those assets as collateral. (CAIS 2025)

Because there is not a liquid secondary market for many private credit instruments, lenders typically hold loans until maturity or a refinancing event. As a result, these loans might include features not found in other credit instruments, such as equity components, prepayment penalties, or a role in oversight or management of the company. (Cai and Haque 2024)

Block, Jang, Kaplan and Schulze (2024) surveyed 872 private credit funds in the fall of 2021 and found that the most common investors in these funds are insurance companies, pension funds, and family offices in Europe, whereas in the United States the third largest investor group was high net worth individuals.

Institutional investors utilise private credit primarily for portfolio diversification, given its low correlation with public markets and relatively high returns. Over the past decade, direct lending in particular has generated higher returns than comparable asset classes. This outperformance reflects borrowers' willingness to pay a premium for the speed, certainty of execution, and customised financing solutions that private lenders provide. Private credit funds have also attracted borrowers with already high leverage who are unable to secure favourable terms from more heavily regulated banks. (Cai and Haque 2024)

2.4.3 Real Estate

Real estate is a broad term encompassing any type of property. It includes all aspects of real estate investment and ownership, ranging from residential housing to commercial and industrial properties. The three main categories of real estate are residential real estate, which refers to buildings or structures along with surrounding land primarily designed for people to live in, commercial real estate, which refers to properties used for business or income-generating purposes such as offices and retail spaces, and industrial real estate, which refers to facilities such as factories, warehouses, and logistics centers. While national real estate markets are generally domestically focused, commercial and industrial segments often have significant levels of international ownership.

Investment in real estate can be made through both listed and unlisted instruments. Listed instruments include real estate companies whose shares trade on public exchanges, such as real estate investment trusts (REITs) or traditional listed companies. REITs are legally required to distribute a large proportion of rental income as dividends in exchange for certain tax advantages, and typically hold diversified portfolios of assets.

Unlisted, or private, real estate refers to property acquisitions outside public markets, undertaken by individuals, private companies, or real estate funds. These transactions are typically financed through a combination of direct equity investment and debt, which, at the institutional level, is often non-recourse. A subcategory within private real estate is private equity real estate (PERE), where investments are made through private equity fund structures. PERE strategies may employ higher leverage depending on the type of asset acquired and the investment approach. (Preqin 2025b)

According to Ghent, Torous and Valkanov (2019) commercial real estate is an important part of asset allocation in the portfolios of institutional investors. The share of commercial real estate in US owned by non-financial corporations has trended slightly down since 1925 but it still stands at 64% in 2015. This decrease has been mostly due the increased share of financial corporations and particularly REITs.

Corporations and institutional investors are not the only participants in the real estate investment market. A US national survey conducted in 2012 estimated that one in eight American adults owned real estate as an investment. Furthermore, home mortgage data from 2010 suggests that approximately 10% of mortgages were used to purchase investment properties. These investments have generally been profitable: between 1999 and 2015, real estate investors as a group outperformed broad real estate indices, which include all property transactions meanign a lot of private individuals purhcasing their homes.

Evidence also indicates that private real estate investors earn higher returns than regular homebuyers, likely because their purchasing decisions are driven by investment potential rather than the property's amenities. This distinction is further supported by the finding that investors generate lower returns on their own homes compared to their investment properties. Several factors appear to contribute to these superior returns. For example, if the property is located within the same three-digit ZIP code area as the investor's residence, annual returns are on average about 2% higher. This may reflect the advantage of local knowledge, which allows investors to identify opportunities more quickly. Another factor is the acquisition of foreclosed properties. Lenders that acquire properties through foreclosure typically have no interest in holding them and are motivated to sell to legitimate buyers, creating opportunities for investors to negotiate favorable terms. (D'Lima and Schultz 2021)

2.4.4 Infrastructure

The role of infrastructure as a foundation and driver of economic development is well documented (Aschauer 1989; Hashimzade and Myles 2010; Yeaple and Golub 2007). According to the OECD's Infrastructure to 2030 project, global demand for infrastructure investment is projected to reach approximately 3.5% of global GDP. Historically, governments have been the primary investors in infrastructure. However, in recent years, private investment has grown substantially. This trend has increased the attractiveness of infrastructure as an asset class, particularly due to its potential to enhance portfolio efficiency (Umar, Zaremba, Gull and Sokolova 2024; Stevens, SCHIEB, Andrieu, Bohlin, Forge, Blackman, Morgan, Stambrook, Ashley and Cashman 2006).

Infrastructure investments have existed for over a century, with wealthy individuals first funding new projects during the Industrial Revolution. As a distinct asset class, infrastructure began to emerge in the 1990s. It encompasses investments in the facilities, services, and installations essential to a functioning society. The industries within this asset class are typically divided into two categories: economic infrastructure and social infrastructure. Economic infrastructure refers to the physical systems and facilities that enable economic activity, such as energy, transport, and utility networks. These assets are generally capital-intensive, long-lived, and essential for supporting productivity and growth. Social infrastructure includes facilities and services that deliver public and social services, such as education, healthcare, and public administration. Its primary purpose is to meet societal needs and support the functioning of communities (Preqin 2025a) (see Table 4 for a full list of industries).

Table 4: Infrastructure Sectors

Table visualises the different industries in infrastructure sectors as presented in Preqin (2025a).

Economic Infrastructure		Social Infrastructure
Energy	Telecommunication	Defense
Natural resources	Transportation	Education
Renewable energy	Power utilities	Government
Cleantech	Water utilities	Judicial
Logistics	Waste management	Healthcare

Inderst (2010) notes that there are certain grey areas in defining what qualifies as infrastructure investment. For example, it is debatable whether utility companies should be classified as infrastructure, given that they typically combine production, distribution, and network assets. Another ambiguity concerns the boundary between "public" and "private" infrastructure.

Infrastructure project development can be divided into three stages: greenfield, brownfield, and secondary. In the greenfield stage, the asset or structure does not yet exist and must be designed and constructed. Investors provide capital for both the construction phase and subsequent maintenance once the project becomes operational. These projects typically carry higher risk but also offer higher expected returns. The elevated risk stems from uncertain demand, usage, and pricing, as well as the absence of revenue generation in the early stages. Brownfield projects involve existing assets or structures that require repairs or improvements. They are often partially operational and generating some revenue, which reduces risk compared to greenfield projects. Assets in the secondary stage are fully operational and require no significant investment or development, thereby lowering risk relative to the previous stages. In some cases, however, a mature asset may require additional capital and development, creating a recurring cycle between greenfield and brownfield stages (Preqin 2025a; Inderst 2010).

Investors today have an increasing variety of vehicles through which to gain exposure to infrastructure assets. Most of these are structured as funds: private equity–style investments are typically closed-end and unlisted, while listed infrastructure funds can be either open- or closed-end. Investors may also invest directly in listed or unlisted infrastructure companies. However, it is often overlooked that investors have long held stakes in publicly traded utility, transport, and energy companies, although these have traditionally been classified as part of the equity market rather than as infrastructure investments (Inderst

2010).

2.4.5 Commodities

Lazard Asset Management (2024) stated that as of January 2024 the global allocation to commodities stood at 1.7%. This is below the 4%–9% allocation range suggested by Bloomberg's analysis based on Sharpe ratios, risk profiles, and historical returns. Commodities have historically generated positive returns during periods of high inflation, with return drivers distinct from equities and fixed income, thereby enhancing portfolio diversification (Schroders 2025).

Commodities are raw materials or basic agricultural staples used in the production of consumer goods. In commerce, commodities are interchangeable with other goods of the same type, although quality may vary. When traded on an exchange, they must meet minimum standards, commonly referred to as basis grade. Traditionally, commodities have included items such as grains, gold, beef, oil, and natural gas, though the range of traded commodities has expanded over time. Commodities are traded on specialized exchanges, and transactions are typically conducted through futures contracts. As a result, a well-developed derivatives market has emerged around commodities. (Fernando 2024)

There are three main ways to invest in commodities: (1) purchasing physical commodities, (2) trading commodity futures, and (3) investing in commodity-related stocks. The most direct exposure is achieved through the purchase of physical assets; however, this entails additional costs related to storage, insurance, and transportation. Consequently, futures contracts represent the simplest way to obtain exposure to the commodities market, as they do not involve actual possession of the underlying asset. Nevertheless, futures can be complex, potentially deterring some investors, and they expose investors to risks from market conditions and the need to roll over positions at maturity to avoid physical delivery. The third, and arguably the most accessible, option is through commodity-related equities, which not only provide exposure to commodity markets but also the potential for dividends and capital gains. (Thomas and Kumar 2023)

According to Daskalaki, Skiadopoulos and Topaloglou (2017), commodities appear to offer attractive risk-adjusted returns due to their limited dependence on the same macroeconomic factors that drive equities and fixed income, resulting in low correlation with traditional asset classes. Abid, Dhaoui, Goutte and Guesmi (2020) further examine the effect of commodities on stock markets. Changes in commodity prices may trigger reactions in stock returns. For instance, energy commodities and industrial metals are heavily used in production and therefore exert the strongest impact on equity markets. Gold, on the other hand, is considered a relatively effective hedging instrument, as its price is primarily determined by supply and demand and it is not extensively used in production.

