MASTER IN BUSINESS ADMINISTRATION (MBA)

Trabajo Fin de Máster

Capstone Project

Family Offices' Investment Strategy in a low-interest rate environment

Author: Tristán Campos Grande

Supervisor: Juan Antonio Gil Serra

Madrid

19th of June 2026

Abstract

This thesis examines the strategic evolution of family offices as they shift from traditional wealth administration into highly professionalized global financial structures. At the heart of this research is a key consulting challenge: the severe disruption of traditional fixed income returns caused by a prolonged low-interest rate environment. This macroeconomic shift forced family offices and wealth advisors to fundamentally rethink decades of established asset allocation models, as conventional strategies for income generation were no longer delivering the yields needed to sustain multi-generational capital.

Through a structured analytical approach that combines a comprehensive industry review, this study explores how wealth preservation is maintained when the risk/return and liquidity profile of a portfolio is fundamentally altered. The research identifies the key drivers and barriers that capital allocators face when moving away from traditional liquid assets toward alternative investment classes, including private equity, real estate, and private debt.

Importantly, this project goes beyond standard institutional investment analysis by addressing the unique dual mandate of the family office: balancing financial performance with emotional and legacy governance. It explores how family values, entrepreneurial spirit, and ESG (Environmental, Social, and Governance) criteria are actively integrated into asset management decisions. It also tackles the challenge of purposeful stewardship by examining how portfolios can be structured to incorporate the perspectives of the next generation and support philanthropic goals without creating internal conflict. Ultimately, this thesis delivers a practical diagnostic framework designed to help wealth owners and advisors select the right investment strategies based on their specific risk profiles and family priorities in today's complex financial landscape.

Table of Contents

Figure Index

Table Index

1. Context & Objectives

The world of private wealth management has gone through a major, structural transformation over the last two decades. Family offices, which historically operated as discreet, locally focused administrative structures, have evolved into highly professionalized financial institutions. Today, they manage an estimated $10 trillion in global wealth and sit at the crossroads of private banking, asset management, corporate governance, and multigenerational philanthropy (Shulman, 2025). Unlike public institutional investors, family offices are not constrained by strict regulatory benchmarks or short-term redemption pressures, which gives them the flexibility and financial firepower to play a significant role in global capital markets.

Despite these structural advantages, the sector reached a turning point. The investment models that reliably protected private wealth for generations have been thrown into question by a prolonged period of low interest rates (known as the Zero Interest-Rate Period, ZIRP). Driven by global central banks following the 2008 Global Financial Crisis and extended through later economic shocks, these loose monetary policies steadily eroded the returns that traditional fixed income instruments could generate.

As a result, the classic 60/40 portfolio (made up of 60% equities and 40% bonds), which had long offered a reliable balance between income and capital protection, began to drag on overall portfolio performance. This pushed family offices toward a critical strategic shift, triggering a broad search for yield that has reshaped capital allocation toward more complex alternative investments, particularly private equity and private credit.

While the pressure from low yields affected family offices everywhere, how each one responded depends heavily on local cultural and regulatory realities. The Iberian market stands out as a particularly distinctive case, where global financial trends collide with a deep preference for physical real estate and direct entrepreneurial investing.

In line with the strategic objectives set, this thesis examines how the prolonged low-interest rate environment acted as a catalyst to permanently reshape family office investment strategies up until today. By identifying the limitations of traditional fixed income assets during that era and analyzing the reallocation of capital into private markets, this research builds a solid understanding of what the modern family office portfolio looks like today.

Ultimately, the goal of this project is to develop a practical diagnostic framework that allows the identification of a suitable asset allocation for family offices. The framework aims to go beyond a purely descriptive analysis of portfolio trends and instead provide a tool capable of supporting strategic allocation choices. It is designed to evaluate the relative attractiveness of different asset classes based on key variables such as expected return, risk, liquidity and inflation among others. By combining these variables in a systematic way, the project seeks to translate a complex investment problem into a practical and comparable allocation model.

2. Literature Review

2.1. The Global Family Office Ecosystem

The world of private wealth management has gone through a major structural transformation over the last two decades. Family offices, which historically operated as discreet, locally focused administrative structures, have evolved into highly professionalized, institutional-grade financial entities. Today, they oversee an estimated $10 trillion in total global wealth (Shulman, 2025). Their assets under management are projected to grow from the current $3,1 trillion and reach $5,4 trillion by 2030 (Romo, 2026). Operating well beyond simple asset management, these entities sit at the intersection of private banking, direct corporate governance, and complex estate structuring. Unlike public institutional investors, family offices are not constrained by strict regulatory benchmarks or short-term pressures, which gives them flexibility, patience, and the financial firepower to play a major role in global capital markets.

To understand how this capital has evolved strategically, it is important to first understand the basic structures through which it is deployed. Private wealth management is not a one-size-fits-all model, as achieving a right structure depends on a combination of factors: the family's total wealth, their desire for privacy, and their ability to absorb the significant operational costs that come with managing wealth on this scale.

At the top of this ecosystem sits the Single-Family Office (SFO). Exclusively dedicated to the financial and personal needs of one family, the SFO typically requires a minimum wealth threshold of $100 million to be financially viable (Masttro, 2026). This structure offers the highest level of privacy and ensures a complete alignment with the family's values and long-term vision, allowing for highly tailored, uninterrupted legacy planning. However, this level of autonomy comes at a cost, as it involves significant fixed operational expenses and presents ongoing challenges in attracting and retaining top

talent away from major investment banks. SFOs also risk becoming isolated from the broader investment community and the insights that come with it.

Despite these challenges, the growth of SFOs has been remarkable. Current estimates put the number of SFOs globally at between 9.000 and 10.000. Geographically, North America leads with around 3.180 entities, followed closely by Europe with 2.630 (Altss, 2025). The wealth concentrated within these structures is substantial: participating families have an average net worth of $2,7 billion, and the offices themselves directly manage an average of $1,1 billion in assets (UBS, 2025).

Figure 1 (FINTRX, 2020) shows the geographic distribution of SFOs across the United States, where a notably higher concentration can be observed in the northeast compared to other regions.

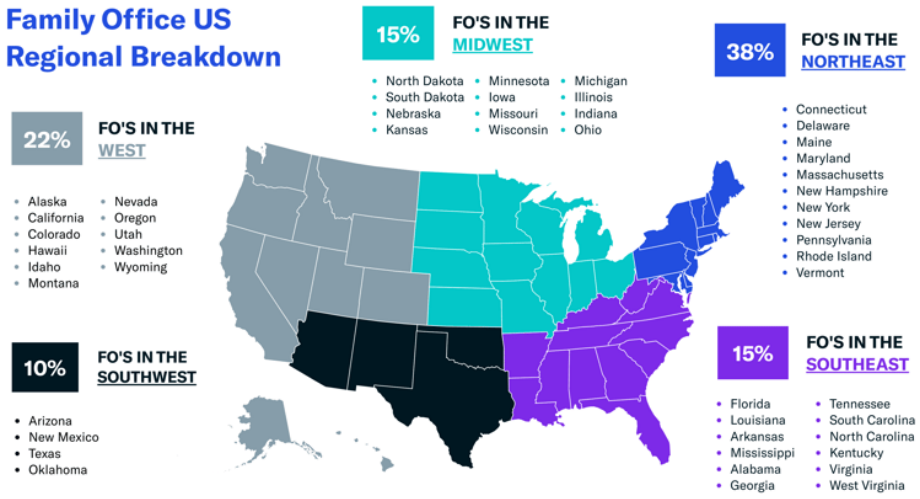

Figure 1: *Family Office US Regional Breakdown (FINTRX, 2020)*

Managing wealth at this scale requires a sophisticated, hybrid operational model that goes well beyond traditional approaches. To balance the need for control with growing external complexity, modern family offices have developed a clear division of responsibilities between in-house and outsourced functions. The data shows that these entities keep their core financial decision-making firmly internal (around 85% handle strategic asset allocation in-house, and 78% retain portfolio risk management internally). At the same time, more specialized functions are increasingly outsourced.

Family offices routinely delegate peripheral tasks such as legal services (67%), cybersecurity infrastructure (57%), and international tax planning (53%). This deliberate split allows them to manage operational risks without pulling focus away from their core mission of wealth preservation (UBS, 2026).

For families whose wealth falls below the threshold needed for an SFO (typically in the $30 million to $100 million range) the Multi-Family Office (MFO) offers a practical and strategic alternative (Masttro, 2026). Operating as a commercial or private entity that serves multiple unrelated families, the MFO effectively opens the door to high quality financial services that would otherwise be out of reach. By pooling resources, participating families can share due diligence costs and access institutional talent and infrastructure that no single family could justify on its own. The tradeoff, however, is a reduction in personalized service. Families must adapt to more standardized reporting and navigate the constant risk of conflicts of interest between the different parties involved.

Finally, the Embedded Family Office represents a unique and structurally complex model. In this setup, wealth management operates directly within the founding family's primary business. While this creates strong operational synergies and eliminates redundant administrative costs, it also introduces significant governance challenges. Mixing personal wealth management with active business risk often blurs the lines of oversight and makes it harder to maintain independent financial decision-making. For multigenerational families in particular, this lack of clear separation demands strong internal controls and a high degree of emotional maturity to prevent business disputes from spilling over into family relationships.

2.2. The Traditional Investment Structure

To properly understand the disruption caused by the prolonged low-interest rate environment, it helps to first look at the historical foundations that guided family office asset allocation for decades. The undisputed global benchmark for responsible wealth

management was the 60/40 portfolio: a strategic model rooted in Modern Portfolio Theory (MPT), formalized in the mid twentieth century. Interestingly, the conceptual origins of this approach are far older, with academic researchers often tracing them back to the "Talmud portfolio", formulated over two thousand years ago (Mikulskis, 2020). This ancient framework advised investors to divide their wealth into three equal parts: real estate, active business ventures, and liquid reserves kept readily available.

Modern Portfolio Theory built on this historical intuition by introducing a mathematical framework that optimized the relationship between risk and return based on how different asset classes move relative to each other. Rather than evaluating assets in isolation, MPT showed that the overall risk of a portfolio could be reduced by combining asset classes with a low or negative correlation. The classic 60/40 model put this logic into practice by striking a balance between public equities and fixed income securities.

Within this framework, the 60% allocation to public equities serves as the primary engine for long-term capital appreciation, dividend income, and protection against inflation. However, public equities are inherently volatile and vulnerable to sharp downturns. To offset this volatility and stabilize the overall value of the portfolio, the remaining 40% was allocated to fixed-income instruments, which are mainly sovereign government bonds and corporate debt.

Historically, the 40% fixed income allocation was not simply a passive holding, and it served two critical functions within the family office's operational structure.

- The Predictable Yield Mandate: fixed income provided a reliable, recurring source of liquidity. In normal economic conditions, the best sovereign bonds consistently generated annual nominal yields between 4% and 6% (Quigley, 2025). This steady cash flow gave the family office enough liquidity to cover the family's lifestyle needs, internal operational costs, and philanthropic commitments. Crucially, it also meant the family office rarely needed to sell core equity positions during market downturns, protecting the compounding trajectory of the portfolio.

