

# UBS Family Office Quarterly

A Family Office Solutions publication

Third Quarter 2024



# UBS Family Office Quarterly

A Family Office Solutions publication  
Third Quarter 2024



03

Introduction

Investment outlook



04

Decision time:  
The big questions  
for 2H24 and beyond

**Solita Marcelli**

Chief Investment Officer Americas  
UBS Global Wealth Management

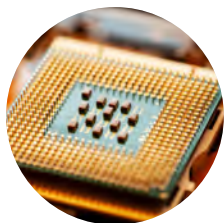
**Daniel J. Scansaroli, Ph.D.**

Head of Portfolio Strategy &  
UBS Wealth Way Solutions, Americas  
UBS Global Wealth Management

**Kiran Ganesh**

Global Head of Investment  
Communications  
UBS Global Wealth Management

Beyond investments



13

AI: Transforming family  
offices into intel agencies

**Igor Jablov**

Founder and CEO  
Pryon

**Dr. Rob Johnston**

Chief Scientist  
Johnston Analytics

Operational



19

Onboarding a family office  
employee for lasting success

**Janet Joyce Arzt, CFA**

Founder and Managing Partner  
Parere Advisory



24

The several C's of family office  
solution sourcing

**Mark R. Tepsich**

Family Office Design and  
Governance Strategist  
UBS Family Office Solutions

Human capital



34

Equity-based compensation  
for single-family office executives

**Patrick J. McCurry**

Partner  
McDermott Will & Emery LLP

In conversation



39

Moving organizations toward  
their North Star

**Leora Zach, CFA**

Client Solutions Specialist  
UBS Family Office Solutions

**Charles Soriano**

Operating Advisor  
Humankind Capital



# Introduction

We are pleased to share the latest *Family Office Quarterly*. In this third edition, we highlight the complexities of the family office environment with insights on how to navigate them successfully. As always, our intention is to continue advancing the family office industry by showcasing leading-edge thinking.

First up, you'll find insights from our Chief Investment Office about how expectations for 2025 will be shaped by a new US president, the continued advance of artificial intelligence and likelihood of the Fed cutting interest rates.

With artificial intelligence top of mind, we examine its role in helping family offices obtain rich data to support decision-making more efficiently and ways they can approach implementing AI in their own businesses.

To support family offices on the operational front, we look at how greater ease can be built into the onboarding process so existing employees can expand into new responsibilities while more efficiently bringing new employees up the learning curve. We also examine how family offices can more successfully address complexity with a framework to guide them in identifying needed functions and thinking through considerations in building their solutions.

Building on these considerations, we look at equity-based compensation structures for family office executives and the role they can play in creating a positive culture of trust and in attracting and retaining talent that is most aligned with their long-term interests.

Our podcast this edition features a conversation with a consumer products executive focused on strategic repositioning, operational transformation and sustainable growth of public, private and private equity-backed international brands. We discuss a proven framework family offices might consider using to guide direct investments, mergers and acquisitions and more.

As the family office industry continues to evolve, we'd love to hear what topics and concerns are top of mind for you. Together, we will continue to learn and adapt while advancing the industry along the way.



**Judy Spalthoff**  
Head, Family Office Solutions



**John Mathews**  
Head, Private Wealth  
Management Americas

Investment outlook

# Decision time

The big questions for 2H24 and beyond



**Solita Marcelli**

Chief Investment Officer Americas  
UBS Global Wealth Management

**Daniel J. Scansaroli, Ph.D.**

Head of Portfolio Strategy &  
UBS Wealth Way Solutions, Americas  
UBS Global Wealth Management

**Kiran Ganesh**

Global Head of Investment  
Communications  
UBS Global Wealth Management

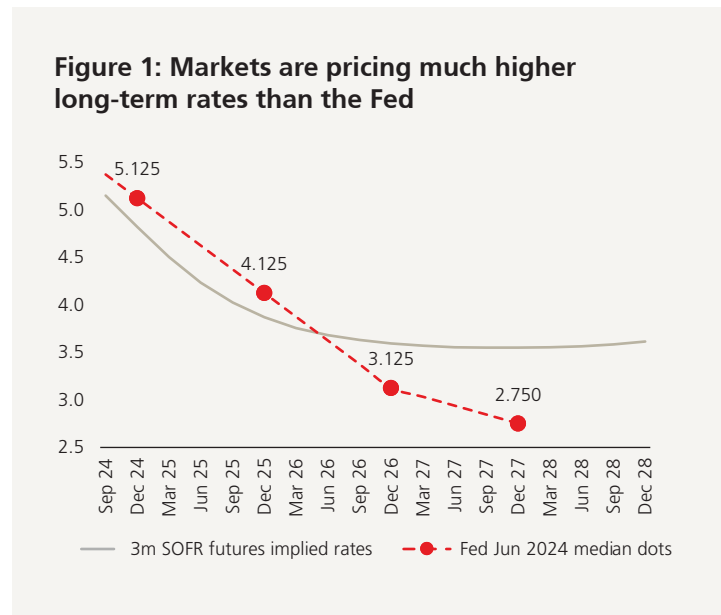
In the first half of 2024, equity markets rallied backed by an artificial intelligence (AI) driven boost, despite persistent US inflation, a delay in the Fed interest rate cut schedule and the 10-year Treasury yield rising 34bps. In the second half of the year, the next president will be selected, AI should continue to advance rapidly and the Fed will likely cut interest rates. For investors, we expect outcomes to be driven by how these events shift expectations for 2025.

We believe that keeping a long-term core allocation to a mix of equities, bonds and alternatives can help investors diversify for various market, policy and geopolitical outcomes. That said, we do see opportunities to take decisive action today to make sure that portfolios are well-positioned for the months ahead. The choices made now will be crucial for successfully navigating the evolving landscape of AI, interest rate changes and the election.

We see opportunities to take decisive action today to make sure that portfolios are well-positioned for the months ahead.

**What is the path for interest rates?**

Our base case is that the Federal Reserve will make two 25bps cuts this year, with the first in September. We then expect the Fed to follow with 100bps of further cuts in 2025, leaving rates at 3.75%–4% by the end of next year.

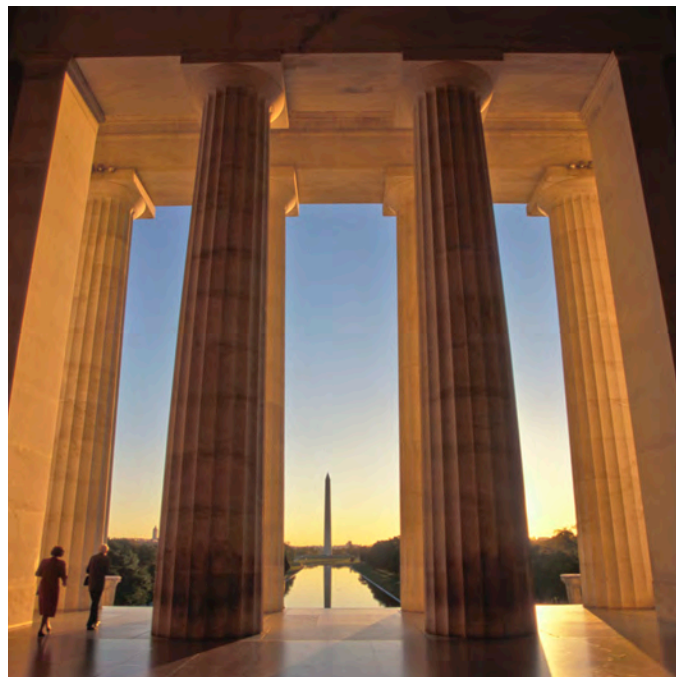
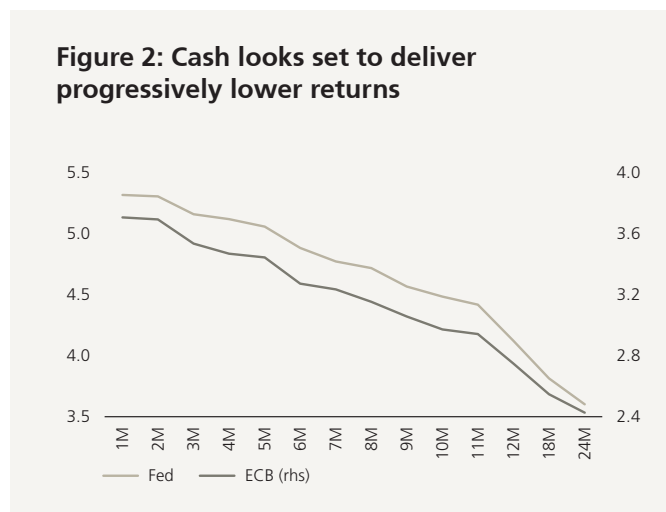