2.4.6 Structured Products

At the end of 2024, European Structured Investment Products Association (2025) reported EUR 465 billion open interest accorss european markets in structured procuts. Structured products have played a significant role in transforming investing by making sophisticated instruments, once reserved for institutions and wealthy investors, accessible to a broader audience. They provide tailored exposure to derivatives and alternative strategies and are typically structured as pre-packaged investments that combine assets linked to interest rates with one or more derivatives. Examples include principal-protected notes that guarantee the initial investment while offering partial equity exposure, yield-enhancement products that provide above-market interest rates with capped returns, buffer notes that protect against initial losses of 10–15% but leave investors exposed beyond that, and auto-callable products that may terminate early and deliver a preset return if the underlying asset reaches a specified price. (Gratton 2025) Structured products are offered across all asset classes, and their returns can be linked to a variety of underlying benchmarks including interest rates, equity markets, foreign exchange, and commodities. Within equities, for example, the benchmark may be a stock market index such as OMX25 or a predefined basket of shares. (Société Générale 2025)

Structured products started to emerge in the early 2000s when interest rates started to trend sharply lower and banks needed to offer their clients better returns. In the early days products were mostly composed of capital protected products. (Société Générale 2025)

Baule and Muenchhalfen (2021) researched which attributes are most important for retail investors when choosing a structured products. They found that the most important factor with 54% relative importance was product costs. Product characteristics were also quite relevant with 35% value. Retail investors gave smaller weighting on risk indicators and issuer with values of 7% and 4%. Study also found that investors prefer products with higher risk-return structure and more equity like nature.

2.4.7 Hedge Funds

The hedge fund industry has experienced rapid growth since the 1990s. In 1990, hedge funds managed approximately US$39 billion in assets, whereas by 2015, the estimated total AUM had increased to US$2.5 trillion.

Hedge funds generally exhibit more complex structures and risk characteristics compared to traditional mutual funds. From an investor's perspective, key considerations include fees, leverage, restrictions on entering and exiting the fund, and the evolving nature of assets under management. Fees for hedge funds typically follow the "2 and 20" model, which includes a 1–2% management fee based on assets under management and a 20% incentive fee on the fund's annual net profits. The net profits subject to the incentive fee are often defined as returns exceeding a specific benchmark, such as LIBOR.

These fees are justified on several grounds. Management fees support the day-to-day operations and ensure the fund remains operational, while the incentive fee aligns the interests of fund managers with those of investors. Furthermore, hedge funds argue that the incentive fee is warranted by the unique investment returns, or alpha, that they generate (Getmansky, Lee and Lo 2015).

Hedge funds have evolved into a dynamic segment of the financial industry, offering investors access to a broad range of investment strategies that often involve more complex risk exposures than traditional investments. They employ diverse approaches, including long/short equity, event-driven, relative value, and global macro strategies, which aim to generate returns with low correlation to traditional asset classes.

Investors are attracted to hedge funds for several reasons. First, hedge funds seek to provide absolute returns, attempting to deliver positive performance regardless of market conditions. Second, they offer diversification benefits through exposure to non-traditional assets and strategies. Third, hedge funds can use leverage and short-selling techniques to enhance returns and manage risk, although these strategies also increase potential downside risk Getmansky et al. (2015).

2.5 Synthesis of theoretical framework

The theoretical framework combined four core domains: family offices, institutional investing, asset allocation, and alternative investments. Together, these elements provide a comprehensive basis for analyzing the investment behavior of Finnish family businesses.

The literature on family offices highlights their role in centralizing wealth management and balancing financial objectives with family-specific considerations such as continuity, governance, and discretion. SFOs in particular exhibit investment patterns that may differ from traditional institutional investors. They combine entrepreneurial flexibility with long-term wealth preservation, which often translates into a preference for illiquid and alternative assets.

Institutional investing offers a benchmark for professionalized portfolio management. Institutional investors usually operate under regulatory frameworks and fiduciary duties that shape asset allocation and risk management practices. While family offices share some characteristics with institutional investors, they remain less constrained by regulation and more influenced by family priorities, which may lead to distinctive allocation strategies. In practice, the largest Finnish family businesses are widely regarded among the major institutional investors in the domestic market. They participate in significant transactions and can be found sponsoring new ventures, including the two SPACs launched in Finland, where large family businesses acted as principal sponsors. This illustrates the convergence between family-controlled capital and institutional investment behavior in the Finnish context.

Asset allocation forms the cornerstone of portfolio construction. Modern portfolio theory emphasizes diversification and risk-return optimization, while behavioral finance introduces factors such as home bias and loss aversion. These principles are essential for understanding how Finnish family businesses distribute capital across asset classes and whether their allocation patterns align with theoretical models or reflect behavioral and contextual factors.

The growing relevance of alternative investments adds complexity to the allocation process. Private equity, real estate, and private credit offer diversification benefits and potential for enhanced returns but entail illiquidity and higher risk. Prior research suggests that family offices often favor these assets to achieve long-term value creation and maintain control, indicating that portfolio size and governance maturity may influence the extent of alternative exposure.

Synthesizing these domains, the framework and practice suggest that Finnish family businesses operate at the intersection of entrepreneurial heritage and institutionalization. Because the Finnish economy is relatively capital poor, these businesses often play an active role in providing long-term capital and supporting domestic entrepreneurship and other corporations. This synthesis provides the foundation for the hypotheses tested in the empirical section, linking governance structures, portfolio size, and strategic orientation to observed allocation patterns.

3 Hypotheses

Family businesses often exhibit distinctive investment behavior compared to non-family firms, driven by their long-term orientation, desire to preserve wealth across generations, and risk management considerations. As reported by Block et al. (2019), SFOs apply slightly different criteria for private equity investments compared to other investor groups, prioritizing profitability over growth. This reflects their objective of preserving family wealth over the long term, making them relatively risk-averse. SFOs frequently invest in companies at the growth stage and often prefer syndications, or co-investments with other investors, to diversify risk. Therefore, hypothesis one is formulated as follows:

Hypothesis 1 *Finnish family businesses allocate a larger share of their portfolios to alternative assets, and particularly to private equity.*

Moreover, Duval and Carlson (2025) highlights that SFOs are increasingly sophisticated investors, managing diversified portfolios that span public and private equities, funds, real estate, and alternative assets. Their approach, often described as "patient capital," enables them to take a long-term view and negotiate favorable deal terms. While participating in co-investments and club deals, they carefully manage regulatory constraints and confidentiality requirements to preserve the family's control and privacy.

Taken together, these characteristics reported from abroad suggest that family businesses may allocate a larger share of their portfolios to alternative assets, including private equity, and are likely to continue expanding their investments in these areas in the future. It is expected to be similar situation in Finland and therefore based on these considerations, the following hypotheses are proposed as second and third:

Hypothesis 2 *Finnish family businesses are expected to increase their allocation to alternative assets and private equity in the future.*

Hypothesis 3 *Larger portfolios allocate a greater proportion of their capital to alternative assets.*

These hypotheses provide a foundation for the empirical analysis that follows. By examining the current allocation patterns and future intentions of Finnish family businesses, the study aims to assess whether their long-term orientation and investment behavior influence the allocation to alternative assets and private equity. Testing these hypotheses will contribute to a deeper understanding of how family-controlled firms in Finland strategically allocate capital.

4 Data and Methods

4.1 Research methodology

This empirical research aims to identify the key characteristics of the investing activities of Finnish family businesses and to explore how these firms approach portfolio allocation. In particular, the study focuses on the extent to which family businesses allocate capital to alternative investments, such as private equity, hedge funds, real estate, and other non-traditional asset classes, which have become increasingly relevant in contemporary portfolio management.

The central hypothesis of this study is that Finnish family businesses allocate a larger share of their investment portfolios to alternative assets than would be expected under traditional portfolio allocations, reflecting their unique long-term orientation and strategic considerations in wealth management. By investigating this hypothesis, the research seeks to provide insights into the decision-making processes, preferences, and priorities that distinguish family-controlled firms from non-family businesses in Finland.