- The Portfolio Shock Absorber Mandate: these assets also acted as a vital hedge and stabilizer during periods of stress. When economic downturns, geopolitical shocks, or sharp equity drawdowns occurred, central banks typically responded by cutting benchmark interest rates to stimulate the economy. Because bond prices move inversely to interest rates, the value of the fixed part of the portfolio would rise precisely when the equity portfolio was falling. This negative correlation effectively cushioned the overall portfolio, reducing downside volatility and delivering strong risk-adjusted returns.

Figure 2 (QuantSeeker, 2025) shows the rolling 24-month correlation between public equity returns (SPY) and bond returns. The data confirms the theoretical basis of Modern Portfolio Theory during the 2000–2020 period, where a consistently negative correlation allowed fixed income assets to reliably cushion portfolio losses. The sharp upward shift observed after 2021 is particularly significant as it marks the breakdown of this historical hedge and visually captures the modern portfolio crisis that further drove family offices to search for yield and reallocate capital into alternative private markets.

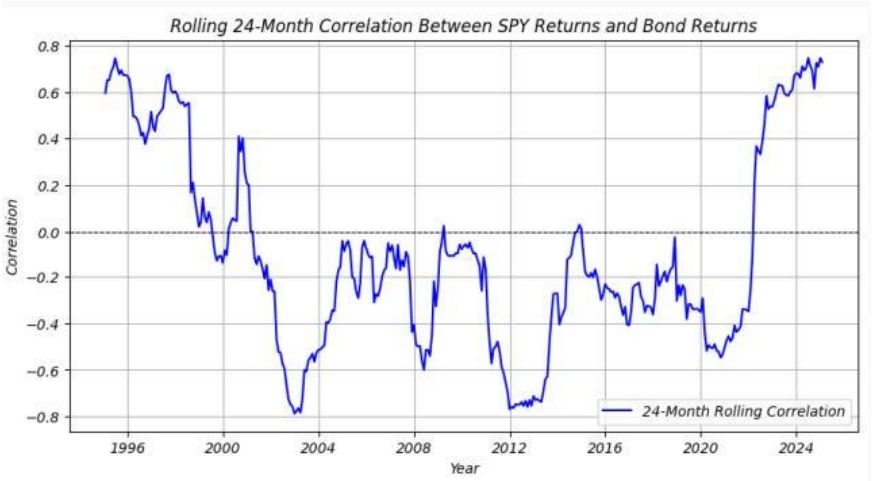

Figure 2: *Correlation Between Stock and Bond Returns (QuantSeeker, 2025)*

For generations, this mathematical relationship was the cornerstone of conservative wealth preservation and multi-generational wealth transition. It allowed family offices to achieve a solid risk-return profile without needing complex internal investment teams or highly specialized due diligence networks. However, once the reliability of this market

broke down, capital allocators were forced to abandon this simpler approach. As the analysis that follows will show, achieving genuine downside protection and sufficient yield now requires a deliberate structural shift into alternative private markets.

2.3. Alternative Investment Strategies

Faced with the threats of inflation eroding capital and rising volatility in public markets, family offices have been pushed into a major strategic shift. Moving away from traditional liquid securities, these entities are systematically reallocating capital toward more complex alternative investments. This represents a fundamental transformation of the family office, from a passive administrative structure into a highly professionalized financial entity. Current data shows that a record 60% of family offices globally plan to restructure their strategic asset allocations in the near term (UBS, 2026), with their new mandates explicitly prioritizing structural resilience and sophisticated diversification over standard public market benchmarks.

Within the world of traditional liquid securities, views on portfolio construction have shifted. For affluent investors aiming to build multigenerational wealth, the classic 60/40 split is increasingly seen as too conservative. Recent analysis argues that a more effective allocation is 90/10, with 90% in public equity index funds and 10% in money-market funds. This approach is supported by the long run outperformance of stocks over bonds, their better tax treatment for capital gains, and the ability of publicly traded companies to adapt to inflation through pricing power. In this 90/10 model, bonds are removed entirely. The 10% cash allocation serves as a liquidity bridge, acting as an insurance policy to cover unexpected expenses during market downturns without forcing investors to sell equities at a loss (Pozen, 2026).

While the 90/10 structure represents the optimal configuration for portfolios focused solely on the public market, institutional family offices operate with a broader, unconstrained mandate. To navigate this complex landscape, family offices are leaning heavily on their full operational autonomy advantage. Unlike regulated institutional

investors, family offices are not bound by quarterly reporting requirements, strict regulatory benchmarks, or sudden redemption pressures. This flexibility allows them to deploy "patient capital" over extended time horizons. By committing capital to illiquid alternative structures for periods of five, ten, or even fifteen years, family offices are uniquely positioned to capture that additional return that private market assets generate as compensation for the lack of immediate liquidity, often referred to as "illiquidity premium".

This deliberate pursuit of the illiquidity premium has shifted alternative asset classes from a peripheral strategy to the core of the modern family office portfolio, with an average of 31% globally. For estates specifically structured to resist against inflation, this allocation to private markets can reach nearly 60% of total assets under management (JPMorgan, 2026). As the following sections will detail, this shift is executed through a precise allocation across private equity (and venture capital), private debt, real estate, infrastructure and hedge funds, each serving a specific role within the broader strategy of generational wealth preservation.

2.3.1. Private Equity

Private equity covers investments in the equity of privately held and unlisted companies, ranging from growth equity for expanding businesses to leveraged buyouts (LBOs). It has firmly established itself as the dominant alternative asset class within the family office ecosystem, making up an average of 9,8% of total portfolios globally (JPMorgan, 2026). Driven by the goal of achieving returns that outperform public market benchmarks over the long term, family offices typically target mid-teen net internal rates of return (IRR) from these allocations (Campden Wealth, 2023). Since generational wealth is often built through the creation and eventual sale of a private business, family principals tend to have a natural entrepreneurial affinity and a solid working understanding of how private equity operates.

However, achieving these strong returns requires significant discipline due to a phenomenon known as the "J-Curve". In the early years of a private equity investment, returns are negative as management fees are charged and capital is deployed into target companies before any value creation can take hold. Valuations are opaque and capital is fully locked up during this period. The ultimate success of a family office's private equity program depends heavily on the family's ability to sit through this initial period of negative cash flow without panicking or rushing toward a premature exit on the secondary market. Figure 3 (Zest Equity, 2024) presents a graphic visualization of the J-Curve phenomenon.

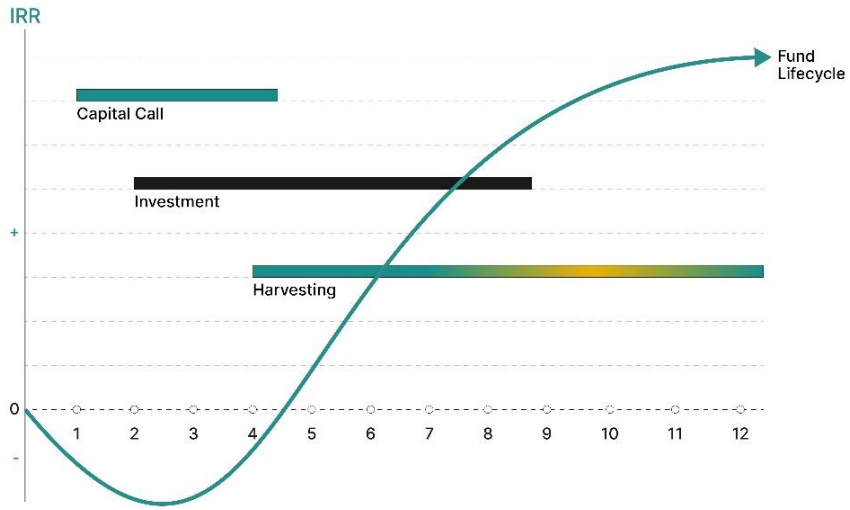

Figure 3: *The Private Equity J-Curve (Zest Equity, 2024)*

Family offices deploy capital into private equity through a range of sophisticated approaches. Commingled funds, where the family participates as a passive Limited Partner (LP) in a blind-pool fund, offer diversification across multiple companies and sectors. However, this comes with a standard fee structure of around a 2% management fee and 20% carried interest (NEPC, 2019), which significantly reduces the net IRR. To improve on this, larger family offices increasingly negotiate co-investment rights alongside their core General Partners (GPs). Co-investing allows the family to deploy additional capital directly into specific portfolio companies, usually on a no-fee, no-carry basis, effectively lowering overall capital costs while concentrating exposure in high conviction sectors.

The most significant structural shift, however, is the growing move toward direct, standalone control investments. By bypassing the traditional fund structure entirely, family offices eliminate intermediary fees, gain full governance control, and deploy capital free from the rigid exit timelines of years that standard institutional funds impose. Executing this strategy requires a significant degree of internal professionalization, including experienced investment bankers and operational experts. While this increases fixed operational costs, the elimination of external management fees on capital pools exceeding $500 million more than offsets these expenses (JPMorgan, 2026), creating a highly efficient vehicle.

Within the Iberian Peninsula, private equity acts as a natural extension of the region's business culture, which is deeply rooted in family-owned small and medium sized enterprises (SMEs). Spanish family offices contribute approximately 32% to 33,4% of all new capital raised by domestic fund managers (SpainCap, 2024). When making direct investments, these entities focus overwhelmingly on the domestic middle market — transactions requiring between €10 million and €100 million in equity (Capital Riesgo, 2026). By targeting this segment, which is frequently overlooked by large international buyout funds, Spanish family offices use their local networks to secure favorable entry multiples and governance terms, while injecting the patient capital needed to help regional SMEs grow into significant pan-European players.

2.3.2. Venture Capital

Venture Capital (VC) is a highly specialized segment of private markets focused on financing early-stage startups. Within the asset allocation framework of the modern family office, venture capital typically serves as a high-risk, high-reward strategy, representing an average allocation of around 3,3% of total assets under management (JPMorgan, 2026). Because of the flexibility that family offices possess to deploy capital into this space, they gain early exposure to disruptive megatrends like artificial intelligence, biotechnology, and clean energy before these companies reach the public equity markets (Aleta, 2026).

The mechanics of venture capital are governed by the "power law", an economic principle stating that most early investments will either fail or return only the original capital, while a few standout winners generate the portfolio's overall returns. Navigating this extreme risk-return asymmetry requires a sophisticated approach. To reduce the traditional fee obligations, family offices are increasingly turning into co-investment structures alongside established VC funds. This allows families to gain direct exposure to these startups without paying the standard 2% management fee and 20% carried interest structure on their entire deployed capital (Rosiers, 2025).