At this stage, it is not clear whether there will be a full return to pre-pandemic norms, when growth, inflation and rates were all much lower. But as the Fed begins to reduce rates, and as growth and inflation continue to slow in the second half, we think that markets will start to focus more on the end point of the rate-cutting cycle and price a lower level of long-term interest rates.

In our base case, we forecast the 10-year Treasury yield to fall to 3.85% by the end of the year and to 3.5% by end-March 2025, from levels of around 4.2% today. We like medium-duration bonds with a maturity up to 10 years, as we think concerns about the high US debt burden and loose fiscal policy may pose a risk for longer-duration bonds.

## Position for lower rates

**Manage liquidity.** Current returns on cash will not be available for much longer if central banks continue to cut rates. Investors holding cash or money market funds (or those with expiring fixed-term deposits) need to manage their liquidity accordingly. For expected cash requirements over the next one to three years, we think Investment Grade, Treasury and municipal bond ladder strategies can help investors retain attractive yields. For cash currently earmarked for longer-term spending needs, investors should consider structured investment strategies that provide exposure to market gains alongside a degree of capital preservation.



**Buy quality bonds.** Investors could also deploy cash into high-quality corporate and government bonds, which have attractive yields and the potential for capital appreciation if markets start to price deeper rate cuts. This also applies to sustainable investments into green, social and sustainable bonds, as well as those issued by multilateral development banks. We prefer medium-duration bonds with a maturity up to 10 years, as we think concerns about the high US debt burden and loose fiscal policy may pose a risk for longer-duration bonds. In our base case, we see the 10-year US Treasury yield falling to 3.85% by the end of this year, from around 4.2% at the time of writing. High-quality bonds currently offer a high degree of positive convexity. If the 10-year Treasury falls to our target by year end, we expect a total return around 5.5%, while it would take more than a 35bps rise in yields to create mark-to-market bond price losses to have a negative return after this year's remaining coupon payments.

**Diversified fixed income strategies.** A combination of lower interest rates and still-positive economic growth should also be supportive for diversified fixed income strategies. And complementing core quality bond holdings with satellite exposure to riskier credits, such as agency MBS and emerging market bonds, can improve overall portfolio yields. Selectivity and diversification are important, given tight investment grade and high yield spreads and potential idiosyncratic risks. Active approaches may offer higher potential returns thanks to their ability to take risk-controlled exposure to higher-yielding parts of the fixed income market, which may be harder for individual investors to achieve.





## Will AI justify the hype?

More than 18 months on from the launch of ChatGPT, increasing conviction in the AI growth outlook has continued to drive equity market gains. Microsoft, NVIDIA, Apple, Alphabet, Amazon and Meta alone have contributed 64% of the global equity market's gain (in total return terms) since then. In June, chipmaker NVIDIA became the largest listed company in the world. And 40% of S&P 500 companies cited "AI" in their first-quarter earnings calls, according to FactSet data.

But will AI justify the hype? To answer that question, we think it's helpful to look at the AI value chain's three layers: an enabling layer (including semiconductors, cloud, data center and power supply), an intelligence layer (including large language models) and an application layer (companies offering AI services for specific use cases, e.g., copilots, coding assistants).

Eventually, each layer needs to create enough economic value to "pay for" the costs of the preceding layer. So, as we assess the evolution of the industry, we will need to keep comparing the monetization potential of the application layer with the costs of the enabling and intelligence layers.

Where do we stand today? Currently, significant investments are being made in the enabling layer. Microsoft, Alphabet, Meta and Amazon are estimated to make capital expenditures of around USD 200 billion this year—a 35% increase over 2023—according to FactSet consensus.

But to justify a capex build-out of this size, AI use cases need to materialize at scale. The potential is large, including in applications like advertising, customer service,

personal and coding assistants, R&D, cybersecurity and more. So far, though, the development of AI-linked revenue streams is relatively limited.

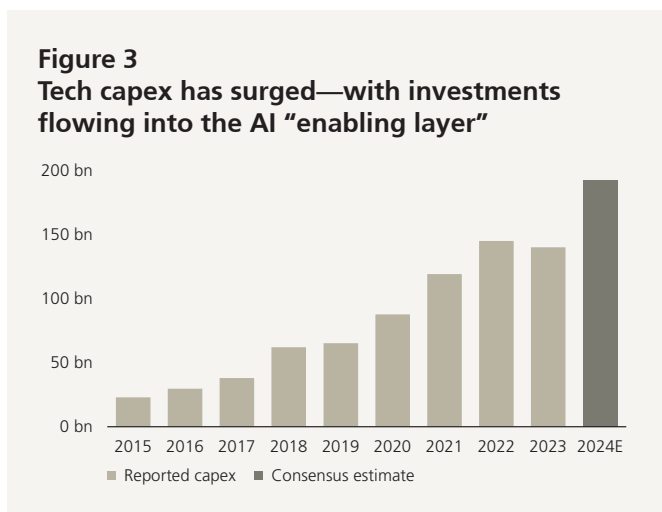
How do we expect it to evolve? In our base case, we expect robust capital investment in AI to continue in the coming months as companies race to bolster their AI capabilities. We think this trend will continue to drive strong earnings growth for the recipients of that investment—i.e., companies in the enabling layer of the value chain. For example, we expect earnings for the global semiconductor industry to increase 50% this year and 25% in 2025. And as the AI ecosystem grows, we believe annual capex for the enabling layer could reach USD 331 billion by 2027.

The risk scenario to monitor over the coming months is if a lack of material model advancements, muted consumer and business uptake, and/or new innovations that change competitive dynamics or require less computing capability could lead to market fears about a capacity glut in components like graphics processing units, custom chips or memory. This could be a particular risk for companies that operate only in single layers of the value chain and cannot trade off margin in one layer for another.

We expect robust capital investment in AI to continue in the coming months as companies race to bolster their AI capabilities.