To examine these questions, the primary research method employed is a structured survey targeting key decision-makers within Finnish family businesses. The survey is designed to capture detailed information on asset allocation patterns, investment objectives, attitudes towards risk, and future investment intentions. This approach allows for both a quantitative assessment of portfolio composition and a qualitative understanding of the factors driving investment decisions in family-controlled firms.

4.1.1 Surveys

To examine the investment practices of Finnish family businesses, PL (Perheyritysten Liitto, Finnish Family Business Association) conducted a survey on the state of their investment activities in August 2024. PL provided access to both the survey data and the corresponding questionnaire. In addition to this material, I developed a complementary survey (see Appendix I) to explore the relatively underresearched topic of asset allocation in greater depth. Henceforth, the study conducted by the PL shall be referenced as ”PL survey” and my complementary survey as ”Thesis survey”.

The questions in the PL survey were predominantly structured in a way that allowed respondents to indicate whether specific topics were relevant to their company. The survey covered areas such as the types of assets held, the contents of the investment policy, key considerations in investment decision-making, and future plans and challenges related to investment activities. Thesis survey uses asset classes in Table 5 while PL survey had just Equities, Fixed Income and Alternatives.

The primary objective of the thesis survey is to examine the asset allocation practices of Finnish family businesses. The survey begins by collecting basic information about the company, the size of its investment portfolio, and its general investment activities. Respondents are then asked to identify the asset classes included in their portfolio and to estimate the relative weight of each asset class as a percentage of the total portfolio. The classification of asset classes follows the categorization presented by Fraser-Sampson (2010), which includes Listed Equities, Fixed Income, Alternative Investments, and Cash. In addition, an “Other” category was provided to capture assets that do not fall within the predefined classes. Table 5 presents what is included in the asset classes.

Table 5: Asset class split in the Thesis survey

Table visualizes which assets are in which asset classes in the thesis survey.

Asset class	Types of assets
Listed Equities	Shares, Equity Funds and ETF and Index funds
Fixed Income	Government Bonds, Corporate Bonds and Certified Deposits
Alternative Investments	Private Equity, Private Credit, Real Estate, Infrastructure, Commodities, Structured Products, Hedge Funds, Unlisted Shares
Cash	Cash and other Cash-like investments
Other	

After selecting the asset classes included in their portfolio, respondents are presented with a set of questions related specifically to those chosen asset classes. First, they are asked to indicate how the investment activities are managed: independently, through an external advisor such as a wealth manager, or through a combination of both. For each selected asset class, respondents specify which specific assets they hold and how the asset class is distributed between them. Additionally, the geographical allocation of the equity portfolio is examined by asking respondents to detail its regional distribution for each asset (Shares, Equity Funds and ETF and Index funds). The final question in the survey is an open-ended question designed to identify the anticipated future areas of emphasis in the respondents’ investment activities.

4.2 Data and Descriptive statistics

4.2.1 Surveys

A total of 115 companies responded to the PL survey, of which 92 reported having some form of investing activities. Among these, 72 companies invest alongside their operational business, while 20 are purely investment firms. Table 6 presents descriptive statistics on the companies that responded to the survey. The majority of respondents operate in the manufacturing industry (38 out of 115). Companies in the financial and insurance sector reported the highest mean revenue, amounting to 182.9M€. This sector also included the largest number of pure investment firms, with 11 out of 15 falling into this category. Out of the 92 companies that reported some form of investing activities, 90 respondents provided data on the size of their investment portfolios, which forms the basis for categorizing answers.

Table 6: Descriptive Statistics for PL survey companies

Table visualizes the general information suchs as industry, mean revenue and operational status on the respondents in the PL survey.

Industry	N	Mean Revenue (M€)	No investing	Investing along operational business	Just investing
Manufacturing	38	100.6	10	27	1
Wholesale and retail	24	57.1	7	17	0
Transportation and storage	1	48.0	1	0	0
Water and waste management	1	7.2	1	0	0
Real estate	5	5.3	1	4	0
Other services	7	2.5	0	4	3
Agriculture, forestry and fishing	2	12.1	0	2	0
Financial and insurances	15	182.9	0	4	11
Administrative and support services	5	12.1	0	2	3
Construction	3	28.5	1	2	0
Professional, scientific and technical activities	8	38.6	2	6	0
Accommodation and food services	3	41.7	0	3	0
Only investment activities	2	n.a.	0	0	2
Information and communication	1	101.4	0	1	0
Total:	115	77.3	23	72	20

The thesis survey was distributed to the 92 companies that reported having investing activities in the PL survey. A total of 20 responses were received, resulting in a response rate of 21.7%. The target was to collect 30 responses, but as Anseel et al. (2010) note in their meta-analysis of surveys, response rates among top management are typically lower than median of 41%. While a standalone dataset of 20 responses would be limited in scope, the combined use of the thesis and PL survey data should offer a reasonably comprehensive view of the investing activities of Finnish family businesses.

Portfolio size is used as the categorizing factor, as it is straightforward to calculate and unambiguous. Table 7 illustrates how portfolio sizes are distributed across the two datasets. While both datasets apply similar categorizations, there is a slight variation in the portfolio size brackets: the Thesis survey uses intervals of 1–10M€ and 10–50M€, whereas the PL survey uses 1–5M€ and 5–50M€. If these are interpreted collectively as one category spanning 1–50M€, this segment accounts for 65% of responses in the Thesis survey and 71% in the PL survey. Otherwise, the datasets are distributed relatively similarly, with differences in categories ranging from 1 to 3 percentage points. **More text here**

The main research question of this thesis is: 'How family firms allocate their portfo-

Table 7: Portfolio size distributions in datasets

Panel A illustrates the distribution of portfolio sizes reported in the survey conducted as part of this thesis. Panel B presents analogous data from the survey administered by the Finnish Family Business Association, thereby enabling a comparative analysis of portfolio size composition across the two datasets.

Panel A: Thesis survey

	< 1M€	1 - 10M€	10 - 50M€	50 - 200M€	200M€ <	Total
N	3	10	3	2	2	20
%	*15*	*50*	*15*	*10*	*10*	*100*

Panel B: PL survey

	< 1M€	1 - 5M€	5 - 50M€	50 - 200M€	200M€ <	Total
N	12	25	39	8	6	90
%	*13*	*28*	*43*	*9*	*7*	*100*

lios?'. Table 8 presents the responses to the thesis survey question on portfolio allocation. Notable variation is observed in the allocation across all asset classes. For Equities and Alternative Investments, the standard deviation exceeds half of the mean allocation. In the case of Fixed Income, the standard deviation is approximately equal to the mean, while for Cash and Other Investments, it is nearly double the mean.

Table 8: Descriptive Statistics for Asset Class Allocations

Table visualizes the descriptive statistics for asset class allocation in the thesis survey.

	Mean	Median	Std. Dev.	Min	Max
Equities	40.6	43.0	27.8	0.0	85.0
Fixed Income	13.5	10.0	13.9	0.0	54.0
Alternative Investments	30.2	30.0	23.2	0.0	70.0
Cash	4.6	0.0	7.9	0.0	25.0
Other Investments	10.3	0.0	25.4	0.0	100.0

5 Results

All results originating from the PL survey are marked with "(PL)", whereas all other results are derived from the Thesis survey.

5.1 Investment policy

Table 9 presents the prevalence and structure of investment policies by portfolio size. Panel A shows the thesis survey, while Panel B displays the PL survey. Both panels indicate that larger portfolios are more likely to have formalized investment policies.

In Panel A, 70% of respondents reported having an investment policy that is monitored regularly, 15% reported a policy that is not continuously monitored, and 15% reported having no policy. All portfolios in the 10–200M€ range reported having a monitored investment policy. Among smaller portfolios, 66.7% of those below 1M€ monitor their policy regularly, and 60% of portfolios in the 1–10M€ range monitor their policy regularly, while 30% in the latter category reported having no policy.

Panel B provides more detail on the components of the investment policies. Smaller portfolios often lack formalized frameworks: 41.7% of portfolios under 1M€ reported having no policy, while 36.0% of portfolios in the 1–5M€ range, 20.5% in the 5–50M€ range, and 12.5% in the 50–200M€ range reported no policy. Conversely, larger portfolios are more likely to include explicit return targets, risk levels, target allocations, investment criteria, and defined authorities. Among portfolios exceeding 200M€, 83.3% have defined target allocations and authorities responsible for investment decisions. This pattern indicates that as portfolio size and complexity increase, governance structures become more formalized, with greater emphasis on both performance objectives and procedural clarity.