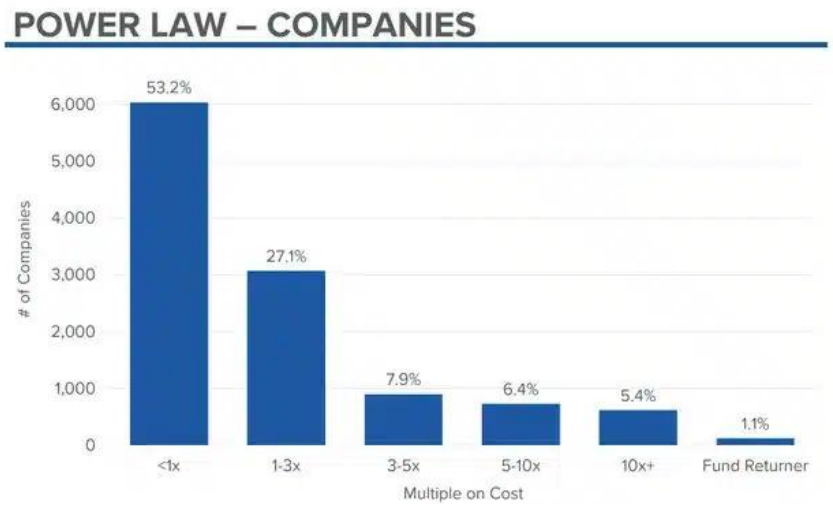

***Figure 4**: The Power Law Distribution in VC (Attar, 2026)*

Figure 4 illustrates the risk-return asymmetry at the core of venture capital. Drawing on institutional data tracking over 11.000 startups, the distribution shows that more than half (53,2%) fail to return the original invested capital (less than 1x), while a concentrated minority (1,1%, classified as "Fund Returners" and 5,4% delivering returns above 10x) drives the bulk of overall portfolio outperformance (Attar, 2026). This mathematical reality makes a compelling case for broad diversification.

Beyond pure financial returns, integrating venture capital into the family office ecosystem often serves an important emotional and governance purpose within the family structure. VC portfolios are frequently used as a practical training ground to actively engage the next generation of wealth successors. Younger family members are

often given the responsibility to source, evaluate, and manage venture allocations, allowing them to build real institutional investment experience. At the same time, this strategy helps align the family's legacy wealth with modern, impactful, and sustainable technologies that naturally resonate with the values of the rising generation (Rosiers, 2025).

In the Iberian Peninsula, the venture capital market has grown rapidly, evolving from an insignificant ecosystem into a key driver of European innovation. Data from 2025 shows that Spanish venture capital reached an unprecedented record of €1.904 million across 863 individual transactions, which represents a 73% increase in volume compared to 2024. This boom is largely driven by larger Series B and Series C funding rounds exceeding €10 million, particularly within the digital technology and healthcare sectors (Capital Riesgo, 2026). Spanish family offices play a vital role in this expansion, acting as the leading LPs providing foundational capital for domestic VC funds (SpainCap, 2024). When making direct venture investments, Iberian families also leverage multi-family platforms and their industrial heritage to contribute more than just capital, therefore bringing operational networks and corporate governance, favoring sustainable business models over inflated valuations.

2.3.3. Private Credit

Private Credit covers non-publicly traded financial instruments originated by non-bank entities. It represents a market projected to exceed $3,5 trillion by 2028 as a direct consequence of the 2008 Global Financial Crisis. Following the introduction of stricter Basel III capital adequacy standards, traditional commercial banks pulled back significantly from corporate lending, creating a large funding gap (Cai & Haque, 2024). Within the family office portfolio, private credit now acts as the replacement for the sovereign bonds that historically represented the 40% fixed income portion (Sundar, 2026). By capturing a meaningful illiquidity premium over a standard period, private credit delivers annualized net returns of 8% to 12% (Mercer, 2023).

The scale of this structural shift is clearly illustrated in Figure 5 (Re:so, 2024), which shows the growing gap between the retreat of traditional banks and the rapid expansion of non-bank institutional lenders over the last 30 years.

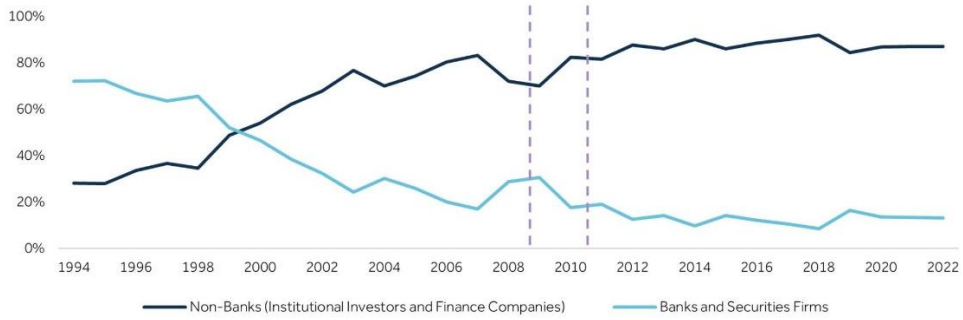

***Figure 5**: The Shift to Private Credit (Re:so, 2024)*

The fundamental structure of private credit aligns well with the family office's core goal of wealth preservation. Approximately two-thirds of the market is deployed as direct lending through senior secured term loans. In the event of a corporate default, these loans sit at the very top of the capital structure, giving lenders priority legal claims over tangible assets and cash flows, consequently reducing the risk of permanent capital loss (Cai & Haque, 2024).

Private credit also offers strong protection against inflation through its floating rate structure. Unlike traditional bonds with fixed coupons, all private credit instruments carry floating interest rates tied to benchmarks such as SOFR or EURIBOR. In the current inflationary environment where central banks are raising rates, the yield automatically adjusts upward, turning the asset class into a protector of real purchasing power at precisely the moment when fixed rate portfolios are suffering losses (Cai & Haque, 2024).

Because these loans lack a liquid secondary market, lenders can negotiate rigorous financial maintenance covenants directly with borrowers. These act as important early warning signals, giving the family office the legal ability to intervene, reprice risk, or take operational control before a formal default occurs. Free from quarterly benchmark

pressures, family offices tend to prioritize this active governance and structural control over simply chasing the highest headline yield (Sundqvist & Hamilton, 2026).

The retreat of traditional banks from lending has been particularly pronounced in Spain. As banks consolidated and tightened their lending standards following the financial crisis, many domestic companies found themselves starved of capital (Fradelizi & Veber, 2024). Rather than acting as passive fund allocators, Spanish family offices have responded by forming strategic joint ventures with local platforms, as the partnership between Ion Ion and Alantra for direct lending (Iberian Property, 2024). Operating primarily within the €10 million to €50 million market (DD Talks, 2026), they secure credit opportunities at attractive spreads with strong local covenant protections (Candriam, 2025).

2.3.4. Real Estate

Real estate remains the most historically consistent and culturally rooted pillar of private wealth preservation. Within a modern family office that is well diversified, real estate allocations have an average of 7,4% of the total global portfolio, firmly establishing physical property as a core component of the alternative investment sleeve (JPMorgan, 2026).

The inclusion of real estate serves several overlapping strategic purposes, with inflation hedging being the most important. As the money supply grows and consumer prices rise broadly, the cost of replacing physical structures increases, which mechanically pushes up property valuations. At the same time, commercial and residential leases are frequently tied directly to inflation metrics such as the Consumer Price Index (CPI). This contractual link ensures that rental income grows in line with broader economic inflation, effectively protecting the real purchasing power of the portfolio's yield across generations (Brookfield, 2026).

Beyond inflation protection, real estate also shows a remarkably low correlation to the daily volatility of public equities and the interest rate sensitivity of liquid fixed income

instruments. Because physical property is bought and sold privately and valued infrequently, it acts as a stabilizer that smooths out overall portfolio returns during periods of severe financial market stress (Mayoral, 2026). The tangible nature of real estate also allows family offices to use it as collateral. Allocators can secure low-cost debt against their property portfolios, using this leverage to boost overall equity returns or release liquidity for deployment into other more profitable alternative asset classes, all without giving up generational ownership of the underlying assets.

Nowhere in the developed world is the preference for real estate more pronounced than in the Iberian Peninsula, where Spanish family offices hold a notably high 24% allocation compared to the 18% European average (CaixaBank, 2025). This outsized allocation is deeply rooted in regional cultural values, reflecting a strong attachment to tangible, physical property ownership over more complex financial instruments (Mayoral, 2026). To optimize tax efficiency for property portfolios exceeding €10 million (CG Capital Europe, 2025), the Spanish ecosystem relies heavily on the SOCIMI framework, which is a highly regulated equivalent of a REIT (Broseta, 2025). By structuring holdings under a SOCIMI, family offices bypass the standard 25% corporate tax rate that applies to a traditional Sociedad Limitada (Terreta, 2025), achieving a 0% Corporate Income Tax on qualifying income in exchange for strict mandatory dividend distributions (Garrigues, 2025). The widespread adoption of this structure has driven the professionalization of generational real estate portfolios.

2.3.5. Infrastructure

Infrastructure investments cover the essential physical systems that keep economies functioning, effectively bridging the gap in risk and return between core fixed income and private equity. Unlike typical operating businesses, infrastructure assets frequently operate as monopolies with very high barriers to entry and large upfront Capital Expenditures (CapEx). Once up and running, these assets generate predictable, long-term cash flows supported by contracts or strict regulatory frameworks. For family offices focused on intergenerational wealth preservation, infrastructure serves as an

excellent inflation hedge, as revenue models such as toll road concessions and renewable energy Power Purchase Agreements (PPAs) routinely include explicit CPI escalators (Family Office Advisory, 2025). Furthermore, because demand for essential services tends to remain stable regardless of economic conditions, infrastructure shows a notably low correlation to the recessionary shocks that typically drive volatility in public equity markets.

Despite this theoretical fit, available data reveals a striking gap in allocation, exposing what can be described as the "AI Infrastructure Paradox." Current surveys show that it only represents about 0,7% of the global average portfolio, with 79% of family offices globally maintaining no allocation to infrastructure at all. At the same time, 65% of these same allocators identify Artificial Intelligence as a defining generational growth theme (JPMorgan, 2026). By investing heavily in software while ignoring physical infrastructure, family offices remain exposed to the real bottlenecks of AI: the enormous power demands, advanced cooling systems, and fiber-optic connectivity required to run hyperscale data centers (Fagan, 2026). Recognizing this gap, leading allocators are quickly shifting capital away from traditional asset classes and into power, resources, and digital infrastructure (UBS, 2026).

In the Iberian Peninsula, the approach to infrastructure is heavily shaped by the region's long industrial history in construction and heavy engineering. Rather than acting purely as passive fund investors, dominant Spanish family offices draw on this operational heritage to make direct minority co-investments alongside major national companies (Villena, 2025). This approach allows them to avoid traditional fund management fees while gaining direct, tangible exposure to national digital infrastructure, regulated utilities, and renewable energy grids. For mid-sized family offices that lack the balance sheet for direct asset acquisitions, domestic private equity platforms serve as important aggregators. These platforms pool capital into large alternative vehicles focused on the energy transition (Capital Riesgo, 2025), broadening access to institutional-grade infrastructure and aligning generational wealth with the broader European decarbonization agenda.