## Seize the AI opportunity

**Get your portfolio “AI-enabled.”** The market potential of AI is vast, and we expect AI to be a key driver of equity market returns over the coming years. We think it is important that investors hold sufficient long-term exposure to AI. Many investors have built at least some exposure to AI over recent months. Yet the sheer pace of growth in the industry means that many investors remain under-allocated overall. Some of the largest tech companies have comparable weightings to certain country equity markets. For example, in the MSCI AC World benchmark index, the allocation to two of the largest AI leaders alone is roughly equivalent to that of the UK, China and Switzerland combined.



**Position in the enabling layer.** While there is a risk that fears about overcapacity in the enabling layer could trigger volatility, the segment is currently benefiting from strong rates of investment and, in our view, currently offers the best mix of attractive and visible earnings growth profiles, strong competitive positioning and a reinvestment runway. We favor the semiconductor companies that are driving the investment in AI infrastructure at the data center and at the edge. Investors concerned about potential volatility ahead can consider structured strategies with capital preservation features.

**And position in the megacaps.** We believe market concentration is a feature of the new AI investment landscape. Over time, we expect the AI market to be dominated by an oligopoly of vertically integrated “foundries” and monolithic players along the value chain. So, alongside semiconductors, we also think investors should position in the oligopolies that are present across the entire technology stack, covering chips, cloud computing and generative AI models and applications. We think these companies will be well-positioned to navigate potential shifts in the competitive landscape in different parts of the value chain.

**It’s not just about the US.** The biggest beneficiaries of the AI rally so far have been in the US. But China’s tech monoliths have been left behind in the rally and are still trading at similar valuations as they were prior to the launch of ChatGPT. Fears about tariffs, export controls, local regulations and weak market sentiment have all contributed. Yet China’s largest tech companies are also investing heavily in AI. And ultimately, we expect China to develop an AI ecosystem that is distinct from that in much of the rest of the world. This should lead to significant monetization potential for China’s AI giants.

We expect the AI market to be dominated over time by an oligopoly of vertically integrated “foundries” and monolithic players along the value chain.



## What will the next US administration mean for markets?

On 5 November, voters will decide the outcome of the first US presidential rematch since 1956. The latest polls give Trump a slight lead. But a significant proportion of voters is undecided. And the ability of either presidential candidate to pursue a robust legislative agenda in 2025 will also depend upon the outcome of the congressional races.

The upcoming election looks set to increase market volatility. We can already identify a distinct “kink” in the VIX futures curve around November, indicating expectations of higher equity volatility around the election day.

We assign a 45% probability of a “red sweep” scenario of a Trump victory and Republican control of the Senate and House; a 40% probability of a Biden victory with a divided Congress (Republican-controlled Senate, Democratic-controlled House); a 10% probability of a “blue sweep” (Biden victory and Democratic control of the Senate and House); and a 5% probability of a Trump victory with a divided Congress. But the key takeaway at this stage is that the outcome remains uncertain, and no single outcome can be considered as “likely.”

It’s important to remember the principle that investors should vote at the ballot box and not with their portfolio. Getting market and economic calls right is usually challenging enough, without adding an uncertain political dimension on top. However, while we don’t recommend mixing politics and investing, the election will impact markets and government policy. We therefore think it is prudent for investors to consider the potential risks to their wealth and manage those risks accordingly.

The election will impact markets and government policy. It is prudent to consider the potential risks to their wealth and manage those risks accordingly.



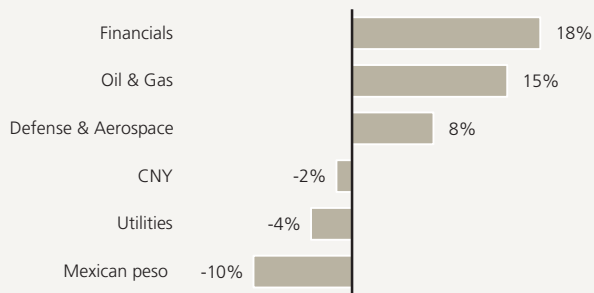
## US election scenarios

	Blue sweep	Biden/GOP Senate/ Dem House	Red sweep	Trump/GOP Senate/ Dem House
<b>Macro impact</b>	Overall economic impact likely to be smaller than in Biden's first term. Taxes on higher-income households would rise. Modest negative for economic growth. Disinflationary impact, leading to somewhat larger Fed rate cuts.	Smaller impact than the blue sweep scenario. Taxes on higher-income households could rise, but by less than in a blue sweep scenario. No corporate tax hikes, but more stringent regulatory oversight. Relatively neutral for growth, inflation and Fed policy.	Overall economic impact should be positive, given likely lower taxes. But inflationary pressure could increase on fiscal expansion and impact of higher tariffs, resulting in fewer Fed rate cuts. Increased trade tensions and higher fiscal deficit likely.	Overall economic impact should be positive but less than in red sweep scenario. Tariffs still add to inflationary pressure, making it more difficult for Fed to cut rates aggressively. Increased trade tensions and higher fiscal deficit likely.
<b>Rates and USD impact</b>	Yields decline led by the front end. The yield curve normalizes and returns to an upward slope given lower inflation and growth and larger Fed cuts. Slightly negative for USD.	Neutral impact on Fed policy means that the USD and yields are likely to be range-bound. Move in yields will be due to the lagged impact of Fed policy during 2022–23.	Expectations of a red sweep could push yields higher at the back end of the yield curve on concerns over loose fiscal policy and a rising debt burden. USD may rise initially, but more limited fiscal headroom and an already overvalued dollar likely to temper this impact. Higher deficits also a longer-term USD negative.	Yields and USD initially rise modestly on reduced rate cut expectations. But Fed still able to deliver cuts while higher deficits and trade tensions could later undermine the dollar.
<b>US equity market impact</b>	Slightly negative impact on equity market due to possible increase in corporate tax rates and potential for greater regulatory oversight.	Neutral to slightly positive for stocks. Similar to the status quo, so likely minimal impact on equity market.	Modest positive equity market impact on less regulation, potential for more M&A and possibly lower corporate tax rates. But higher tariffs and inflationary pressures would be offsetting headwinds.	Neutral: Mixed equity market impact. Less regulation and potential for more M&A would be supportive, but higher tariffs, and inflationary pressures would be headwinds.

## Prepare for the US election

**Equity sectors.** The US election is likely to trigger volatility, and we think investors should manage risks accordingly. In equities, the US consumer discretionary and renewables sectors would be at risk in a “red sweep” scenario. We would see more potential upside in financials in that scenario. Investors should consider strategies to help hedge risks in sensitive stocks and sectors. We also think that gold can act as an effective hedge against fears of geopolitical polarization, inflation or excessive deficits. We also recommend investors to tilt toward the financial sector. We think the financial sector is currently not pricing the potential for lower regulation that could materialize under a “red sweep” scenario.

**Figure 4: The 2016 presidential election led to divergent outcomes**



**Defensive structured investments.** We have identified a series of stocks across sectors that would likely be affected by a Trump or a Biden victory. To help manage the potential volatility associated with the outcome, strategies that investors can employ for single stocks or cyclical sectors like energy, industrials and financials include capital preservation strategies or yield-generating strategies. In addition, vanilla put options, more exotic lookback options or dispersion strategies can be considered on the stocks we have identified. Options are not suitable for all investors, and trading in these instruments is considered risky and may be appropriate only for sophisticated investors. For more information, please see the Options disclosure in the disclaimer at the end of this document. Additionally, investors may not be able to implement these option strategies depending on their location.

**Gold.** We also think gold represents an interesting opportunity and have lifted our stance on the asset to most preferred. Concerns about geopolitical polarization, inflation, the US fiscal deficit and Fed independence could all help gold prices. In our base case, we forecast gold prices rising to USD 2,600/oz by the end of the year and USD 2,700/oz by mid-2025, driven by political uncertainty and by continued central bank buying.