5.2 Asset allocation

The first aspect examined in both surveys is the composition of asset classes within portfolios. As shown in Table 10, the overall results across the two surveys are broadly consistent with each other. Only portfolios below 1M€ exhibit discrepancy between the two surveys. This divergence is likely attributable to the limited number of responses in this size category in the thesis survey, which includes only three portfolios under 1M€.

The two most commonly held asset classes are Equities, present in 80.0% of portfolios in the thesis survey (Panel A) and 90.0% in the PL survey (Panel B), and Alternative Investments, included in 85.0% and 85.6% of portfolios, respectively. However, when dis-

Table 9: Investment policy

Panel A illustrates how big proportion of portfolio size bracket has which investment policy in place according to the thesis survey. Panel B visualizes how big proportion of portfolio size bracket has certain aspects in their investment policies according to PL survey.

Panel A: Thesis survey

%	Investment policy monitored regularly	Investment policy not continuously monitored	No policy
< 1M€	66.7	33.3	0.0
1 - 10M€	60.0	10.0	30.0
10 - 50M€	100.0	0.0	0.0
50 - 200M€	100.0	0.0	0.0
200M€ <	50.0	50.0	0.0
Total:	70.0	15.0	15.0

Panel B: PL survey

	We have an investment policy with:					
%	Return target	Risk level	Target allocation	Investment criteria	Authorities	No policy
< 1M€	25.0	25.0	16.7	16.7	0.0	41.7
1 - 5M€	36.0	48.0	24.0	16.0	28.0	36.0
5 - 50M€	59.0	61.5	48.7	23.1	38.5	20.5
50 - 200M€	37.5	75.0	62.5	37.5	62.5	12.5
200M€ <	50.0	50.0	83.3	66.7	83.3	0.0
Total:	45.6	53.3	41.1	24.4	35.6	25.6

aggregated by portfolio size, the thesis survey reveals greater variation in the inclusion of different asset classes. A clear trend emerges: the larger the portfolio, the more consistently it includes all major asset classes. Notably, excluding cash, all portfolios exceeding 50M€ in the thesis survey contain Equities, Fixed Income, and Alternative Investments. In the PL survey, Equities and Alternative Investments are included in 100% of portfolios over 50M€, and in 94.9% of portfolios between 5M€ and 50M€. Compared to the thesis survey, Fixed Income is found in a smaller share of portfolios above 50M€ in the PL survey.

The average portfolio allocations across different portfolio sizes are presented in Table 11, and notable variation can be observed. Portfolios under 1M€ appear more concentrated in Alternative Investments and Other assets. This is largely driven by one of the three portfolios being fully allocated (100%) to Bitcoin, which makes the results for this group less reliable. When compared to the distribution shown in Panel B of Table 10, the allocations to Equities and Fixed Income in this size category are likely understated.

Above the 1M€ threshold, a more consistent trend emerges. Listed Equities account for approximately 45–50% of portfolios across portfolio sizes, before declining to 30% in portfolios exceeding 200M€. In contrast, allocations to Fixed Income and Alternative In-

Table 10: % of portfolios have asset class X

Panel A illustrates how big proportion of portfolio size bracket has asset class X in them according to thesis survey and Panel B according to PL survey.

Panel A: Thesis survey

	< 1M€	1 - 10M€	10 - 50M€	50 - 200M€	200M€ <	Total
Equity	33.3	80.0	100.0	100.0	100.0	80.0
Fixed Income	0.0	70.0	100.0	100.0	100.0	70.0
Alternative Investments	66.7	90.0	66.7	100.0	100.0	85.0
Cash	33.3	30.0	33.3	50.0	100.0	40.0
Other	66.7	20.0	0.0	0.0	0.0	20.0

Panel B: PL survey

	< 1M€	1 - 5M€	5 - 50M€	50 - 200M€	200M€ <	Total
Equity	83.3	80.0	94.9	100.0	100.0	90.0
Fixed Income	33.3	64.0	76.9	62.5	83.3	66.7
Alternative Investments	50.0	72.0	100.0	100.0	100.0	85.6
Other	8.3	8.0	5.1	0.0	33.3	7.8

vestments vary more significantly by portfolio size. Nevertheless, one clear pattern stands out: portfolios over 200M€ allocate around 20 percentage points more to Alternative Investments and approximately 10 percentage points less to Fixed Income than smaller portfolios. The relatively high standard deviations across all major asset classes further underscore the heterogeneity in allocation strategies across different portfolio sizes and companies.

Table 11: Average allocation to Asset Class

Table visualizes the average allocation on different portfolio sizes and for the whole polulation as well as standard deviations on different asset class allocations.

%	< 1M€	1 - 10M€	10 - 50M€	50 - 200M€	200M€ <	Mean	Std. Dev.
Listed Equities	16.67	45.00	50.33	50.00	30.00	40.55	27.07
Fixed Income	0.00	12.50	29.67	17.50	10.00	13.45	13.55
Alternative Investments	36.67	30.20	13.33	31.00	55.00	31.20	23.04
Cash	8.33	3.30	6.67	1.50	5.00	4.55	7.68
Other	38.33	9.00	0.00	0.00	0.00	10.25	24.72

This heterogeneity is also evident in Figure 5, which visualizes all non-zero portfolio allocations by asset class and portfolio size, along with trendlines[2] to illustrate broader patterns. Significant variation is observed in Listed Equities and Alternative Investments, particularly among portfolios in the 1–10M€ range. In Fixed Income, variation is much smaller across all portfolio sizes, indicating more consistent allocation behavior in that asset class.

[2]Trendlines also take into account 0% allocations.

When excluding Cash and Other assets, the trend in Listed Equities becomes especially clear: allocations to Equities decrease as portfolio size increases. Fixed Income allocations show a modest downward trend, while Alternative Investments exhibit a slight increase with portfolio size. If only portfolios above 10M€ were considered, the trendline for Alternative Investments would be considerably steeper, indicating a stronger preference for this asset class among the largest portfolios. The 50–200M€ size bracket, in particular, exhibits the greater variance in allocations, reflecting differences in strategic approaches within this group.

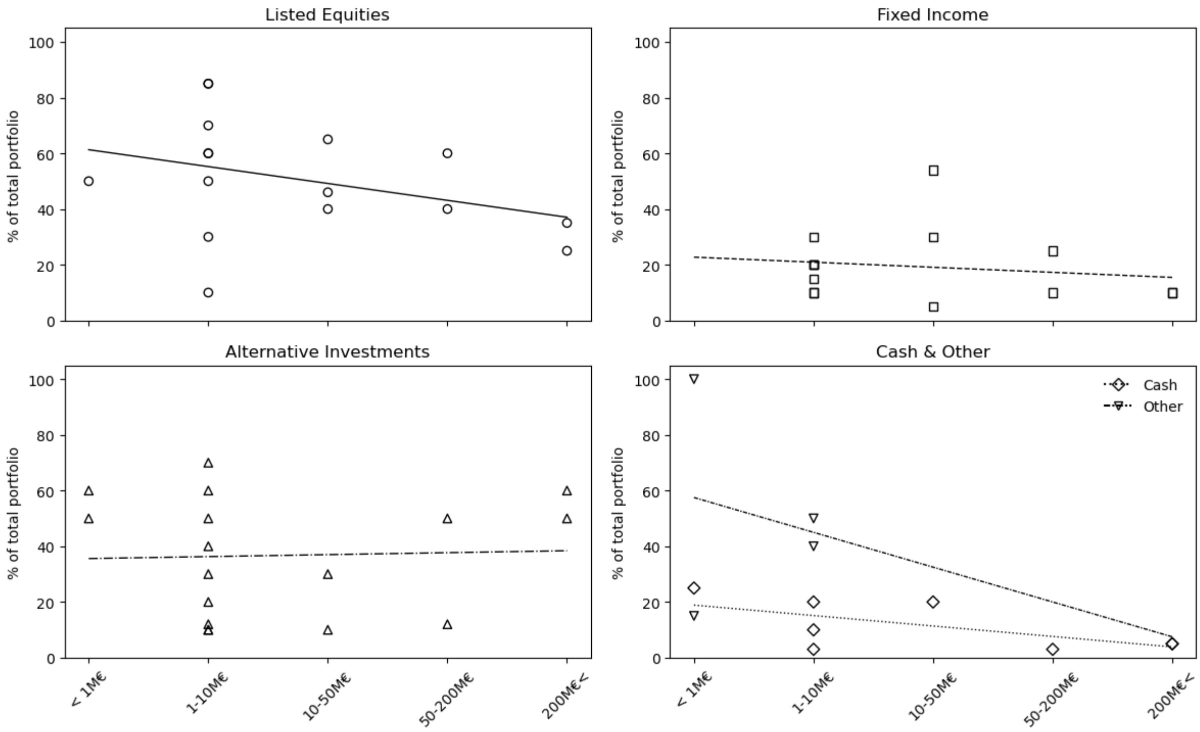

Figure 5: Asset allocation by Portfolio Size
Figure visualises the allocation to asset class over the portfolio sizes and the trend lines.