2.3.6. Hedge Funds

Hedge funds act as highly flexible tactical buffers within the alternative portfolio, using unconstrained mandates and complex trading strategies such as short selling, dynamic leverage, and statistical arbitrage to generate returns that are structurally independent from broad market benchmarks. During the previous decade of central bank quantitative easing and low volatility, the standard hedge fund fee structure was frequently questioned by allocators, as passive index funds delivered strong double-digit gains without requiring long periods. However, the macroeconomic shift of the 2020s, characterized by surging inflation, higher costs of capital, and sharp simultaneous losses in both global equity and bond markets, has brought the asset class back to the forefront, establishing it as an essential risk management tool rather than a purely speculative addition to the portfolio (M., 2026).

The modern family office approach to hedge funds has moved away from simply chasing returns, focusing instead on downside protection, volatility reduction, and generating returns that are uncorrelated to broader markets. When the traditional 60/40 portfolio failed as a hedging mechanism in 2022, producing simultaneous historic losses across asset classes, allocators turned to more sophisticated strategies such as Global Macro and Equity Long/Short to protect capital during deep market downturns (Lai, 2024) (Abuhoff Jacobson & Berger, 2025). By exploiting pricing inefficiencies across different asset classes and geographies, often through strategies that traditional and long only mutual funds are legally prohibited from using, these vehicles introduce a differentiated return stream that helps smooth overall portfolio volatility. Globally, family offices maintain an average 4,7% allocation to hedge funds (JPMorgan, 2026), with 37% actively considering increasing their exposure to strengthen their portfolios against shifting monetary policies and risks from high index concentration (UBS, 2026).

Hedge funds also serve as a vital "liquidity bridge" for the modern family office. Because heavy allocations to private equity, private debt, and infrastructure require capital to be locked up for ten to fifteen years, family offices face a real structural vulnerability when

they need to cover operational expenses or generational disbursements. Hedge funds, which typically offer quarterly or semi-annual redemption windows, provide meaningfully higher expected returns than cash or cash equivalents while maintaining the mid-level accessibility needed to meet sudden capital calls from private market GPs (Agres, 2025).

Within the Iberian market, family offices structure these allocations through flexible domestic vehicles known as Fondos de Inversión Libre (FILs), which operate under the supervision of the CNMV (Comisión Nacional del Mercado de Valores, 2026). This local regulatory framework allows Spanish allocators to take advantage of a unique tax deferral regime, enabling them to rebalance capital across different hedge fund strategies without triggering immediate capital gains taxes, which in turn maximizes long-term compounding efficiency (Crescenta, 2026).

2.3.7. Summary

To conclude with the alternative investment strategies, Table 1 summarizes the main categories explained above, highlighting their typical numerical parameters, liquidity profile, and strategic role in family office portfolios.

	Typical Allocation	Return/Yield Profile	Liquidity
Private Equity	9,8%	Mid-Teen IRRs	Very Illiquid, with long lockups and a clear J-curve in early years
Venture Capital	3,3%	Highly dispersed outcomes as some deals return only capital while others generate outsized gains	Very illiquid, with holding periods of many years
Private Credit	2,4%	Around 8% to 12% of annualized net returns	Illiquid compared to public markets, but usually shorter dated than private equity.

Real Estate	7,4%	A stable asset that helps combat inflation rather than a pure return maximizer	Moderately illiquid, especially in direct ownership structures
Infrastructure	0,7%	Return profile is typically steady and long-duration rather than high-growth; cash flows are often contract-linked	Highly illiquid, with very long asset lives and long concession periods
Hedge Funds	4,7%	Flexible diversifiers and downside protection tools rather than high-return engines	Moderately liquid, with quarterly or semiannual redemption windows common

***Table 1**: Alternative Investment Strategies*

2.4. Friction of Priorities in Family Offices

The transfer of wealth and leadership between generations represents the most structural vulnerability within the global family office ecosystem. While macroeconomic shocks and geopolitical shifts can force portfolio changes, internal family dynamics have the potential to dismantle the family's wealth entirely. Approximately 70% of wealthy families lose their accumulated capital by the second generation, and 90% see it fully depleted by the third (Masttro, 2026). This is rarely caused by a single financial catastrophe. Instead, it tends to be the result of gradual internal erosion driven by fragmented governance, communication breakdowns and misalignments between wealth creators and their heirs.

At the heart of this intergenerational tension lies a fundamental difference in how capital is perceived, which directly shapes risk appetite across the family. The first generation (G1) built its wealth through concentrated risk-taking and a hands-on relationship with scarcity. Their mindset prioritizes direct operational control, viewing wealth as a symbol of resilience and security. As a result, their portfolios tend to be weighted toward the illiquid alternative assets like private equity, core operating businesses, and local commercial real estate (Lumicre, 2026). The second generation

(G2) acts as a psychological bridge, shifting the focus toward wealth preservation, security, and broader diversification across other asset classes. By the third generation (G3) and beyond, the mindset evolves again: younger family members tend to associate wealth with social impact, viewing capital as a tool for driving meaningful change rather than simply generating financial returns (Oaks Wealth Management, 2026).

When a portfolio remains rigidly tied to the founder's historical risk appetite, it creates structural tension that frequently leads to capital flight after the founder's passing. Currently, 93% of family office professionals observe generational differences within client families, with 33% identifying a disruptive divergence in core investment philosophy. Industry data shows that 68% of professionals report deep generational friction over digital assets, 52% report significant differences regarding ESG and impact investing, and 50% observe disagreements over private market allocations versus public liquidity (Wheaton, 2025).

To understand how this values divergence can lead to operational paralysis, academic frameworks use the "Three-Circle Model of the Family Business System", developed by John Davis and Renato Tagiuri in 1978. This model breaks the enterprise down into three closely linked subsystems: the Family, which is governed by emotion and the desire for harmony; the Business, which is governed by meritocracy and financial returns; and Ownership, which is governed by legal frameworks and shareholder value. Figure 6 (Davis, 2019) consists of a visual representation of this model, illustrating the seven distinct stakeholder groups created by the structural intersection of these domains.

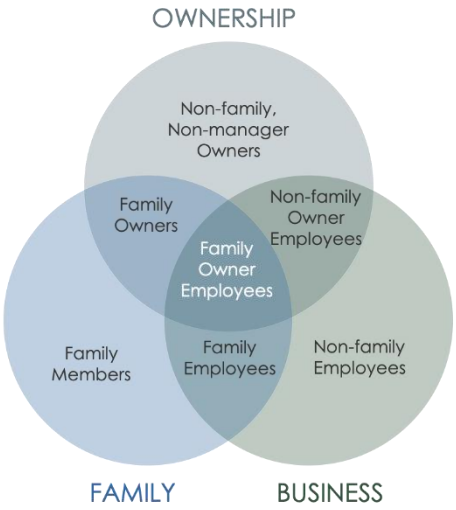

***Figure 6**: Three-Circle Model of the Family Business System (Davis, 2019)*

During the wealth creation phase, the G1 founder sits at the center of all three circles, acting as patriarch, Chief Investment Officer, and majority shareholder at the same time, which makes internal conflict easier to resolve. But as the family office grows, these roles become much more separated. Tension often appears when an heir from the third generation in the Family circle pushes for carbon divestment, while a non-family executive in the Business circle is focused on maximizing returns through traditional energy equities.

This fragmentation creates a set of predictable succession problems such as founder reluctance, influence from close confidants, sibling rivalry and lack of interest from the next generation (Chandrashekar, 2025). Founder reluctance is especially common, with 34% of family offices operating without a complete succession plan and 20% relying only on verbal agreements (RSM, 2025). These risks are becoming even more visible in the Iberian Peninsula. A 2025 study by OpenWealth and finReg360 found that 35% of Spanish family offices will go through a generational transition within the next decade, yet 52% have not seriously addressed succession planning (CaixaBank, 2025). In Spain, this is made worse by the gap between G1's preference for tangible domestic assets and the NextGen's demand for global diversification and more institutional reporting.

Modern family offices are moving away from autocratic decision making and toward values-based governance, with formal family councils and separate investment

committees. They also use "intergenerational intelligence" by creating specific portfolio sleeves, such as venture capital or dedicated impact mandates that serve as lower risk training grounds. These structures give NextGen members real decision making responsibility and help them build professional credibility, while ESG frameworks act as a bridge between disciplined investing and a sense of purpose (Oaks Wealth Management, 2026).

2.5. ESG Implementation

As later generations take control of family office capital, sustainability criteria have become a much more technical part of portfolio construction. A professional family office should clearly distinguish between defensive Environmental, Social, and Governance (ESG) integration, which is mainly about managing risk, and offensive Impact Investing, which aims to produce and measure specific positive outcomes.

The most common defensive approach is negative screening, which means excluding certain companies or entire sectors based on ethical or ESG criteria (Agapova et al., 2025). While this method is simple in principle, a strict exclusion rule narrows the investable universe. Under Modern Portfolio Theory, any rule that blocks an otherwise optimal asset pushes the portfolio away from the efficient frontier, leading to a weaker risk-adjusted return profile (Krizo & Lundsgaard, 2023).

The main technical result of this truncation is the creation of structural tracking error, or active risk, compared with a normal market benchmark. In simple terms, if you exclude certain sectors, the portfolio no longer moves exactly like the benchmark, which can create a gap in performance and risk. Consequently, the portfolio manager faces an optimization problem that consists of two parts: reducing tracking error versus the benchmark while also improving the portfolio's excess ESG score.

This means ESG integration through negative screening naturally carries an active risk penalty. As exclusion lists get longer, the required deviation from the benchmark increases in a mechanical way. Optimization algorithms also tend to overweight assets

that are not excluded and are highly correlated, which can unintentionally create strong biases, such as a hidden tilt toward technology stocks.

To avoid these problems, sophisticated family offices use positive screening. Instead of boycotting entire industries and distorting macroeconomic exposure, positive screening compares companies to their peers within the same sector and actively select and overweight those with stronger ESG metrics (Agapova et al., 2025). This approach maintains broad market diversification, keeps tracking error low, and systematically penalizes ESG underperformers by raising their relative cost of capital (Robeco, 2026).

While screening represents quantitative adjustments to traditional public equities, Impact Investing is a paradigm shift primarily executed within private markets. Genuine impact investing requires a structured framework known as a Theory of Change (ToC) to map how capital deployment translates into societal or environmental outcomes, preventing "greenwashing" (Family Office Advisory, 2026). To audit these outcomes, institutional family offices rely on the Impact Management Project (IMP) ABC Framework to classify enterprise impact, and utilize the IRIS+ taxonomy to track standardized metrics with the exact same mathematical discipline as the financial Internal Rate of Return (Godeke & Briaud, 2020).

The absolute technical frontier of this space relies on Catalytic Capital (Brown et al., 2023). This type of investment takes on higher risks or accepts lower financial returns to have impact that traditional commercial investors would not support. SFOs are especially well suited for this because they are not bound by the strict tracking error rules and liquidity requirements that apply to institutional mutual funds, making them the ideal entities to deploy capital and fund breakthrough solutions (Impact Investing Institute, 2024).

3. Methodology

This chapter translates the strategic questions raised in the literature review into a working analytical tool. The preceding sections established that the modern family office allocates across nine broad asset classes (cash, fixed income, public equities and the six alternative strategies) and that this allocation is shaped not only by financial fundamentals but by qualitative family characteristics: the risk profile, the generation in control, the conviction towards ESG, and the size of the assets under management. The objective of this chapter is to build a diagnostic framework that takes those characteristics as inputs and returns a reasoned, transparent asset allocation as output. The model is implemented in Excel as an automatized workbook, so that any change to a family input propagates automatically through to the final allocation, enabling the scenario analysis presented in the Result section.