## What role should alternative investments play in your portfolio?

As demonstrated in the recent *UBS Global Family Office Report 2024*, the average US Family Office in the survey holds 59% of their allocation to alternatives with a mix of private equity, debt, real estate and hedge funds. Including alternative assets in a well-diversified portfolio can help investors navigate a shifting interest rate, technological and political backdrop.

### Infrastructure

Infrastructure-linked assets have shown resilience to macroeconomic and interest rate pressures while benefiting from policy and structural tailwinds. According to preliminary Cambridge data, infrastructure investments returned on average 9.13% in 2023.

### Private equity

The private equity (PE) industry continues to adjust to the macroeconomic environment of elevated interest rates. Data for the first quarter of 2024, however, indicate a turning point is nearing. PE valuations seem to have found a bottom while public equities have continued to become increasingly expensive. Private transaction activity, while down in dollar value, is picking up in deal count. Deal realizations have yet to build more momentum, but we think conditions are there for an acceleration in the coming quarters.



## Private credit

Direct lending delivered positive returns in 2023, driven by high current income and only moderate realized losses. Anecdotal evidence suggests a continuation of this trend in the first quarter of 2024, with around 2%–3% returns for the quarter.

We estimate that including a 30% allocation of alternatives in a balanced portfolio could increase expected annual returns by over 100bps per annum over the long term, with 125bps less volatility. Investors should note that alternatives come with a unique set of risks, including lower liquidity and lower transparency.

For more insights into private market trends and views, please read our [Private Markets Quarterly Update](#).

## Hedge funds

The current conditions look ideal for active management, in our view, as the outlook for rates, AI and elections around the world is likely to lead to market dislocations. In addition, in a market where stocks and bonds could periodically move together amid rates and inflation volatility, we think hedge funds can be a good portfolio diversifier. We see an enhanced value proposition for hedge fund investing in the current market environment.

## Explore more



For more insights into our views on the election and potential investment implications, please visit [ubs.com/ElectionWatch](https://ubs.com/ElectionWatch).



To stay up-to-date with in-depth reports and market commentary from the UBS Chief Investment Office, please visit our [Investment research site](#).

## Solita Marcelli

Solita is Chief Investment Officer Americas for UBS Global Wealth Management, where she oversees both the CIO Research and Investment Solutions businesses, with over USD 1.5 trillion in total invested assets. Frequently featured on CNBC, Bloomberg and *The Wall Street Journal*, Solita is a member of the Aspen Global Leadership Network and the Global Advisory Council for the Wilson Center. Solita holds an M.B.A. from the Stern School of Business at New York University and a B.A. in economics and history from Brandeis University.

## Daniel J. Scansaroli, Ph.D.

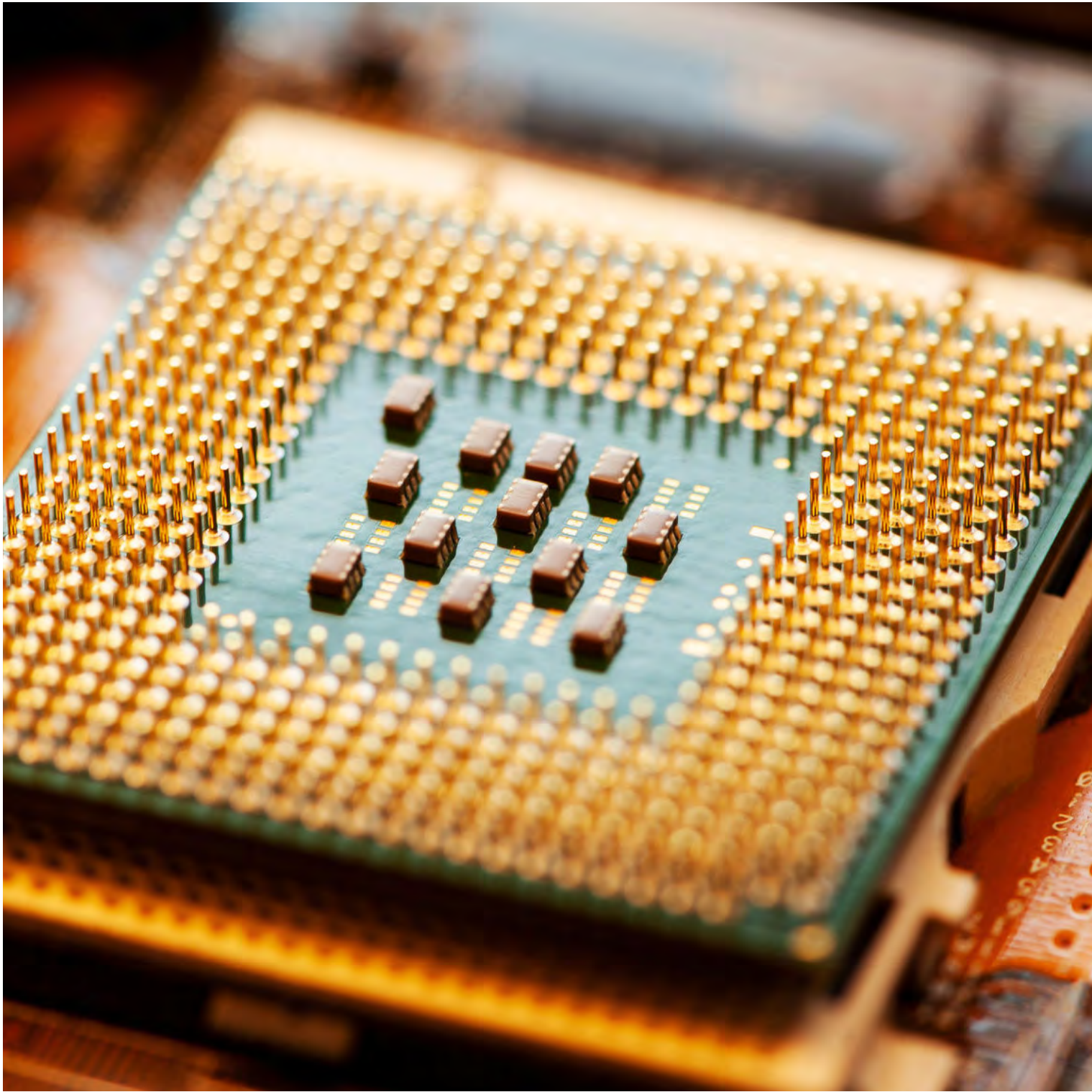
Daniel is a Managing Director and Head, Americas Portfolio Strategy & UBS Wealth Way Solutions, for UBS Global Wealth Management. Dan leads research and advises individuals and institutions on asset allocation, goals-based investing, private markets and hedge fund investing strategies, as well as portfolio/risk management. Dan holds several degrees from Lehigh University, including a doctorate (Ph.D.) in industrial/financial engineering, an M.S. in applied mathematics, an M.S. in management science and a B.S. in mechanical engineering.

## Kiran Ganesh

Kiran is a managing director and Global Head of Investment Communications for UBS Global Wealth Management. Kiran is editor-in-chief of the CIO's annual outlook, appears regularly in financial media, including CNBC, Bloomberg, the *Financial Times* and *The Wall Street Journal*, and has previously been named as one of *Forbes* Europe's 30 Under 30 in Finance and a Future Leader by the Institute for International Finance. Kiran holds a first-class honors degree from Imperial College London in mathematics with statistics for finance, an Executive M.B.A. with Distinction from Columbia and London Business Schools, and is a CFA charterholder.