5.3 Listed Equities

Out of the 20 respondents, 16 companies reported having Listed Equities as part of their portfolio. However, no clear pattern emerges regarding how different portfolio sizes allocate their Listed Equity holdings (see Figure 6). This absence of a systematic allocation approach is further reflected in the relatively high standard deviations[3] across subcategories, indicating substantial variation in allocation strategies.

Among the respondents, five companies reported a full (100%) allocation to a single asset category: three portfolios in the 1–10M€ range, one in the 50–200M€ range, and one above 200M€ are entirely invested in Direct Shares. Additionally, two companies (one in

[3]42.6 for Listed Equities, 36.4 for Equity Funds and 31.7 for ETFs

the 1–10M€ range and one in the 10–50M€ range) are fully allocated to Equity Funds, and one portfolio in the 1–10M€ category is entirely invested in ETFs.

Direct Shares and Equity Funds together account for over 70% of the total Listed Equity allocation across all portfolio size brackets and represent 81.9% in the average portfolio. However, the relative split between these two categories varies significantly by portfolio size. In smaller portfolios (below 10M€), the majority of the allocation between the two is directed toward Direct Shares. In contrast, in the 10–50M€ bracket, Equity Funds dominate with a 75% share, while Direct Shares comprise only 15%. The 50–200M€ bracket is more difficult to interpret due to the limited number of responses. Answers consist of only two portfolios which are both allocated 100% to a single asset category. In portfolios above 200M€, Direct Shares again take the lead with a 60% allocation, followed by ETFs at 30% and Equity Funds at just 10%.

Due to the limited number of responses within each portfolio size category, these results should be interpreted as indicative rather than conclusive at that level. However, when considering all responses collectively, a more reliable picture of Listed Equity allocation strategies among Finnish family businesses begins to emerge.

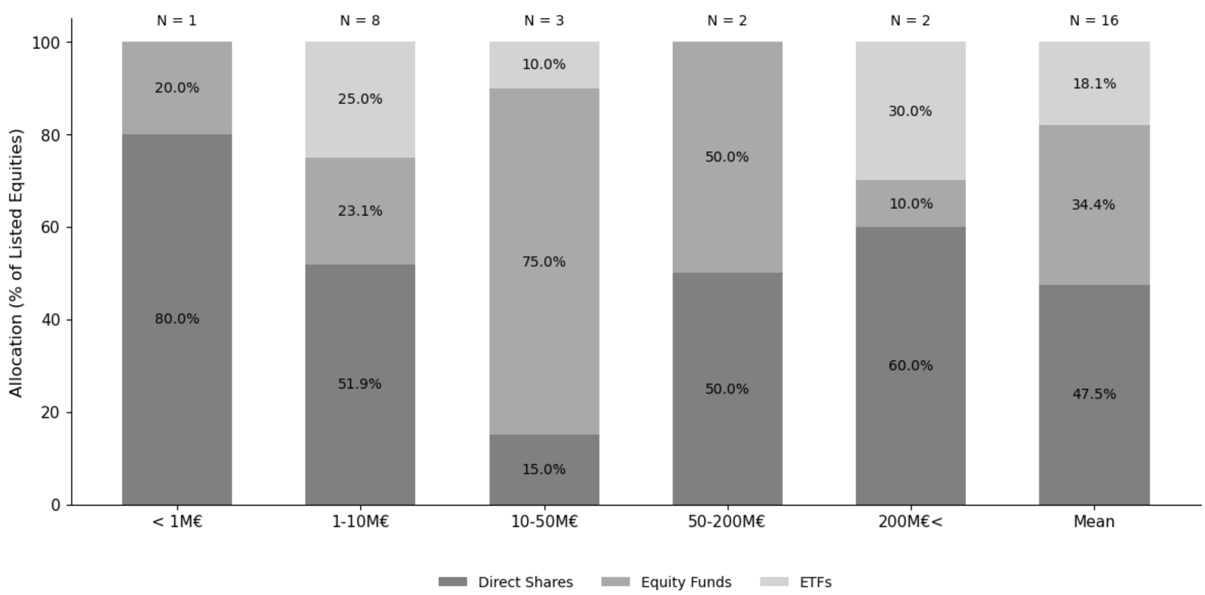

Figure 6: Average Listed Equity portfolio allocation by Portfolio Size

When examining the geographical allocation of portfolios in Table 12, several distinct patterns become evident. Investors predominantly allocate their Direct Shares to domestic markets, reflecting a strong home bias, while utilizing Equity Funds and ETFs to gain exposure to international markets. Domestic markets, Finland and the Nordics together account for approximately 79.1% of the Direct Shares allocation, reinforcing the home bias discussed in Chapter 2.3. Europe and North America each represent about 10% of the Direct Shares allocation.

The allocation within Equity Funds is more evenly distributed. Finland and the Nordics each account for roughly 15%, while Europe and North America each represent approximately 24% of the Equity Fund portfolio. The allocation in ETFs and Index funds is concentrated in North America, comprising 65% of the allocation. This concentration reflects the dominance of the S&P 500-focused ETFs, which constitute the top three ETFs globally (ETF Database).

Allocations categorized under "Other" were not asked to specify by respondents but can be interpreted as investments in global portfolios.

Table 12: Average Geographical Diversification (%)

Table visualizes the geographical diversification of the listed equity portfolio.

	Finland	Nordics	Europe	North America	Emerging Markets	Other
Direct Shares ($N = 11$)	51.8	27.3	10.0	9.5	1.4	0
Equity Funds ($N = 10$)	15.3	16.4	23.2	26.1	3.3	14.4
ETF and Index funds ($N = 5$)	1.0	6.0	19.0	65.0	9.0	18.1

Table 13 presents how Listed Equity investments are executed across different portfolio size brackets. The most common approach is through an external advisor, used by 43.8% of respondents. When including those who reported using both independent management and external advisory, the share rises to 68.8% of the total, indicating that the majority of companies rely on some sort of external expertise.

Using only an external advisor is particularly dominant in the 1–5M€ bracket, where five respondents reported relying exclusively on external advice. Independent execution accounts for 31.2% of responses. It is the sole method used in both the smallest (<1M€) and largest (200M€<) portfolio brackets, while in other brackets its use is more evenly distributed alongside other approaches. The least common method is a combination of independent management and external advisory, though it still represents 25.0% of the total.

Table 13: Listed Equity investments are carried out

Table illustrates how listed equity investing activities are carried out according to the thesis survey.

	< 1M€	1 - 5M€	5 - 50M€	50 - 200M€	200M€ <	% of Total
Independently	1	1	1	0	2	31.2
Through external advisor	0	5	1	1	0	43.8
Both	0	2	1	1	0	25.0

Taken together, these findings highlight the diversity in how Finnish family businesses approach their Listed Equity investments. While clear trends such as home bias in Direct Shares and the use of external advisors are observable, the overall picture is marked by heterogeneity in allocation strategies, execution methods, and geographical focus. This variation likely reflects differences in investor preferences, governance structures, and investment sophistication across firms. Although limited sample sizes within individual portfolio brackets warrant cautious interpretation, the aggregated results offer a view on how the equity part of the portfolio is constructed among Finnish family businesses.

5.4 Fixed Income

Fixed income assets are included in 14 portfolios. As presented in Table 10, all portfolios exceeding 10M€ and 70% of those in the 1–10M€ range contain fixed income investments. In contrast, none of the portfolios below 1M€ include any allocation to fixed income.

Fixed income investments are carried out relatively evenly with listed equity investments, as shown in Table 14. A total of 64.3% of the companies utilize some form of external advisor, either exclusively (42.9%) or in combination with internal investment activities (21.4%). A similar distribution is observed in the 1–5M€ portfolio size bracket, whereas the 5–50M€ and 50–200M€ brackets are more evenly split between the different approaches. Notably, portfolios exceeding 200M€ report not using any external assistance in managing their fixed income investments.

Table 14: Fixed Income investments are carried out

Table illustrates how fixed income investing activities are carried out according to the thesis survey.