This chapter first justifies the choice of a multi-criteria scoring approach over formal portfolio optimization. It then describes the empirical data that feeds the model and the way that data is converted into comparable scores. It subsequently sets out the adjustment layers that personalize the allocation to a specific family. Finally, it explains how the model engine combines all these elements into a single recommended allocation.

3.1. The MCDA Approach

The conventional starting point for any asset allocation exercise is Modern Portfolio Theory and its operational expression, mean-variance optimization (MVO). Such a model takes three inputs (the expected return of each asset, its volatility, and the matrix of correlations between assets) and solves mathematically for the combination of weights that delivers the highest expected return for a given level of risk, tracing out what is known as the efficient frontier. Its strength is that it is rigorous, objective and academically canonical.

MVO is, however, poorly suited to the question this thesis sets out to answer. The decision variables at the heart of the family office (the generation in control, the strength of ESG conviction, the tier of assets under management) are qualitative characteristics that a covariance matrix simply cannot ingest. There is no mathematically correct way to tell an optimizer that a portfolio belongs to a third-generation family with a strong impact mandate. A second weakness compounds the problem: MVO is acutely sensitive to its return inputs, so that small revisions to the assumptions can produce large and unstable swings in the recommended weights. For a diagnostic tool that is meant to be transparent and stable, that fragility is a serious drawback.

For these reasons the model is built as a Multi-Criteria Decision Analysis (MCDA). Under this approach each asset class is scored on several criteria; the family's profile determines how much weight each criterion carries; and the resulting weighted scores are translated into an allocation that is then refined by a series of adjustment layers. This deliberately trades the rigor of optimization for two properties that matter more here, which are transparency (since every number can be traced to a source or a stated assumption) and the ability to embed qualitative family preferences directly into the allocation rather than bolting them on afterwards.

3.2. Data Foundation

The empirical backbone of the model is JPMorgan's Long-Term Capital Market Assumptions (LTCMA), an annually published set of forward-looking estimates of return, volatility and correlation across asset classes over a ten-to-fifteen-year horizon. Additionally, it is the Euro section, the one from which all this input has been obtained, and the one that is used throughout. For each of the nine asset classes the model draws two figures from the LTCMA, namely the expected (arithmetic) return and the volatility, reported in Table 2.

Two of the nine classes require a brief justification due to the simplification done for the model. The model uses the Euro Investment Grade Corporate Bond series as a single

category for fixed income, as investment grade corporates capture that generation of income reality while preserving credit quality. For public equities, the model uses the Developed World Equity series in preference both to any single index, which would embed a pronounced bias inconsistent with the global, diversified equity exposure family offices pursue. The remaining seven classes map directly onto their natural LTCMA equivalents, as shown in Table 2.

Asset class	LTCMA proxy series	Exp. return %	Volatility %	Return score	Risk score	Liquidity score	Inflation score
Cash	Euro Cash	2,30	0,64	0,00	1,00	1,00	0,00
Fixed Income	Euro IG Corp Bonds	4,12	4,93	0,21	0,80	0,95	0,00
Public Equities	Developed World Equity	7,29	14,69	0,57	0,34	0,90	0,50
Private Equity	Private Equity	11,10	18,42	1,00	0,17	0,15	0,50
Venture Capital	Venture Capital	10,04	22,03	0,88	0,00	0,10	0,50
Private Credit	Direct Lending	8,17	15,32	0,67	0,31	0,40	1,00
Real Estate	European Core Real Estate	6,84	10,83	0,52	0,52	0,25	1,00
Infrastructure	Global Core Infrastructure	6,51	11,48	0,48	0,49	0,00	1,00
Hedge Funds	Diversified Hedge Funds	4,65	5,67	0,27	0,76	0,55	0,40

***Table 2**: Asset classes data inputs and resulting criterion scores (JPMorgan LTCMA, 2026)*

The nine asset classes are described quantitatively by their returns and volatilities are (expressed as percentages), while liquidity and inflation protection are qualitative properties. To combine them within a single framework, each criterion is converted to a dimensionless score between zero and one. This conversion follows two distinct logics, and the distinction between them is central to the credibility of the model: two criteria are derived empirically from the data, while two are derived from the qualitative findings of the literature review.

Both the return and the volatility are adjusted using a min-max normalization across the nine classes, rescaling each value onto a 0-1 range defined by the minimum and maximum of each set. For the return criterion the mapping is direct, so the highest returning asset (private equity) scores one and the lowest (cash) scores zero. For volatility the mapping is inverted, since lower risk is the desirable property, so the least volatile asset (cash) scores one and the most volatile (venture capital) scores zero.

Alternatively, the ordering of the nine assets in relation to liquidity and inflation is fixed by the evidence from the literature review, and only the spacing between tiers is an authored calibration. The liquidity ranking has at the top the three daily tradable classes cluster separated only marginally, after which the score falls with lock-up length to hedge funds, private credit, real estate, private equity, venture capital and infrastructure (the longest concessions). The inflation score applies a three-tier mapping following the literature, with poor protection for the fixed nominal classes of cash and fixed income, moderate protection for the classes that reprice with the economy through pricing power (public equities, private equity, venture capital), and high protection for the classes with explicit inflation linkage.

3.3. The Adjustment Layers

The four scores in Table 2 are identical for every family and on their own they would yield a single, generic allocation. The analytical contribution of the model lies in the five adjustment layers that personalize that allocation to a specific family. These layers are driven by the four family inputs (risk profile, generation, ESG conviction and assets under management) are organized and presented in Tables 3 through 7.

Risk profile	Return	Risk	Liquidity	Inflation
Conservative	0,25	0,25	0,25	0,25
Balanced	0,45	0,20	0,15	0,20
Aggressive	0,55	0,20	0,15	0,10

***Table 3**: Criteria Weights by Risk Profile (Table A)*

The weight vectors presented in Table 2 encode the standard relationship between risk appetite and what investor values. A conservative family weights capital preservation, access and real-value protection on a par with growth, hence the equal 0.25 split; as the profile moves to balanced and aggressive, weight migrates monotonically into return and out of liquidity and inflation, while the risk weight is held at a moderate level throughout because volatility matters even to an aggressive allocator. The precise magnitudes are authored, constrained only by adding up to one.

Asset class	G1 (founder)	G2 (preservation)	G3 (impact)
Cash	−3	0	−1
Fixed Income	−1	+1,5	−1
Public Equities	−1	+2	0
Private Equity	+2	−1,5	+0,5
Venture Capital	+1	−1	+2
Private Credit	0	0	0
Real Estate	+2	−1,5	−2
Infrastructure	+1	0	+1,5
Hedge Funds	−1	+0,5	0

***Table 4**: Generational Adjustments in % (Table B)*

Asset class	None	Moderate	High
Cash	0	−1	−2
Fixed Income	0	−1,5	−3
Public Equities	0	−2,5	−5
Private Equity	0	+1,5	+3
Venture Capital	0	+1,5	+3
Private Credit	0	0	0
Real Estate	0	0	0
Infrastructure	0	+2	+4
Hedge Funds	0	0	0

***Table 5**: ESG conviction adjustment in % (Table C)*

In both layers the adjustment values have been decided based on the outputs obtained throughout the research phase. Table 4 follows the generational risk appetite shift, where the founder is biased toward tangible, controllable, illiquid assets (positive on private equity, real estate and infrastructure, and negative on cash), the second generation moves to the liquid diversified core, and the third generation's tilt toward venture capital and the energy-transition infrastructure that align with an impact orientation. Table 5 follows the ESG importance in the model adjustment, penalizing the low-impact-capability classes (most sharply public equities, where negative screening introduces tracking error for limited genuine impact) and rewarding the impact-capable private classes. The magnitudes are kept slightly small so that they avoid overriding the score baseline but can be adjusted.

Asset class	Access group	Floor multiplier
Cash	Flat	1,00
Fixed Income	Flat	1,00
Public Equities	Flat	1,00
Private Equity	Steep	0,50
Venture Capital	Steep	0,30
Private Credit	Mild	0,60
Real Estate	Near Flat	0,95
Infrastructure	Steep	0,30
Hedge Funds	Near Flat	0,85

***Table 6**: Accessibility to Asset Classes (Table D)*

The floor multipliers translate documented access thresholds into a retained weight fraction, as shown in Table 6. Cash, fixed income and public equities are the fully accessible classes, while real estate and hedge funds are near-flat because there are feeder vehicles that broaden access at small scale with only a modest efficiency penalty; private credit is mildly constrained, and the classes that depend on scale are steeply constrained, with venture capital and infrastructure set below private equity because

pooled access to them is thinner. The €500 million upper breakpoint is the direct investing threshold, and the €50 million lower breakpoint approximates the access floor below which the steep classes are less available.

Risk profile	Maximum illiquid share
Conservative	40%
Balanced	55%
Aggressive	65%

***Table 7**: Maximum Illiquid Share (Table E)*

Finally, the ceilings are anchored to the observed range of alternatives exposure rather than chosen freely. The aggressive ceiling is set just above the documented upper bound, the conservative ceiling although it is slightly above the global average, it still enforces a liquid buffer of at least 60% the portfolio, and the balanced profile bridges the two.

3.4. The Engine of the Model

The engine assembles the scores and the five adjustment layers into a single allocation through an ordered sequence of steps. Each step operates on the output of the previous one, and the whole sequence is recomputed automatically whenever a family input changes.

1. **Attractiveness score:** For each asset, the four criterion scores from Table 2 are combined into a single weighted attractiveness score using the criterion weights selected by the family's risk profile (Table 3).
2. **Sharpening:** The attractiveness score is raised to the power of a conviction exponent, set to two. This exponent governs how decisive score differences are converted into weight: a value of one would be allocated in direct proportion to the scores, while a higher value concentrates the allocation more firmly in the higher scoring assets.
3. **Baseline weights:** The sharpened scores are normalized, each divided by their sum, to produce a baseline allocation.

4. **Generational and ESG adjustments:** The adjustments from Table 4 (B) and Table 5 (C) are added to the baseline weights. Any weight pushed below zero is floored at zero, and the result is renormalized back to one hundred per cent.
5. **AUM accessibility:** Each weight is multiplied by its accessibility multiplier (Table 6 (D), ramped to the family's actual AUM). Because this removes weight from the constrained private classes, the removed weight is redistributed proportionally across the fully accessible classes, so that the portfolio continues to sum to one hundred per cent and the family is never left holding capital it cannot deploy.
6. **Illiquidity ceiling:** The total weight of the illiquid classes (private equity, venture capital, private credit, real estate, infrastructure and hedge funds) is compared with the ceiling set by the risk profile (Table E). If it exceeds the ceiling, all illiquid classes are scaled down by a common factor until their total exactly meets the ceiling, and the weight thereby freed is redistributed across the liquid classes in proportion to their existing weights.
7. **Final allocation:** The result of the previous step is the recommended allocation of the model across the nine asset classes.