Beyond investments

# AI: transforming family offices into intel agencies



**Igor Jablov**  
Founder and CEO  
Pryon

**Dr. Rob Johnston**  
Chief Scientist  
Johnston Analytics

To survive and thrive through this decade and beyond, family offices need to think of themselves less as financial overseers and more as intelligence agencies serving their principals. A series of benchmark reports indicate not only the continued growth of family offices, but also trends that may lead to new directions for artificial intelligence (AI) as well as knowledge management.


## Current state of affairs

Generational changes in family office composition and leadership are driving a shift in family office investment strategies, from a focus on growing wealth to preserving wealth and increasing tax efficiency. This is especially true as family offices find themselves operating in a more adversarial environment with higher velocity changes in the underlying economy. Hand-in-hand with this shift is an emphasis on sustainability and socially responsible investments, as well as technology innovation via venture capital investment. Quantitative data based on family office surveys help identify these trends; however, we lack the qualitative data that would help us understand why these strategy changes are being made.

Historical data is one potential source of this qualitative data—data that includes not only what but also why decisions were made. While it doesn't have the same objectivity as quantitative data, historical data is more personal and reflects the environment of a particular family office. The richness of this type of data provides a context for understanding:

- The motivation behind investment strategy decisions
- How these decisions were viewed
- What successes and challenges were involved
- Who influenced the decision-making

Combining these very different (qualitative and quantitative) data in a way that can be useful in decision-making is an arduous, labor-intensive task. AI can mitigate two of the greatest stressors family offices will face by helping take temporality out of managing portfolios for faster reaction times while at the same time meeting the scale of signals that need to be processed.

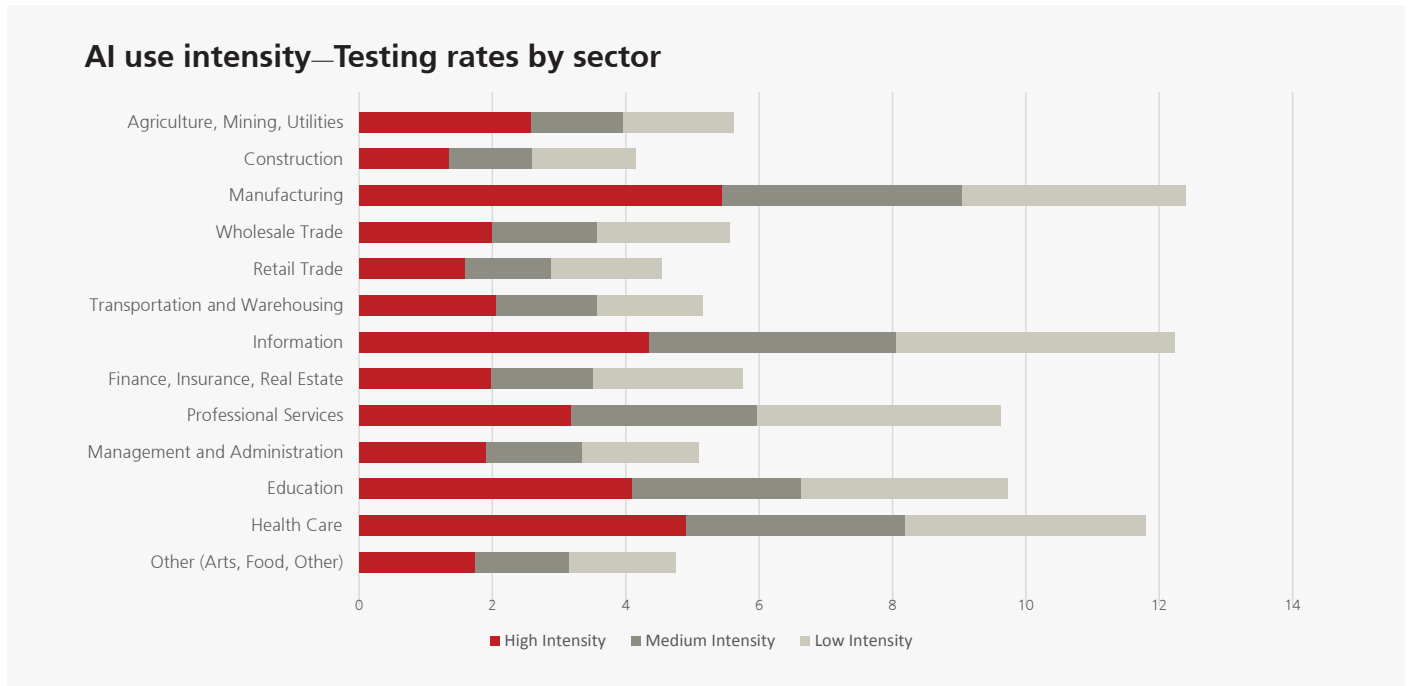


AI can help take temporality out of managing portfolios for faster reaction times while at the same time meeting the scale of signals that need to be processed.



## Adoption or disruption

As the chart shows, AI is top of mind in varying degrees for nearly every business sector, including family offices. Large-scale hedge funds and private equity firms are already recalibrating the totality of their portfolios, rescoring their holdings and evaluating how AI will impact their ventures' outcomes: accelerate them, have a neutral impact or severely hamper them.



While family offices may be considering whether they want to invest in AI start-ups, they also need to think about how to implement AI in their own businesses. This is the future challenge leading each business to consider three main options:

- Use AI for everything?
- Don't use AI at all?
- Use AI selectively according to our specific needs and workflows?

The everything path is self-explanatory, and can lead to chaos and poor decisions or serendipitous successes, many of which may be hard to assess.

The path of not using AI has some very real long-term consequences for family offices. They may not be able to remain competitive without using AI for internal business processes and external economic, financial and investment data. Family offices that have little experience using AI in some form may also have difficulty benchmarking their own potential AI investments.

This leaves the selective path. Conventional wisdom says that the selective path, while possibly not as creative as the everything path, will likely lead to measurable outcomes, especially regarding the effectiveness of the intended use. The selective path seems to be the wiser choice, but how does a business determine the need for AI support and then how do they implement it?

83%

Generative AI was the most popular investment theme among family offices surveyed for the *2024 Global Family Office Report*. 83% of US family offices stated they are likely to invest in AI. See the report for more insights from our comprehensive analysis of 320 single family offices across seven regions globally.

[Download the report](#)



## Considerations around selective implementation

In considering the selective path, family offices will need to address the potential security risks AI poses. As with any networked information system, there are potential security risks in using AI, but some are specific to AI. AI “hallucinations” are a common and well-founded concern. Family offices need to know how the AI was designed, the model it uses and how it changes over time as the data grow. Specifically, the family office needs to know how the AI is designed to interact with data and how those interactions impact how and what the AI model learns.

In addition to potential security risks, family offices will need to think through how and where to implement AI for the greatest positive impact to the business. This is not necessarily the purview of an in-house IT team, whether the business is large or small. So, we look to the experts, preferably those who speak in terms that allow business owners and decision-makers to connect AI capabilities to their own business operations. What are those experts saying?

Family offices, large and small, need to identify processes in the business that tend to bog down or disrupt the workflow. They then must determine if the acquisition of additional data would benefit further analysis and improvement of a particular process. It may be that an existing body of information needs better organizing to support ongoing improvement.