	< 1M€	1 - 5M€	5 - 50M€	50 - 200M€	200M€ <	% of Total
Independently	0	2	1	0	2	35.7
Through external advisor	0	4	1	1	0	42.9
Both	0	1	1	1	0	21.4

Corporate bonds are the clear dominant asset class within Fixed income allocations. On average, 81.8% of the Fixed income portfolio is allocated to Corporate bonds, whereas Government bonds account for 5.7% and Certificates of deposit for 12.5%. Portfolios below 200M€ are relatively consistent in their allocation structures. In all size brackets below 200M€, Corporate bonds hold the largest share, ranging from 82.7% (10–50M€) to 96.0% (50–200M€). Certificates of deposit typically represent around 10–15% in portfolios below 50M€, while Government bonds account for the remaining 4% in the 50–200M€ bracket.

In contrast, portfolios exceeding 200M€ show a more balanced distribution: 35.0% in Government bonds, 40.0% in Corporate bonds, and 25.0% in Certificates of deposit. This is explained by two distinct strategies within the responses: one portfolio invests primarily in Government bonds with the remainder in Corporate bonds, while the other allocates its Fixed income holdings evenly between Corporate bonds and Certificates of deposit. However, due to the limited number of responses in this size category, and the differing nature of these two strategies, the results should be interpreted with caution.

It is natural that Government bonds are more prevalent in portfolios exceeding 200M€, as investors of this size typically operate on an institutional level. In the Eurozone, retail investors are generally not permitted to participate directly in government bond auctions, and minimum denominations for such instruments typically range between 1 000€ and 100 000€, depending on the issuing country and bond series. A recent OECD review notes that although retail investor holdings in sovereign debt have increased markedly across the euro area, most countries still do not allow direct retail participation in primary auctions, and participation is mainly facilitated via secondary markets or dedicated retail programmes (Boitreaud, Foxall and Policino 2025).

Considering everything stated Fixed income investments are common in portfolios above 10M€, with Corporate bonds dominating across all size brackets. External advisors are primarily used in smaller portfolios, while larger ones manage investments internally. Portfolios over 200M€ show a more balanced allocation, reflecting institutional investor strategies and the limited access to Government bonds for smaller ("retail") investors.

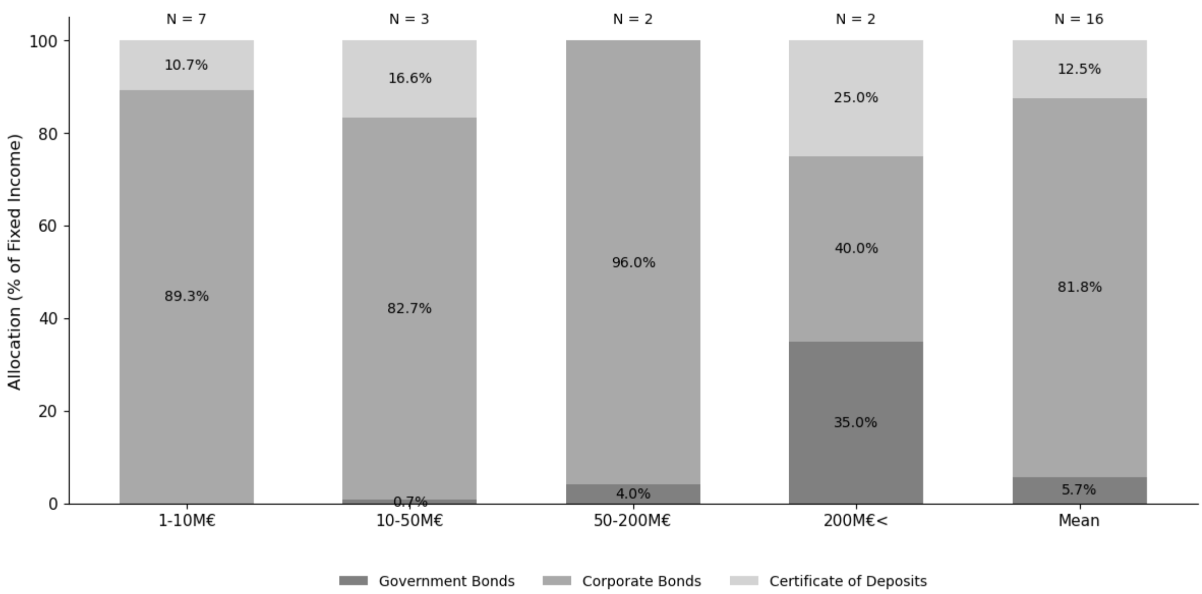

Figure 7: Average Fixed Income portfolio allocation by Portfolio Size

5.5 Alternative Investments

A total of 17 companies reported having Alternative Investments in their portfolios, making it the most commonly held asset class among the respondents in the thesis survey. As shown in Table 15, over half of these companies (52.9%) invest in Alternative Investments independently, while 35.3% rely solely on external advisors, and 11.8% use a combination of both methods. All portfolios under 1M€ and over 200M€ report investing purely independently, whereas portfolios between 1M€ and 200M€ are more evenly distributed across the three approaches.

Table 15: Alternative investments are carried out

Table illustrates how alternative investment investing activities are carried out according to the thesis survey.

	< 1M€	1 - 5M€	5 - 50M€	50 - 200M€	200M€ <	% of Total
Independently	2	3	1	1	2	52.9
Through external advisor	0	4	1	1	0	35.3
Both	0	2	0	0	0	11.8

No clear trend can be seen in Alternative investments portfolio allocation among different portfolio sizes, Table 8. Private Equity ("PE") is clearly the largest asset class in all portfolio sizes, but the allocation differs among portfolio sizes.

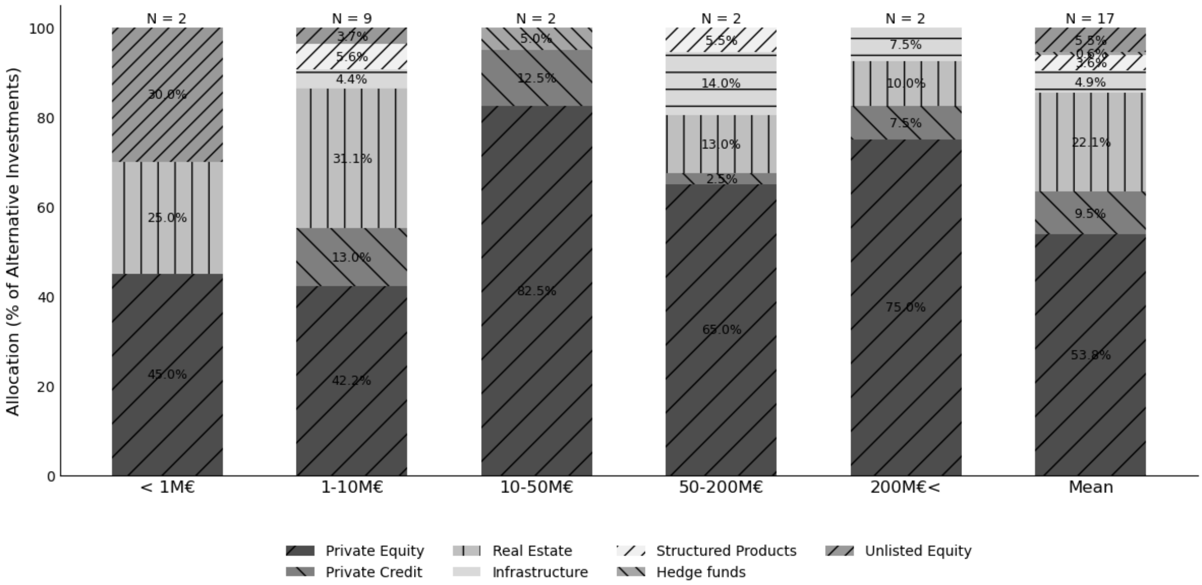

Figure 8: Average Alternative Investments portfolio allocation by Portfolio Size

5.6 Other Investments

In the Thesis survey, four companies reported having some sort of Other investments in their portfolio. Notably, all of the responses were from portfolios below 10M€, with two in the <1M€ bracket and two in the 1–10M€ bracket. The survey did not require respondents to specify the type of Other investments, and only one company provided further detail. This company reported a 100% portfolio allocation to Other investments, specifically to Bitcoin.

In the PL survey similar question was asked and 7 portfolios reported having Other investments.