4. Results

This chapter applies the diagnostic framework developed in the methodology to a set of representative family office profiles. First, it demonstrates that the model produces coherent, meaningfully differentiated allocations when fed realistic combinations of the four family inputs (that the tool behaves intelligently rather than mechanically) by simulating three different scenarios.

Throughout, the model allocation is reported alongside an indicative industry composite that has been normalized across the nine asset classes of the model. This composite is a descriptive reference only as the framework does not attempt to reproduce industry averages. These systematic differences between the model's prescriptions and observed industry practice are where the analytical contribution of the tool becomes visible.

4.1. Scenario analysis

Three different scenarios were selected to span the dimensions the model is designed to capture: the wealth creating founder, the preservatory second generation, and the impact-oriented next generation. Crucially, the three differ simultaneously in risk profile, generation, ESG conviction and assets under management, so that each is a coherent family rather than the same family observed at different settings of a single dial.

4.1.1. Scenario 1 – The Founder

The first example is a large, established first generation family office: a balanced risk profile, G1 in control, no explicit ESG mandate, and €800 million in assets under management. This represents the wealth creator who is financially mature and substantial but not reckless, oriented toward tangible and controllable assets, yet diversified enough to have moved beyond a single concentrated holding. The model allocates the following results:

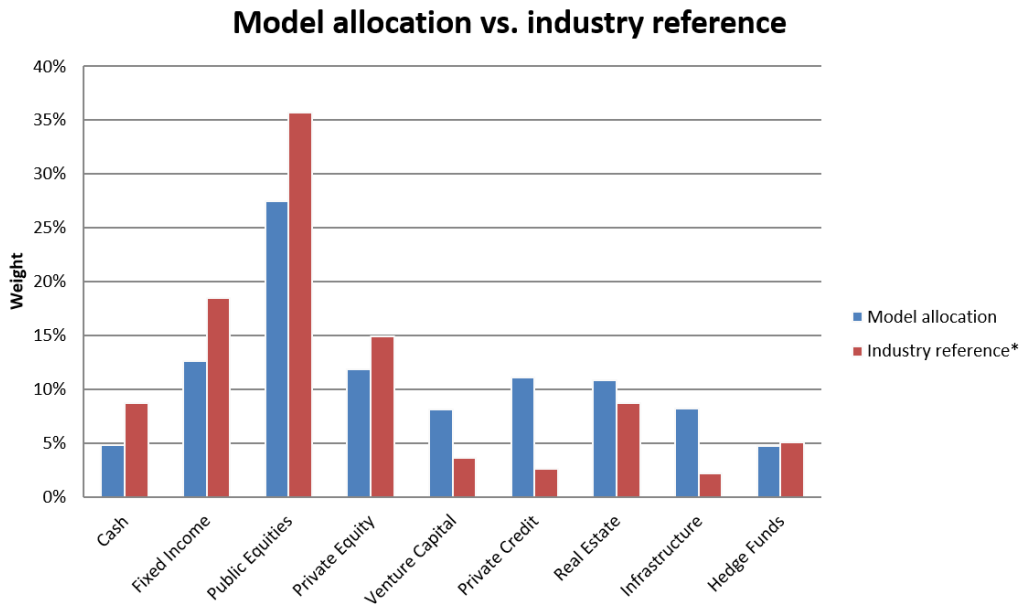

***Figure 7**: Asset Allocation vs Industry Reference (Scenario 1)*

The illiquid asset classes together make up 55,0% of the portfolio, sitting exactly at the set ceiling, which confirms that the founder's underlying preference, before the cap is applied, leans toward an even heavier allocation to private markets. The G1 generational tilt is visible in the higher allocations to real estate (10,8%) and private equity (11,9%) relative to the liquid core, consistent with the founder's well-documented preference for tangible, hands-on assets. The portfolio carries an expected return of 7,2% and a modelled volatility of 9,5% under the real correlation matrix, compared to 12,8% under the more conservative assumption of perfect correlation. This gap illustrates the diversification benefit that the correlation structure provides, even though it plays no direct role in the allocation decision itself.

4.1.2. Scenario 2 – The Preservation Bridge

The second archetype is the central, most benchmark-comparable case: a balanced profile, G2 generation, moderate ESG conviction, and €250 million under management. G2 is the generation that, according to the literature, moves the family away from the founder's concentrated holdings toward a more diversified, preservation-oriented approach. The model gives the following allocation:

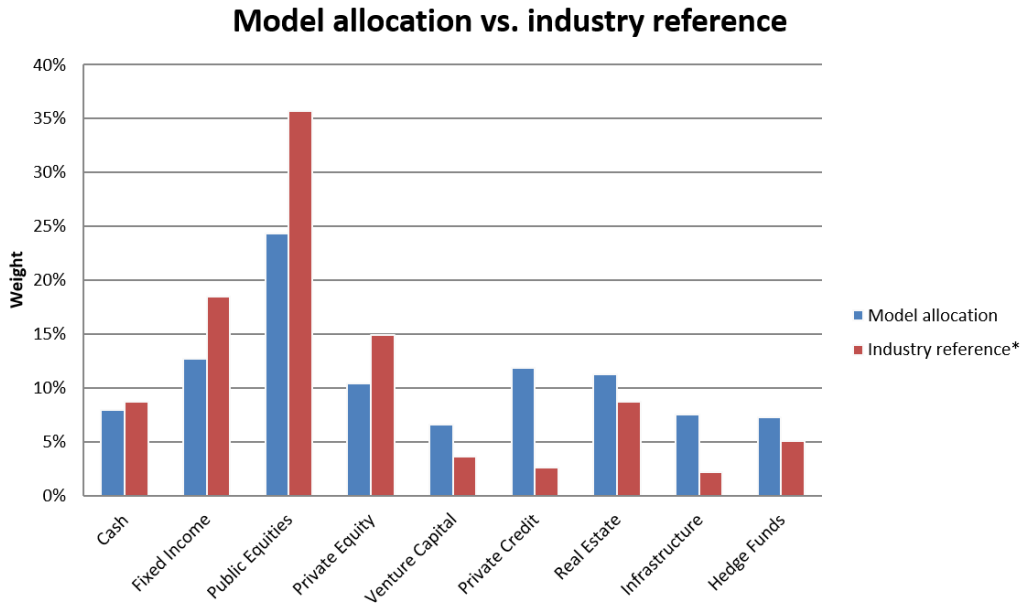

***Figure 8**: Asset Allocation vs Industry Reference (Scenario 2)*

Since Scenario 2 shares the same balanced risk profile as Scenario 1, the differences between the two come from the generational, ESG, and AUM inputs rather than from any change in risk appetite. The G2 shift is visible in the stronger liquid diversifiers: cash rises from 4,8% to 8,0% and hedge funds from 4,8% to 7,3%, while the founder's emphasis on real estate and private equity softens. This preservation-focused posture is exactly what the literature associates with the bridging generation, and it emerges from the model naturally through the G2 tilt vector acting on the baseline, without any direct instruction to "preserve." The moderate ESG conviction pushes up the allocation to impact-capable private asset classes, with infrastructure reaching 7,5%, while trimming public equities, where negative screening is known to introduce tracking error for limited real-world impact. The illiquid asset classes once again reach the 55% ceiling. The expected return is 6,9%, with a modelled real volatility of 8,7%, compared to an 11,9% upper bound under the perfect-correlation assumption.

4.1.3. Scenario 3 – The Next Generation

The third archetype is the impact-driven successor running a smaller office: an aggressive profile, generation G3, high ESG conviction, and €60 million under

management. This case is deliberately the one where the AUM accessibility ramp is most active, since €60 million sits near the lower breakpoint below which the scale-dependent private classes become difficult to access. The model allocates:

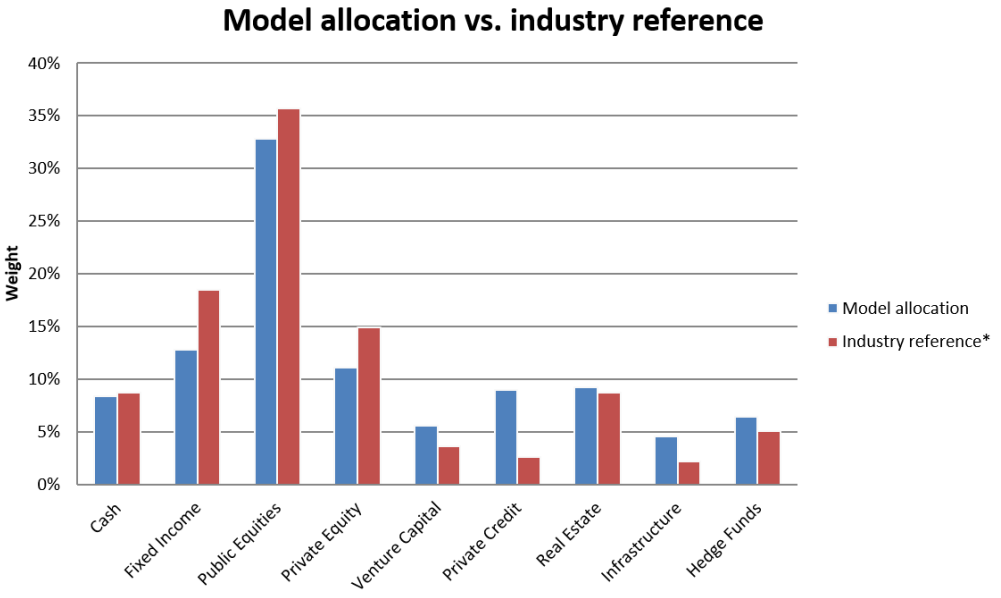

***Figure 9**: Asset Allocation vs Industry Reference (Scenario 3)*

This scenario gives the chapter's most revealing result. Even though it has the most aggressive risk profile and the highest illiquidity ceiling at 65%, the NextGen office ends up with only 45,9% in illiquid assets, which is well below its own cap. The reason is structural, and that is exactly the point of the scenario: at €60 million, the AUM access ramp limits the scale-dependent private classes, especially venture capital and infrastructure, before the illiquidity ceiling ever becomes binding. In other words, the smaller office is kept out of private markets not because it is more conservative in principle, but because direct and pooled access to these asset classes requires a scale it does not have. The relatively high public-equity weight of 32,9% follows from that same constraint, since capital that cannot be placed in the restricted private classes is pushed into the fully accessible liquid sleeve. This is the access-driven constraint the model is meant to capture, and it would not appear in a framework that treated allocation as only a question of risk appetite. The portfolio posts an expected return of 6,9% and a modelled real volatility of 9,2%, against a 12,1% upper bound under perfect correlation.

The fact that its expected return matches the balanced Bridge scenario despite a more aggressive profile is itself a result of the access constraint, because the small office is blocked from the higher-return private classes that its risk appetite would otherwise favor.