Family offices will need to think through how and where to implement AI for the greatest positive impact to the business.

Family offices could look to capture the history of processes and decision-making that inform the onboarding of new employees, integrates or changes policies, and is relied on when making critical decisions linked to long-term business success. AI can support each of these kinds of requirements for businesses small and large. Ultimately, successful AI implementation relies on a thoughtful and strategic approach.

## The importance of the AI platform

At the core of selective AI implementation is something called an “AI platform” (AIP) or “knowledge cloud.” Simply put, these are compilations or libraries of all, or nearly all, the internal data a business has or needs to function effectively, housed in an accessible platform. Ideally, the AIP is customizable and generally consists of information related to specific activities, businesses or operations. It could be agnostic to the human languages that are authored or recorded into it, work with any system of record internal or external to the family office, and support any content type.

For example, Family Office “X” has an AI platform that contains traditional business operational information, i.e., data related to sales, HR, operational policies, profit and loss, compliance with government requirements, etc. The Family Office “X” AI platform also contains investment portfolio data, strategic management data, tax efficiency data, as well as historical data, i.e., how and what decisions are made about business development, sales, investments, policy determination and implementation, succession planning, etc.

When the AI platform is populated with all the pertinent data, a human-machine interface such as a text-based chatbot or an Alexa-like voice interface helps the user address problems ranging from specific workflows (How do we do it? How did we do it in the past? How can we do it better?) to business development (What kinds of

opportunities should we be looking at based on our capabilities and track record in various past endeavors?).

This ongoing learning process can provide meaningful insights, based on proprietary Family Office “X” data, in a manner that is more complete and much less of a burden on resources than having humans sort through spreadsheets, internal messaging and social media, and any manner of documents. An added benefit to the AI platform is that it is the Family Office “X” repository for knowledge management and lessons learned—assets that are too often underappreciated.

Knowledge management is sufficiently critical that the American Medical Association, Central Intelligence Agency, Department of Defense and National Aeronautics and Space Administration, among many others, employ knowledge management and lessons learned processes to improve decision-making and human performance, as well as to increase the overall professionalization unique to that organization. Equally important, the AI platform is continually being optimized as new insights informed by AI-aided actions are evaluated and efficiently integrated with existing lessons learned, adding to the breadth and depth of the AI platform’s knowledge base. The Family Office “X” AI platform captures the actions, processes, decisions, trends, changes and outcomes to help make future predictions, identify outliers and reimagine risk.

## Clear sailing ahead

When faced with the idea that more meaningful data is a good thing for family offices, questions remain, including:

- Where and how to begin such a digital transformation?
- How to collect data in useable formats from across the business where it often exists in disparate forms and for different uses?
- What can family offices expect to derive from it?
- How can family offices grow and protect it?

The mystique surrounding AI can get in the way of answering these questions. Quite simply, AI is a tool that takes the pain out of amassing and analyzing data. This

frees analysts, managers and others to engage in higher-level analysis and informed decision-making. It also creates more data-rich environments that can include important factors that may not have been possible with traditional analysis using spreadsheets, etc. The key to determining an implementation strategy is to understand the specific needs of an individual family office as well as the relative strengths of this powerful tool, and then committing to using it for maximum benefit.

Quite simply, AI is a tool that takes the pain out of amassing and analyzing data, freeing staff to engage in higher-level analysis and decision-making.





Like any innovation, some behavioral change and paradigm shifts are required, but the gains in the diversity of analyses and capture of historical, operational and local data that could otherwise be lost or disregarded are a powerful motivator for adoption. We are on the cusp of a revolution where the promise of Admiral John Poindexter's vision of total information awareness is not only possible but also practical. Family offices will be able to generate a knowledge cloud to monitor themselves and their portfolios in a way never before possible. This fabric will support global visibility because it is agnostic to different languages that authored the content. Whether from external or internal sources, it will not matter what media the data is in, whether audio, images, text and/or video. It will produce sub-second responses to end users' queries, trigger complex multi-hop workflows, and automata will monitor for emergent risks. The family offices that transform themselves in these ways will be able to navigate to the end of this turbulent decade and beyond.



### **Igor Jablov**

Igor is the Founder and CEO of Pryon, a private company at the intersection of artificial intelligence and knowledge management. Named an "Industry Luminary" by *Speech Technology Magazine*, he previously founded industry pioneer Yap, the world's first high-accuracy, fully automated cloud platform for speech recognition. After its products were deployed by dozens of enterprises, the venture became Amazon's first AI-related acquisition. The firm's inventions then served as the nucleus for follow-on products such as Alexa, Echo and Fire TV. Previous to that and as a Program Director at IBM, Igor led the team that designed the precursor to Watson and developed the world's first multimodal web browser.

### **Dr. Rob Johnston**

Rob is a computational social scientist specializing in technology and national security. Rob is the Chief Scientist at Johnston Analytics, a Distinguished Visiting Scholar in the School for Public and International Affairs at North Carolina State University (NCSU) and a former Research Scholar at the Laboratory for Analytic Sciences (a National Security Agency partner Laboratory) at NCSU, where he focused on the intersection of artificial intelligence and social science for understanding the mechanisms of learning, cognition and decision-making. Prior to this Rob was the founder and the first Chief of the Lessons Learned Program at the Central Intelligence Agency (CIA), the Director of the Lessons Learned at the Office of the Director of National Intelligence and a research scientist in the Office of the Chief Scientist at CIA.

### **References**

Campden Wealth Limited and Royal Bank of Canada, *The North America Family Office Report 2023*. Campden Wealth Limited, 2023.

McElheran, Kristina, J. Frank Li, Erik Brynjolfsson, Zachary Kroff, Emin Dinlersoz, Lucia Foster and Nikolas Zolas, "AI adoption in America: Who, what, and where." *Journal of Economics & Management Strategy*, 2024.

Staff, Academy of Programs/Project and Engineering Leadership, *Government Brief: Extraordinary Lessons*. NASA APPEL Knowledge Services, June 14, 2011, Vol. 4, issue 4.

Operational

# Onboarding a family office employee for lasting success




**Janet Joyce Arzt, CFA**  
Founder and Managing Partner  
Parere Advisory

Even long-established family offices often operate like start-up companies in usually having few employees, each of whom must wear many hats. The flexible and dynamic nature of a family office can be beneficial in the long term because it allows employees to adapt quickly as the family's needs change—especially compared to a traditional corporate environment. However, it may also lead to staffing issues that can create bottlenecks just when that same dynamic flexibility is needed most.

As the family office develops, existing employees may transition into new roles and new personnel may be hired. The head count often lags behind the company's growing complexity, especially when unexpected developments arise, such as the sale of a key asset, unanticipated market movements or even a change in the makeup of the family itself. Few offices have formal employee training programs, and recently promoted senior staffers may find it hard to make time to train the people replacing them. This creates a "sink or swim" environment for new team members.

Family offices can ease the onboarding process by creating an environment that allows existing employees to expand their responsibilities while more efficiently helping new ones up the learning curve, so they feel comfortable and confident from the start. This kind of positive reinforcement sets the stage for the office to thrive and sustain itself across familial and generational transitions. Here are a few tips to smooth the way.



Family offices can create an environment that allows existing employees to help new ones up the learning curve more efficiently.

## Onboarding checklist

A checklist can take a complex, multifaceted role and break it down into navigable steps. It can also decrease or eliminate the need for shadowing existing team members, freeing up time that those employees or family members can devote to other responsibilities.