5.7 Investing in the future

Table 16 presents the distribution of PL survey respondents according to investment horizon. The data indicate notable differences in investment horizons across varying portfolio sizes. For smaller portfolios under EUR1M, respondents are fairly evenly split between medium-term (5–10 years) and long-term (over 10 years) horizons, with 41.7% in each category, and only 16.7% reporting a short-term horizon of less than 5 years.

As portfolio size increases, the share of respondents with longer investment horizons becomes more pronounced. In the EUR50–200M category, 75% of respondents indicate an investment horizon exceeding 10 years, while none report a horizon shorter than 5 years. Similarly, for portfolios larger than EUR200M, long-term horizons are reported by 50% of respondents, and medium-term horizons by the remaining 50%, with no respondents indicating short-term investment plans.

Overall, the data suggests a clear tendency for larger portfolios to be associated with longer investment horizons. Across all portfolio sizes, the majority of respondents indicate medium- to long-term investment horizons, with 50% reporting a 5–10 year horizon and 42.2% reporting a horizon exceeding 10 years. Only a small fraction of respondents (7.8%) adopt a horizon of less than 5 years, highlighting that family businesses generally adopt a medium- to long-term perspective in their investment strategies.

Table 16: Respondent counts by portfolio size and investment horizon (PL)

Table illustrates what is the investment horizon on different portfolio sizes. On the top part is the numbers and bottom part is the percentage of total according to PL survey.

	< 1M€	1 - 5M€	5 - 50M€	50 - 200M€	200M€ <	Total
less than 5 years	2	3	2	0	0	7
5-10 years	5	14	21	2	3	45
over 10 years	5	8	16	6	3	38
%						
less than 5 years	*16.7*	*12.0*	*5.1*	*0.0*	*0.0*	*7.8*
5-10 years	*41.7*	*56.0*	*53.8*	*25.0*	*50.0*	*50.0*
over 10 years	*41.7*	*32.0*	*41.0*	*75.0*	*50.0*	*42.2*

Table 17 presents PL survey respondents' expectations regarding changes in asset allocation and perceived challenges for the future. Panel A focuses on estimated changes in investment allocations across various asset classes, while Panel B reports the anticipated difficulties in managing portfolios going forward.

In Panel A, the results indicate that family businesses of different portfolio sizes generally plan to increase their allocations to alternative assets, particularly private equity and unlisted equities. For smaller portfolios under EUR1M, the majority of respondents anticipate increases in listed equities (37.5%), private equity (16.7%), and unlisted equities (14.3%). As portfolio size grows, the expected allocation shifts become more pronounced. For example, respondents with portfolios above EUR200M indicate a strong intention to increase allocations to private equity (40.0%) and unlisted equities (50.0%). Notably, however, the allocation to startups shows a different pattern: 40% of respondents with the largest portfolios report plans to decrease their exposure, suggesting that investment in early-stage ventures may be perceived as riskier or less attractive relative to more established alternatives. Changes in traditional assets such as listed equities and fixed income funds are generally more moderate. Overall, the total sample shows a clear trend of increasing allocation toward alternative assets, with the exception of startups, which exhibit some reduction among the largest portfolios.

Panel B reports perceived difficulties in the future, broken down by portfolio size. Respondents identify finding interesting investments (FII) and meeting return requirements (MRR) as the most significant challenges, particularly for larger portfolios, with 83.3% of respondents above EUR200M citing FII and 66.7% citing MRR. Other common challenges include ensuring sufficient expertise among owners (SEAO), managing skilled personnel (SP), and adapting to changes in the operating environment (COE). Smaller portfolios tend to report fewer difficulties, though areas such as finding investments and ensuring owner expertise still represent notable concerns.

Some respondents elaborated on future challenges in the open-ended section. The lack of time and resources, as well as concerns about the quality of Finnish asset managers, were mentioned repeatedly. Several respondents also noted that while the investment portfolio is sometimes used as a reserve fund for the business, liquidity may be required to support the company's operations even when the investment horizon is intended to be long term. In addition, generational transitions and the associated tax implications were identified as challenges that will increase the need for liquidity in the future.

Table 17: Changes in the future

Panel A: Estimated changes in asset allocation (PL)

↓= decrease in allocation, — = no change in allocation and ↑= increase in allocation

	Listed Equities			Equity Funds			Fixed Income Funds			Real Estate			Private Equity			Unlisted Equities			Startups		
%	↓	—	↑	↓	—	↑	↓	—	↑	↓	—	↑	↓	—	↑	↓	—	↑	↓	—	↑
< 1M€	0.0	62.5	37.5	0.0	66.7	33.3	0.0	50.0	50.0	14.3	85.7	0.0	16.7	66.7	16.7	14.3	85.7	0.0	14.3	85.7	0.0
1 - 5M€	20.0	40.0	40.0	5.9	47.1	47.1	23.8	57.1	19.0	22.2	50.0	27.8	7.1	71.4	21.4	10.5	52.6	36.8	29.4	58.8	11.8
5 - 50M€	16.7	52.8	30.6	2.8	52.8	44.4	29.7	54.1	16.2	28.6	51.4	20.0	18.8	50.0	31.3	15.2	54.5	30.3	32.3	54.8	12.9
50 - 200M€	25.0	37.5	37.5	0.0	42.9	57.1	25.0	75.0	0.0	62.5	25.0	12.5	12.5	25.0	62.5	25.0	50.0	25.0	50.0	37.5	12.5
200M€ <	16.7	16.7	66.7	60.0	0.0	40.0	40.0	40.0	20.0	60.0	20.0	20.0	0.0	60.0	40.0	16.7	33.3	50.0	40.0	40.0	20.0
Total:	16.7	46.2	37.2	6.8	48.6	44.6	25.3	55.7	19.0	31.5	49.3	19.2	13.8	53.8	32.3	15.1	54.8	30.1	32.4	55.9	11.8

Panel B: Estimated difficulties in the future (PL)

FII = Finding interesting investments, **MRR** = Meeting return requirements, **EMS** = Effective management structure, **SP** = Skilled personnel, **SPT** = Social pressure for transparency, **LR** = Legal requirements, **UT** = Utilization of technology, **SEAO** = Sufficient expertise among owners, **DTAO** = Different targets among owners and **COE** = Changes in operating enviroment

%	FII	MRR	EMS	SP	SPT	LR	UT	SEAO	DTAO	COE	Other
< 1M€	25.0	41.7	0.0	16.7	0.0	0.0	0.0	33.3	33.3	33.3	0.0
1 - 5M€	48.0	48.0	12.0	16.0	4.0	20.0	16.0	64.0	40.0	40.0	16.0
5 - 50M€	56.4	46.2	17.9	23.1	7.7	10.3	7.7	51.3	17.9	41.0	5.1
50 - 200M€	62.5	25.0	25.0	37.5	25.0	25.0	37.5	37.5	37.5	50.0	0.0
200M€ <	83.3	66.7	33.3	66.7	33.3	33.3	0.0	66.7	16.7	16.7	16.7
Total:	53.3	46.7	15.6	24.4	8.9	14.4	11.1	52.5	27.8	40.0	7.8

6 Discussion of results

The results of this study largely align with patterns identified in prior international research on family offices and family business investing while also revealing distinctive features of the Finnish context.

First, the strong allocation to alternative assets observed in Finnish family businesses is consistent with findings by Schickinger et al. (2023), who report that family offices in German-speaking countries combine private equity and other alternatives with traditional financial instruments to balance family objectives and financial returns. Similarly, Block et al. (2019) note that family offices prioritize profitability and stability in private equity investments, reflecting a long-term wealth preservation strategy. The Finnish data confirm these tendencies, as respondents allocate substantial shares of their portfolios to private equity and real estate and express intentions to increase these allocations in the future.

Second, the relationship between portfolio size and governance professionalization mirrors patterns documented in previous studies. Schickinger et al. (2023) emphasize that larger family offices adopt more formal governance structures and investment policies, a trend that is evident in the Finnish sample. Portfolios exceeding EUR50 million consistently report structured investment policies and defined decision-making authorities, indicating a move toward institutionalized practices as investment complexity grows.

Third, the pronounced home bias in equity investments contrasts with the international diversification strategies often associated with institutional investors. French and Poterba (1991); Covrig et al. (2006) identify home bias as a persistent phenomenon among both individual and institutional investors, and the Finnish results reinforce this observation. Despite increasing professionalization, Finnish family businesses maintain a strong preference for domestic and Nordic equities, suggesting that cultural familiarity and network advantages continue to influence allocation decisions.

Finally, the dual identity of large Finnish family businesses as both family-controlled entities and significant institutional investors reflects global trends highlighted by Duval and Carlson (2025). These authors describe how SFOs increasingly resemble institutional investors in terms of sophistication and deal participation.