A finding that appears across all three scenarios is equally important. No matter the generation, ESG conviction, or AUM level, the model consistently underweights the traditional liquid core relative to industry practice. Fixed income stays at 12,6% to 12,8%, compared with a benchmark of 18,5%, and public equities remain at 24,3% to 32,9%, below the reference level of 35,7% in every case. The offsetting over-weights are just as consistent: private credit rises to 9,0% to 11,9% against a benchmark of 2,6%, and infrastructure reaches 4,6% to 8,3% versus 2,2%. This consistency matters because the pattern survives across three families that differ on every input, which means it is not just the result of one profile. It is a structural outcome of scoring the nine asset classes on preservation fundamentals, namely return, risk, liquidity, and inflation protection, in today's return environment. When fixed income is judged on those fundamentals rather than kept at a legacy 40% weight by convention, the model does not give it the share that industry practice still does. That is the quantitative expression of the thesis's central argument: in a low-yield environment, the traditional liquid core no longer deserves its conventional allocation once assets are evaluated on the criteria that matter most to a family office.

4.2. Robustness to Parameter Calibration

The scenarios show that the tool behaves sensibly, but this section asks whether its results depend too much on the specific values chosen for the authored parameters. The model has two types of inputs: empirical figures taken from the JPMorgan LTCMA, which are fixed, and authored calibrations such as the conviction exponent, the tilt magnitudes, the accessibility multipliers, and the illiquidity ceilings, which are judgment-based rather than directly measured. The key question is whether the conclusions are just an artifact of those judgments. To test this, Scenario 2 (Balanced risk, G2, Moderate

ESG conviction, and €250 million AUM) is kept fixed while the two parameters with the widest plausible ranges are varied one at a time.

4.2.1. Conviction exponent (k)

The exponent governs how score differences translate into allocation weight. Varying it across k = 1 (proportional), k = 2 (the model's setting) and k = 3 (more concentrated) produces:

Asset class	k = 1	k = 2	k = 3
Cash	11,1%	8,0%	5,2%
Fixed Income	14,4%	12,7%	10,7%
Public Equities	19,5%	24,3%	29,1%
Private Equity	9,5%	10,5%	11,3%
Venture Capital	7,1%	6,6%	6,0%
Private Credit	10,5%	11,9%	13,3%
Real Estate	10,7%	11,3%	11,7%
Infrastructure	8,0%	7,5%	7,0%
Hedge Funds	9,1%	7,3%	5,8%

***Table 8**: Sensitivity to the Conviction Exponent k*

As k rises, weight migrates from the lower-scoring liquid classes (cash, hedge funds, fixed income) into the higher-scoring ones (public equities, private credit), exactly as the parameter's design intends. What does not change is the qualitative prescription: fixed income remains under its benchmark weight at every value of k, private credit remains substantially over it, and the relative ranking of the classes is preserved. The exponent governs the magnitude of the tilts, not their direction.

4.2.2. Illiquidity Ceiling

Varying the balanced ceiling across 0,45, 0,55 (the model's setting) and 0,65 produces

Asset class	0,45	0,55	0,65
Cash	9,8%	8,0%	7,4%
Fixed Income	15,5%	12,7%	11,7%
Public Equities	29,7%	24,3%	22,5%
Private Equity	8,6%	10,5%	11,1%
Venture Capital	5,4%	6,6%	7,0%

Private Credit	9,7%	11,9%	12,6%
Real Estate	9,2%	11,3%	12,0%
Infrastructure	6,1%	7,5%	8,0%
Hedge Funds	6,0%	7,3%	7,7%

***Table 9**: Sensitivity to the Illiquidity ceiling*

A tighter ceiling shifts weight from the illiquid classes into the liquid core, while a more loosen one does the opposite, in a smooth and monotonic way with no abrupt reordering. Even at the tightest setting tested, 0,45, fixed income remains below its 18,5% reference, and private credit stays well above its 2,6% reference.

The framework's directional conclusions are stable across the tested calibration ranges. The specific authored values change the size of individual allocations, but not the qualitative prescription, fulfilling its purpose as a diagnostic tool satisfactorily.

5. Conclusion

In conclusion, this thesis sets out to understand how the prolonged low-interest rate environment reshaped family office investment strategy, and to turn that understanding into a practical tool that could support real allocation decisions rather than simply describe trends. The literature review laid out a clear structural story. The breakdown of the traditional 60/40 portfolio was not a temporary setback but a structural break: once the negative stock-bond correlation that underpinned Modern Portfolio Theory reversed after 2021, the fixed income sleeve lost both of its historical roles, the predictable yield and the portfolio shock absorber. In response, family offices have systematically moved capital toward private markets, pursuing the illiquidity premium through private equity, private credit, real estate, infrastructure and hedge funds. Private credit has emerged as the direct structural replacement for the sovereign bond allocation that low rates had hollowed out. Importantly, the review also showed that this shift is not driven by financial fundamentals alone. The family office operates under a dual mandate in which generational mindset, ESG conviction, and the governance challenges of wealth transfer shape allocation just as much as return and risk do, a set of qualitative forces that conventional portfolio theory simply cannot capture.

These two findings, the financial obsolescence of the traditional liquid core and the importance of qualitative family characteristics, define the gap this thesis addresses and explain the methodological choice at its center. Building the diagnostic framework as a Multi-Criteria Decision Analysis rather than a MVO was a direct response to what the literature required, which is a tool that could incorporate the generation in control, the strength of ESG conviction, and the level of assets under management while staying transparent and stable instead of being exposed to the sensitivity of optimization models. The main result confirmed the literature's story from independent fundamentals. Across three deliberately different family profiles, the framework consistently underweighted fixed income and public equities relative to industry practice and overweighted private credit and infrastructure, and the robustness analysis showed that this direction held across the full tested range of the authored parameters.

The model reaches the industry's own structural conclusion without being told to do so, which is the strongest claim the framework can legitimately make.

That claim, however, should be stated carefully, because the model has real limitations that affect how far its output should be interpreted. The first is the data foundation. The entire scoring layer rests on a single source, without comparison to alternative providers or realized historical returns, so the framework is only as strong as that one forward-looking input set, and it has not been tested against actual portfolio outcomes. The industry composite used throughout is a descriptive reference, not an external benchmark of correctness, so the model shows internal consistency rather than empirical accuracy. The second limitation is structural simplicity. Nine asset classes, a correlation matrix used only for the volatility cross-check and not for the allocation decision itself, and ESG treated as an adjustment tilt rather than a scored criterion, despite its importance in the wider analysis, are all deliberate simplifications that trade detail for clarity. Third is the fact that the calibration is authored. The criterion weights, tilt magnitudes, accessibility multipliers, and ceilings are reasoned judgments rather than measured quantities. The sensitivity analysis shows that the qualitative prescription is stable within the ranges tested, but that stability is not the same as external validation: a materially different criterion set, or calibration beyond the tested ranges, could change the result, and this remains a framework whose parameters are argued rather than empirically derived.

These limitations point directly to the most promising next steps. The data foundation could be made stronger by comparing several capital market assumptions sets and testing the model's allocations against real family office returns, which would move it from internal consistency toward genuine empirical validation. The criterion set could also be expanded, most clearly by turning ESG from a tilt into a fully scored criterion and by broadening the asset universe beyond nine classes. The calibration could be placed on firmer ground by deriving the tilt and accessibility parameters from survey or transaction data instead of authored judgment, and by testing the framework across a much wider range of parameter combinations than the two examined here. A natural

extension would also be to adapt the global model to a specific jurisdiction such as the Iberian market, whose distinct preference for real estate and specific vehicle structures are well documented in the literature but not reflected in the global framework.

Taken together, this thesis contributes on two levels. Substantively, it provides quantitative support, based on preservation fundamentals rather than convention, for the view that the traditional liquid core no longer deserves its historical allocation in a low-yield environment. Methodologically, it offers a transparent and extensible framework that builds qualitative family preferences directly into the allocation process instead of adding them afterwards, showing that the dual mandate of the family office can be handled systematically without relying on rigid optimization. Its value lies not in dictating the answer but in making the reasoning behind the allocation visible, traceable, and open to challenge, which is exactly what a diagnostic tool for a decision as important as multigenerational wealth preservation should do.

6. References

Abuhoff Jacobson, N., & Berger, A. (2025). *2026 hedge fund outlook: Inflation, volatility, and valuations: 3 reasons hedge funds fit today's market*. Wellington Management. https://www.wellington.com/en-us/institutional/insights/hedge-funds-outlook

Agapova, A., Filatova, U., & Yuk, I. (2025). Positive versus negative ESG portfolio screening and investors' preferences. https://doi.org/10.1080/1351847X.2025.2585967

Agres, S. (2025). *Building resilient portfolios: Liquid diversifiers for today's institutional challenges*. Cambridge Associates. https://www.cambridgeassociates.com/insight/liquid-diversifiers-for-todays-institutional-challenges/

Aleta. (2026). *Family office private equity*. https://aleta.io/knowledge-hub/family-office-private-equity

Altss. (2025). *Best family office databases for 2025: A comparison guide*. https://altss.com/blog/best-family-office-databases-for-2025-a-comparison-guide

Attar, A. (2026). *LPs beware: The "super power law" in venture capital*. The VC Factory. https://thevcfactory.com/super-power-law/

Beesley, C. (2025). *Your guide to family office planning*. Creative Planning. https://creativeplanning.com/insights/financial-planning/consider-family-office-services/

BNY Mellon Wealth Management. (2024). *GFO investment research report 2024*. https://info.bnymellonwealth.com/rs/636-GOT-884/images/GFO_Investment_Research_Report_2024_BNY_Mellon_WM.pdf

Brookfield. (2026). *Understanding the potential of alternative investments*. The Alts Institute. https://privatewealth.brookfield.com/thealtsinstitute/understanding-potential-alternative-investments

Broseta. (2025). *The SOCIMI constitutes a great opportunity to boost the real estate market*. https://www.broseta.com/en/the-socimi-constitutes-a-great-opportunity-to-boost-the-real-estate-market/

Brown, M., Kadam, R., & Klein, K. (2023). *Catalytic capital in impact investing: Forms, features, and functions*. https://impact.wharton.upenn.edu/wp-content/uploads/2023/09/Catalytic-Capital-in-Impact-Investing-Forms-Features-and-Functions.pdf

Cai, F., & Haque, S. (2024). *Private credit: Characteristics and risks*. FEDS Notes. Board of Governors of the Federal Reserve System. https://www.federalreserve.gov/econres/notes/feds-notes/private-credit-characteristics-and-risks-20240223.html

CaixaBank. (2025). *One in three family offices in Spain will be facing a generational shift over the next ten years*. https://www.caixabank.com/en/headlines/news/one-in-three-family-offices-in-spain-will-be-facing-a-generational-shift-over-the-next-ten-years

Calvo Escamilla, M. (2025). *The solidarity tax on large fortunes and its interaction with the wealth tax*. Devesa Abogados. https://www.devesa.law/en/solidarity-tax-on-large-fortunes/

Campden Wealth. (2023). *Global family office report Europe 2023*. *https://www.campdenwealth.com/report/european-family-office-report-2023*

Candriam. (2025). *Private debt: A fixed focus on change*. https://www.candriam.com/en-us/professional/insight-overview/topics/private-debt/private-debt-a-fixed-focus-on-change/

Capital Riesgo. (2025). *Qualitas Energy launches its sixth energy transition fund targeting EUR 3.25 billion*. https://capital-riesgo.es/en/articles/qualitas-energy-launches-its-sixth-energy-transition-fund-targeting-eur-3-25-billion/