A checklist should start with the "who"—an at-a-glance list of family members, board members and office staff and their roles or relationships. In addition, new employees should meet as many relevant players as possible, as quickly as possible. This will help them feel part of the team immediately, put faces to names, and understand the hierarchy when they are approached



with questions or ideas. Families often have extensive and complex entity-ownership structures, so the checklist can also include an organizational diagram showing which assets each family member or entity owns and any additional underlying activities. If you have one on file already, revisiting it to ensure it is accurate and easy to follow is a good exercise before the employee's start date.

Your checklist should also include a category for relevant third parties and service providers. Onboarding new employees with third-party providers can sometimes take weeks to set up, because each provider will likely have a different process for accessing and communicating with new employees.

## Onboarding new employees with third-party providers

An outside provider will likely ask what types of communication or levels of permission the new employee should be able to access, so we recommend asking for an overview of the provider's current communication process to review and assess accordingly. A bank, for example, may send a checklist of capabilities such as who from the family office currently has access to account statements and permission to send wires, while a law firm may provide a list of legal entities with corresponding lists of managers for each entity. To allow access to third-party communications, some providers may require signatures from members of the family or staff, while others may request certain forms of identification from a new employee before they can access certain communications.

Starting with the third party's current process lets you confirm that the current information they have on file is correct while also providing you with a template for adding new employees to those communications. Completing this onboarding process before the new hire actually starts work can lessen frustration and help them hit the ground running.

When giving an employee access to communications, make sure they are listed as an additional interested party. Adding parties rather than replacing existing ones will ensure your office continues to receive all the necessary information from each vendor. This redundancy will also indirectly support the new employee as they learn how to obtain and review various communications from outside providers.



## In-house onboarding

Ideally, family office onboarding—both in-person and virtual—should also be addressed before the new employee starts. In terms of technology, some family offices may have a dedicated IT professional or shared IT resource across the family's other businesses, and others may outsource the IT function completely. Whichever path the office takes, the primary point of contact should maintain an onboarding IT checklist that is reviewed annually or whenever significant changes are made to the office technology. It should include everything from how the employee will access the server to which files he or she will need to access, and it should include remote-access capabilities. If cybersecurity isn't a priority for your family office, you should make it one as soon as possible. All new employees should attend a mandatory cybersecurity training program on their first day of work.

Besides ensuring new employees are able to use technology right away, it is important to make new employees feel welcome by taking a few minutes to go over the family office culture with them. Do family members ever visit or work out of the office? How do the staff communicate with them when they are present? Is information shared across family members?

Existing employees conform to the office culture regarding such "soft" activities without even thinking about it, but if a new person unknowingly violates the family norms they may be judged unfairly. Start a list of social expectations and add to it as things occur to you, so that you're prepared when a new employee starts.

## Maximize participation

Including new employees in as many meetings and calls as possible—if the information is not sensitive, of course, and everyone’s schedule permits—is a great way to train through osmosis, increasing the employee’s exposure to the interactions and responsibilities of the broader office. This will also help to remind any outside service providers who attend those meetings of the employee’s role and that they should be included in communications.

Also be sure to let the new hire know if there are any traditions such as board meetings, family member birthdays or other events so that he or she is aware. We typically recommend a shared office calendar for all family and officewide meetings and events so that no one is inadvertently left off the invite list.

## Create diagrams and flow charts

Work process flow charts that clearly outline how to complete certain tasks, such as opening a legal entity or approving an outgoing wire, are another efficient training tool that new employees can reference, freeing up family members and existing employees to focus on other duties. Furthermore, if a new employee has a question about a specific task, he or she can reference the diagram before seeking assistance, which can lead to a more efficient and productive problem-solving conversation.

Work process flow charts that new employees can reference help free up family members and existing employees to focus on other duties.

These process charts do require some up-front work, but they can act as training programs and ease the onboarding process for years to come. They may also reduce the likelihood of process errors in the future as they act as checklists that an employee must follow to complete a specific task, as opposed to reciting each step from memory.

## Lay out a “first 90 days” framework

According to Michael D. Watkins, a professor at the International Institute for Management Development in Lausanne, Switzerland, the first 90 days may very well determine an employee’s performance, longevity at the company and long-term contributions. While Watkins’s 2013 book, *The First 90 Days: Proven Strategies for Getting Up to Speed Faster and Smarter*, tends to focus on ways employees can maximize this initial time frame, there are also ways employers can boost their impact during



---

# 66%

Two-thirds (66%) of family offices only employ up to 10 members of staff (with 20% just employing up to three), typically not enough to carry out the full gamut of services from investment through to bookkeeping, philanthropy, tax and lifestyle support. Our *2024 Global Family Office Report* also revealed that at least one employee is a family member in 72% of family offices surveyed. See the report for more insights into single family offices worldwide.

[Download the report](#)

---

this period, ensuring that by the end of the 90 days, a new employee has a holistic view of the family, a good understanding of office politics, and a firm grasp on his or her responsibilities.

We also recommend categorizing the employee's responsibilities by function and listing them in order of priority. Not forcing new employees to learn all topics simultaneously can help them develop a clear and thorough understanding of each. Within each category—for example, bill pay, bank balance reconciliation, financial statement production—list the existing systems and processes that the new employee needs to learn. The goal should be that by the end of the 90-day period, the new hire will be adequately familiar with each of these systems and processes. The new employee can also spend that period understanding the desired outcomes for each area and even develop his or her own process to present to the family and staff based on this familiarization exercise.

The order of priorities may shift throughout the initial 90-day period, as the inevitable fire drills arise and the employee may get pulled in different directions by the family members and office staff. This is reasonable to expect given the nature of family offices and the issues they face. Even if the new employee temporarily veers off the framework, having a schedule in place will remind everyone on the team of the set priorities.

## Ask for feedback early and often

We recommend informal weekly check-ins with new employees during the first 90 days. While it is easy to schedule these check-ins at the end of each week, be mindful that at 5 p.m. on a Friday, no one has the focus or energy for a fruitful conversation. A check-in breakfast or lunch can be an effective alternative to a meeting, as it allows for an informal conversation and culture-building while also giving you and the employee undivided attention for asking questions and receiving feedback. For remote or hybrid employees, we recommend video calls for these conversations, ideally early in the day before everyone's plate is full.

Carving out time for these check-in conversations and making them a priority can ease the transition for new employees and help ensure your family office has the personnel it needs to fulfill its mission over the long term.

While adaptability can be a strength for family offices, remember that they also need some level of structure so that employees can operate at their highest abilities, setting the stage for a lasting relationship with the family and the office. Investing in the onboarding process is a key step on the road to lasting success.

### Janet Joyce Arzt, CFA

Janet is Founder and Managing Partner of Parere Advisory, an independent consulting firm advising family offices on infrastructure, development and strategy. Prior to founding Parere Advisory, Janet served as Chief Executive Officer of a newly launched family office in Charlottesville, Virginia, where she built out and oversaw investments and operations for the family and its businesses. She began her Wall Street career in the investment banking program at Merrill Lynch after receiving a B.S. in commerce from the McIntire School of Commerce at the University of Virginia. Janet is a member of the Young Presidents' Organization (YPO) and a contributor to Forbes.com. She was named one of the "Top 50 Leading Women in Hedge Funds" in 2020 by The Hedge Fund Journal in association with Ernst & Young.