Taken together, the findings confirm that Finnish family businesses share many characteristics with their international counterparts, particularly in their preference for alternative assets and their gradual institutionalization.

7 Summary and Conclusion

This thesis examined the investment behavior, portfolio structures, and governance practices of Finnish family businesses and family offices. The study combined two datasets: an independently conducted thesis survey and data from the Finnish Family Business Association's 2024 survey. Together, these datasets provided a comprehensive view of how Finnish family businesses allocate their portfolios, manage investment activities, and plan for the future.

The theoretical framework explored how family offices and family businesses differ from institutional investors in their objectives, governance, and investment approach. While institutional investors operate under strict regulatory frameworks and fiduciary responsibilities, family businesses emphasize long-term wealth preservation, continuity, and flexibility. These characteristics influence their asset allocation decisions, investment horizons, and tolerance for illiquidity.

The empirical analysis tested three hypotheses related to the investment behavior of Finnish family businesses. The first hypothesis (H1) stated that Finnish family businesses allocate a larger share of their portfolios to alternative assets, and especially to private equity, compared to traditional portfolio allocations. The results support this hypothesis. Both datasets indicate that family businesses have notable allocations to alternative investments, with the share of alternatives increasing along with portfolio size. Larger portfolios reported particularly high exposure to private equity, real estate, and unlisted equities. This pattern reflects both a higher capacity to manage illiquid assets and a preference for long-term value creation through direct ownership.

The second hypothesis (H2) proposed that family businesses expect to increase their allocations to alternative assets, and particularly to private equity, in the future. This hypothesis is also supported by the results. Respondents in both surveys expressed intentions to further expand their exposure to alternatives, while allocations to listed equities and fixed income were expected to remain stable or decrease slightly. Private equity and unlisted equities were the asset classes most frequently identified for future growth, suggesting that Finnish family businesses increasingly view these investments as core components of their long-term strategies.

The third hypothesis (H3) stated that larger portfolios allocate a greater proportion of their capital to alternative assets. The empirical results strongly support this hypothesis. The relationship between portfolio size and the share of alternative investments is consistent across all portfolio categories. Larger portfolios tend to be more diversified and include a higher share of private equity, real estate, and other alternatives. Smaller portfolios, in contrast, rely more heavily on listed equities and funds. This finding indicates that as portfolio size grows, the ability and willingness to take on illiquidity and complexity also increase.

The results also reveal that investment governance becomes more structured as portfolios expand. Larger portfolios are significantly more likely to have a formal investment policy that defines return targets, risk levels, target allocations, and decision-making authorities. Smaller portfolios often operate without a formal policy or monitor it less systematically. This trend reflects a process of professionalization, where growing investment volumes lead to the adoption of clearer governance frameworks and more institutional management practices.

The findings also show that equity investments are strongly concentrated in Finland and other Nordic countries, particularly when considering direct shareholdings. This indicates a pronounced home bias in equity portfolios, as investors tend to favor markets that are geographically and culturally familiar. The concentration of direct investments in domestic and nearby markets may be explained by better access to information, established business networks, and a perceived lower level of risk.

Respondents also identified several future challenges. Many noted limited time and resources as key constraints in managing investments effectively. Some expressed concerns about the availability and quality of Finnish asset managers, while others emphasized the need to maintain liquidity for business operations or generational transitions. Taxes and the transfer of ownership between generations were also highlighted as issues that will require liquidity planning.

Overall, the findings demonstrate that Finnish family businesses exhibit investment behavior that combines entrepreneurial flexibility with increasingly institutional features. Larger portfolios are more diversified, more exposed to alternative assets, and more governed by formalized investment policies. The results suggest that family businesses in Finland are evolving toward more professionalized investment management while maintaining their long-term orientation and control over capital.

This thesis contributes to the limited empirical research on family business investing and asset allocation in Finland by providing unique survey data and comparative insights. The findings enhance understanding of how Finnish family businesses allocate their portfolios, manage governance, and approach long-term investment strategies. However, certain limitations should be acknowledged. The empirical analysis is based on survey data, which relies on self-reported information and may involve subjective interpretations or reporting bias. The sample size was relatively small as a standalone, which limits the generalizability of the findings and reduces the ability to perform extensive statistical testing. To the author's knowledge, there is no similar research available, and the data is not easily accessible since there is no public source to rely on. This makes the collected data, despite its limitations, a valuable source of insight. Furthermore, the limitation is not considered highly significant because the study still provides unique and meaningful observations that contribute to understanding the topic.

Future research could extend these findings by employing larger and more diverse samples, combining quantitative and qualitative methods, and conducting longitudinal analyses to capture changes in investment behavior, generational transitions, and the evolution of family offices as professional investment entities. Additionally, the role of generational dynamics in governance, decision-making, and investment behaviors within family offices, which has emerged in previous research, could be explored further.

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Disclosing the use of AI:

I utilized AI tools, including ChatGPT and Microsoft Copilot, to enhance my language, improve word choice, assist with Python code for data visualization, and support the overall planning and structuring of the thesis. My prompts typically began with sentences such as, “I am writing a master’s thesis in finance; could you help me with the grammar?”

APPENDIX I: Survey

Questions marked with * are optional.

1. Name*
2. Company*
3. Email*
4. Size of the portfolio
   (a) $<$ 499kEUR
   (b) 500 - 999kEUR
   (c) 1 - 10MEUR
   (d) 50 - 200MEUR
   (e) 200 - 500MEUR
   (f) 500MEUR $<$
   (g) I don't want to disclose this
5. Which of the following describes the company's investment activities?
   (a) The company has an investment plan, which is monitored at regular intervals
   (b) The company has an investment plan, but it is not continuously monitored
   (c) The company has no investment plan
6. What types of assets are in the company's portfolio?
   (a) Listed Equities
   (b) Fixed Income
   (c) Alternative Investments

(d) Cash

(e) Other

7. Share of portfolio (%)

(a) Listed Equities

(b) Fixed Income

(c) Alternative Investments

(d) Cash

(e) Other

Listed equities

8. The company carries out investment activities

(a) Independently

(b) Through an external advisor

(c) Both

9. The portfolio of listed equities consists of: (choose all that are included)

(a) Listed shares

(b) Equity funds

(c) ETF and Index funds

10. as % of Listed equities

(a) Listed shares

(b) Equity funds

(c) ETF and Index funds

Following question for every options chosen on question 9)

11. Geographical diversification (%)
    (a) Finland
    (b) Nordics (excl. Finland)
    (c) Europe
    (d) North America
    (e) Emerging markets
    (f) Other

Fixed Income

14. The company carries out investment activities
    (a) Independently
    (b) Through an external advisor
    (c) Both
15. The portfolio of fixed income consists of: (choose all that are included)
    (a) Government bonds
    (b) Corporate bonds
    (c) Certificate of deposits
16. as % of Fixed income
    (a) Government bonds
    (b) Corporate bonds
    (c) Certificate of deposits

Alternative Investments

17. The company carries out investment activities
    (a) Independently
    (b) Through an external advisor
    (c) Both
18. The portfolio of alternative investments consists of: (choose all that are included)
    (a) Private Equity
    (b) Private Credit
    (c) Real Estate
    (d) Infrastructure
    (e) Commodities
    (f) Structured products
    (g) Hedge funds
    (h) Unlisted shares
19. % of Alternative investments
    (a) Private Equity
    (b) Private Credit
    (c) Real Estate
    (d) Infrastructure
    (e) Commodities
    (f) Structured products

(g) Hedge funds

(h) Unlisted shares

Other investments

20. The company carries out investment activities

    (a) Independently

    (b) Through an external advisor

    (c) Both

21. What other investments does the company have?

Other questions

22. What are the investment focus areas for the future?*

APPENDIX II: Data management plan

Table 18: Research data

Type of material	Contains personal data	I produced the material myself	Someone else has produced the material	Other notes
Survey 1: PL survey			X	
Survey 2: Thesis survey	X	X		

Handling of personnal data:

The personal data collected in the study includes names and email addresses, which are used to send the completed work to respondents. Providing personal data was not mandatory.

All responses will be treated confidentially and anonymized to ensure that individual participants cannot be identified. The data will be used solely for the analysis of a Master's thesis conducted at the Department of Accounting and Finance at the University of Turku.

Storage of material during research:

The material is stored in the school's personal account in the cloud service.

Documentation and metadata of the material:

Data consists of numerical answers about portfolio size, asset allocation on different assets as well as open questions about the future.

Material after completion of the study:

I will not store the material after the completion of the study.