Capital Riesgo. (2026). *Fundraising, venture capital, divestment and number of transactions in Spanish private equity surpassed all historical records in 2025*. https://capital-riesgo.es/en/articles/fundraising-venture-capital-divestment-and-number-of-transactions-in-spanish-private-equity-surpassed-all-historical-records-in-2025/

CFA Institute. (2025). *Family offices private equity investment strategy*. https://www.cfainstitute.org/insights/articles/family-offices-private-equity-investment-strategy

CG Capital Europe. (2025). *SOCIMIs outlook*. https://cgcapitaleurope.es/socimis-outlook/

Comisión Nacional del Mercado de Valores. (2026). *Other investment funds*. https://www.cnmv.es/portal/inversor/fondos-otros?lang=en

Chandrashekar. (2025). *Succession planning: Critical flaws to avoid today*. Crescentia. https://crescentia.co.in/succession-planning-critical-flaws-to-avoid-today/

Creand. (2024). *X-ray of Family Offices in Spain: eight questions to understand how they work*. https://creandgroup.com/en/opinion-article/x-ray-of-family-offices-in-spain-eight-questions-to-understand-how-they-work/

Crescenta. (2026). *Tipos de fondos de capital privado: FCR, FIL o FILPE*. https://www.crescenta.com/es/aprende-y-crece/articulo/tipos-fondos-capital-privado-fcr-fil-filpe

Cruz, C., Jiménez, L., & Oliveros, F. (2025). *Single Family Offices for families in business: Wealth creation challenges and strategies*. IE University Center for Families in Business & Fundación Abante. https://static.ie.edu/fundacion/pdf/Informe_Abante_IE_Single_Family_Offices_ENG.pdf

Davis, J. A. (2019). *How three circles changed the way we understand family business*. Family Business Magazine. https://familybusinessmagazine.com/family-offices/family-office-management/how-three-circles-changed-way-we-understand-family-business/

DD Talks. (2026). *Iberian private credit market: Spain & Portugal outlook 2026*. https://ddtalks.com/iberian-private-credit-market-spain-portugal-outlook-2026/

Fagan, J. H. (2026). *Energy in 2026: Why family offices should be paying attention*. Day Pitney. https://www.daypitney.com/energy-in-2026-why-family-offices-should-be-paying-attention

Family Office Advisory. (2025). *Family office alternative investments: Allocation guide*. https://family-office-advisory.com/articles/family-office-alternative-investments-allocation-guide

Family Office Advisory. (2026). *Impact measurement frameworks: IMP, IRIS+, and beyond*. https://family-office-advisory.com/articles/impact-measurement-frameworks-imp-iris-and-beyond

FINTRX. (2020). *The definitive guide to family offices*. https://www.fintrx.com/blog/the-guide-to-family-offices

Fradelizi, G., & Veber, E. (2024). *Private debt as an alternative to bank financing*. Rothschild & Co. https://www.rothschildandco.com/en/newsroom/insights/2024/03/wm-private-debt-an-alternative-to-bank-financing/

Garrigues. (2025). *SOCIMI: True Spanish REIT*. https://www.garrigues.com/en_GB/new/socimi-true-spanish-reit

Godeke, S., & Briaud, P. (2020). *Impact investing handbook: An implementation guide for practitioners*. Rockefeller Philanthropy Advisors. https://www.rockpa.org/project/new-impact-investing-handbook/

Goldman Sachs. (2025). *Adapting to the terrain: Family office investment insights report*. https://www.goldmansachs.com/pdfs/insights/articles/adapting-to-the-terrain/family-office-investment-insights-report.pdf

Iberian Property. (2024). *Alantra partners with a Spanish family office to develop pan-European private debt platform*. https://www.iberian.property/news/market-updates/alantra-partners-with-a-spanish-family-office-to-develop-pan-european-private-debt-platform/

Impact Investing Institute. (2024). *Family offices: A roadmap to impact*. https://www.impactinvest.org.uk/resources/publications/family-offices-a-roadmap-to-impact/

J.P. Morgan Private Bank. (2026). *2026 family office report*. https://privatebank.jpmorgan.com/eur/en/insights/reports/2026-family-office-report

J.P. Morgan Asset Management. (2026). 2026 Long-Term Capital Market Assumptions. https://am.jpmorgan.com/es/es/asset-management/adv/insights/portfolio-insights/ltcma/

Krizo, R., & Lundsgaard, M. K. (2023). *Applying ESG strategies to portfolio optimisation: A comparative study of how varying approaches to ESG can guide investment decisions* [Master's thesis, Copenhagen Business School]. https://research.cbs.dk/en/studentProjects/applying-esg-strategies-to-portfolio-optimisation/

Lai, J. (2024). *How family offices should think about asset allocation?* Schroders Wealth Management. https://www.schroders.com/en-sg/sg/wealth-management/insights/how-family-offices-should-think-about-asset-allocation/

Lumicre. (2026). *Family wisdom*. https://lumicre.com/investments/family-wisdom/

M., L. (2026). *Hedge funds 2026*. Aston. https://aston.ae/hedge-funds-2026/

Masttro. (2026). *Strategies for family offices*. https://masttro.com/es/insights/strategies-for-family-offices

Masttro. (2026). *Family office minimum net worth*. https://masttro.com/es/insights/family-office-minimum-net-worth

Mayoral, N. (2026). *Family office, the new CEO of family wealth*. Do Better by Esade. https://dobetter.esade.edu/en/family-office-wealth

Mercer. (2023). *Private debt marries access with opportunity for insurers*. https://www.mercer.com/insights/investments/portfolio-strategies/private-debt-marries-access-with-opportunity-for-insurers/

Mikulskis, D. (2020). *Have family office allocations changed in 2000 years?* Family Capital. https://www.famcap.com/2020/07/have-family-office-allocations-changed-in-2000-years/

Natixis Investment Managers. (2024). *Next decade investing: The seismic shifts shaping the investment landscape today, and the key trends that will continue to define investor thinking over the next ten years*. https://www.im.natixis.com/content/dam/natixis/website/investments/next-decade-investing/next-decade-investing.pdf

NEPC Private Wealth. (2019). *Direct investments*. NEPC. https://www.nepc.com/direct-investments/

Newell, G., & Marzuki, M. J. (2026). Practice briefing: The significance of real estate in family office portfolios. *Journal of Property Investment & Finance, 44*(2), 187–195. https://doi.org/10.1108/JPIF-03-2026-0062

Oaks Wealth Management. (2026). *The generational wealth transfer myth*. https://www.oakswealthmanagement.com/the-generational-wealth-transfer-myth

Partners Capital. (2023). *Best practices in institutional family office investment management*. https://partners-cap.com/wp-content/uploads/Partners-Capital-Best-Practices-in-Institutional-Family-Office-Investment-Management.pdf

Pozen, R. C. (2026, May 21). You're probably overinvested in bonds. *The Wall Street Journal*. https://www.wsj.com/opinion/youre-probably-overinvested-in-bonds-1a498844

Quantseeker. (2025). *Exploring stock-bond correlations*. https://www.quantseeker.com/p/exploring-stock-bond-correlations

Quigley, C. (2025). *Private client insight: The next decade in wealth – investing beyond the 60/40 portfolio*. The Prudent Speculator. https://theprudentspeculator.com/blog/special-reports/private-client-insight-the-next-decade-in-wealth-investing-beyond-the-60-40-portfolio/

Re:so Insights. (2024). *The unfolding saga of private credit*. https://resoinsights.com/insight/the-unfolding-saga-of-private-credit/

Robeco. (2026). *Positive screening*. https://www.robeco.com/en-us/glossary/sustainable-investing/positive-screening

Romo, J. (2026). *Why reputation is the new capital for single family offices*. Twofourseven. https://www.twofourseven.co.uk/blog/20/4/2026/why-reputation-is-the-new-capital-for-single-family-offices

Roncalli, T. (2021). *Green and sustainable finance, ESG investing and climate risk*. SSRN. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3769378

Rosiers, P. (2025). *Family offices: how are they different? Ghent University.* Scriptiebank. https://scriptiebank.be/file/21267/download?token=g_85BnQ4

RSM. (2025). *Securing the family legacy: Strategies to mitigate generational transition risk*. https://rsmus.com/insights/services/family-office/family-office-generational-transition.html

S&P Global. (2025). *Private markets – A growing, alternative asset class*. https://www.spglobal.com/en/research-insights/market-insights/private-markets

Shafer, B. (2025). *The basics of the 60/40 portfolio*. Investing for Beginners 101. https://einvestingforbeginners.com/the-basics-of-the-60-40-portfolio-bshaf/

Shulman, S. (2025). *"The biggest wealth transfer in history has already begun:" $10 trillion in family office capital signals a new era*. CTech. https://www.calcalistech.com/ctechnews/article/se9runorf

SpainCap. (2024). *Report Venture Capital & Private Equity activity in Spain 2024.* https://www.spaincap.org/storage/documents/2024/09/dprbwBqDXCXcji69JgKt.pdf

Suljanovic, A. (2026). *Family offices boost alternatives exposure*. Investor Daily. https://www.investordaily.com.au/family-offices-boost-alternatives-exposure/

Sundar, S. (2026). *Private credit still earns its place in portfolios with the right approach*. J.P. Morgan Private Bank. https://privatebank.jpmorgan.com/nam/en/insights/markets-and-investing/ideas-and-insights/private-credit-still-earns-its-place-in-portfolios-with-the-right-approach

Sundqvist, H., & Hamilton, D. (2026). *As private credit begins to sway, family offices look for steady ground*. Moody's. https://www.moodys.com/web/en/us/insights/credit-risk/private-credit/as-private-credit-begins-to-sway-family-offices-look-for-steady-ground.html

Terreta. (2025). *Investing in real estate in Spain: should you buy in your own name, through an SL, or a SOCIMI?* https://terretaspain.com/en/investissement-immobilier-espagne-nom-propre-sl-socimi/

UBS. (2025). *UBS Global Family Office Report 2025: all eyes on the global trade war*. https://www.ubs.com/global/en/media/display-page-ndp/en-20250521-global-family-office-report-2025.html

UBS. (2026). *UBS Global Family Office Report 2026: navigating geopolitical shifts and alternative asset allocation*. https://www.ubs.com/global/en/media/display-page-ndp/en-20260528-global-family-office-report-2026.html

Villena, D. (2025). *25 active family offices in Spain*. Venture Capital Archive. https://venturecapitalarchive.com/blogs/25-active-family-offices-in-spain

Vlerick Business School. (2025). *Mastering private assets: Expert insights for family offices*. https://www.vlerick.com/en/insights/mastering-private-assets-expert-insights-for-family-offices/

Wheaton, P. (2025). *How to build a family office structure: The first 100 days blueprint*. Copia Wealth Studios. https://copiawealthstudios.com/blog/how-to-build-a-family-office-structure-the-first-100-days-blueprint

Zest Equity. (2024). *Understanding the J-curve in private markets*. https://www.zestequity.com/blog/understanding-the-j-curve-in-private-markets