Operational

# The several C's of family office solution sourcing




**Mark R. Tepsich**  
Family Office Design  
and Governance Strategist,  
UBS Family Office Solutions

Family offices are inefficient. This is why they exist. Families build family offices because they face a complex and interrelated balance sheet of people and relationships, businesses and portfolios, residences and assets.

Often, people and relationships have overlapping yet individual goals, objectives, interests and initiatives. The enterprise and its assets are typically held in entities and trusts all having unique tax, cash flow and liquidity profiles. The total connection and interrelation of these people, activities, assets and entities makes for a challenging enterprise to manage for many family offices, not only technically but also from a relationship management standpoint.

The family office needs to be able to manage, administer and provide actionable insights that enable the family to execute on their goals and objectives. To be successful, it is prudent to have a framework to guide the family office in identifying functions and building their solutions.



Family offices are often operating elements of several service firms under one roof. Many families form family offices because of the complexity that is necessary to manage.

## The challenge facing family offices

Due to the wide-ranging nature of a family's particular needs across their enterprise and balance sheet, including investment, tax, legal and risk, they need elements of an accounting department, investment advisor, tax advisory firm, law firm, human resource advisory, IT firm, residential real estate manager, insurance and risk advisor, financial planner and modeler, just to name a few. Indeed, family offices are often operating elements of several service firms under one roof. Unfortunately, there is no single app that can manage all of these disparate, yet interrelated initiatives for a family. Many families form family offices because of the complexity that is necessary to manage.

To illustrate, many family offices comprise under 10 employees.<sup>1</sup> Because of the staff numbers and the nature of services required, many family offices often feel stretched by a family's requirements.<sup>2</sup> Staff wear many hats and are often cross-functional. This contrasts starkly with professional service firms whose associates sub-specialize within their respective legal, tax and investment domains. Family office employees are expected to be both generalists and specialists at the same time. This is a challenge as nearly all family offices lack the requisite scale to provide every single solution in-house or have sufficient staff to enable sub-specialization.

<sup>1</sup>UBS GFO Report 2024 p. 60

<sup>2</sup> Id.

Less staff can increase risk, particularly around the quality of financial control. With fewer people providing more services, the quality of service is bound to be affected and this can lead to burnout and staff turnover. The loss of a single employee in a five-person family office represents 20% of the workforce, which can adversely affect the client-family relationship. Family office staff often possess significant institutional family knowledge, such as the interconnectedness of how the enterprise fits together.

## Optimal outcomes

For many family offices, it is necessary to define desired sourcing outcomes based on the family's goals and objectives. While some goals and objectives are unique to each family, there is considerable similarity from family to family. These include growth of assets, appropriate diversification and optimal tax efficiency. For a family office as an organization and its capabilities, these can also include:

- Managed risk across assets and operations
- Efficient operations
- Low staff turnover
- Informed decision-making ability
- Strong relationship management with family clients

This is not an exhaustive or definitive list, but generally speaking, the family and the family office need to know where they are today and where they are going in the future and have a plan for how to get there. How a family office is built, designed, adapts and evolves is crucial in meeting the goals and objectives of both family and the family office.

A family office often makes the decision to buy, build, insource or outsource the following functions: investment management, research and analysis, accounting-related, legal and tax return preparation, as well as technology-related.



## The consideration framework

In determining which solutions are needed and how to build them, it is prudent to have a framework that considers many factors. The following factors and considerations can be used and applied to the solution sourcing process. Each consideration and how it is applied will be different for every family office based on complexity, budget and family style. These considerations will need to be updated as the solution marketplace and family complexity evolves.

### Capability

A primary consideration in solution sourcing is the level of capability required to deliver the desired outcome. Does adequate capability exist in the family office or can it reasonably be outsourced based on other factors such as cost? From there, it is understanding the marketplace options to deliver the capabilities required to provide the outcome.

### Cost

Cost is another nuanced factor. There are both the initial and upfront costs, such as onboarding, as well as ongoing costs, such as maintenance and management. Other considerations include whether costs decrease over time, as happens with technology, or increase, as often occurs with human capital. Costs also include service cancellation terms or severance costs when someone is let go. It is helpful to think through various costs throughout the entire lifecycle of a solution.

### Connection

Connection is another critical consideration. Connection relates to how close family office staff need to be to the data, information, resource or solution. Often having a close connection to the data or information is necessary to make an informed decision or provide adequate service, especially in families with a lot of complexity. A family's enterprise is an interrelated and complex whole, often with disparate or siloed parts. Therefore, a close connection is often necessary





to be able to understand how all aspects of the enterprise fit together, as well as how a decision made in one part may have impacts elsewhere.

If a function is outsourced to a service firm or professional, information is distributed away from the family office. This is often the case with accounting-based information. How frequently family office staff need to obtain information is a factor in determining whether outsourcing is a viable option. If the family office must call the service professional to obtain information to make a decision on a regular basis, an external solution might be ill-advised. If it is only episodic, an external solution might make more sense. Other factors determining the efficacy of outsourcing include how tightly integrated a resource or solution needs to be with family office staff and loss of fidelity during information transition.

### **Control**

Control concerns the ability to manipulate or control a solution. For example, financial planning, modeling and asset allocation decisions often evaluate a host of different options. This often requires both technology and information to model and compare various scenarios, necessitating a high level of control that would make an external solution ill-advised. Understanding the required control level is important.

### **Coordination**

Understanding who in the family office or at an external solution will coordinate the function is another important consideration. With an external solution, this could be a service team or single point of contact. You'll want to look at how coordination might change over time, including

both internally and at the solution. With an external resource, keep in mind that the initial team that onboards family office staff to the solution or resource may not be the same service team that manages the relationship. Coordination is also related to risk, since who or what is executing which part of the function helps ensure adherence to security and necessary controls.

### **Clarity**

Understanding how any function is built and how it adds or detracts from a family office's transparency is paramount. If a process is too cumbersome with too many steps, it could hinder transparency in the family office operating environment. An outsourced function could also detract from clarity. While clarity often depends on the complexity of family office activities, having a well-thought-out and appropriate process for how any function is delivered can help create better outcomes.

### **Constancy**

Constancy concerns the necessity to have a permanent or continuous solution either inside the family office or externally. A resource inside of the family office offers the value of continuous institutional knowledge, especially if there is a high degree of complexity. In certain instances, it may be valuable to have a permanent solution for a particular function that resides outside of the family office. Having a permanent solution or knowledge base impacts family office operations, as well as the client experience the family office offers. Other times it is necessary to reduce key-man risk inside of the family office. Each family office will associate a different weight for the level of constant functioning from its solution.



## Current

Current is also another important factor to consider. Specifically, “current” involves the ability to innovate, evolve and adapt as a viable solution source. This often occurs in the tax and legal landscape, as well as with investment and technology solutions. External solutions operate in a competitive environment and must continually adapt and stay abreast of industry changes or the regulatory environment. External solutions also serve a wide variety of clients with diverse fact profiles. This diverse exposure provides external solution providers with skills that enable them to stay sharp and navigate different situations.

Family offices have significant knowledge of complex family enterprises and how different aspects work together. For instance, they understand the potential impacts of decisions across the enterprise. This allows them to efficiently navigate family complexity.

While family office staff have extensive institutional knowledge of the family and enterprise, they do not serve a varied client base that allows them to build deep expertise across sub-specializations. This is why the family office staff, even while working in a vertically integrated environment, still require trusted professional service firms to consult. Otherwise, you run the risk of creating an environment where overstretched staff experience inertia and have little incentive to innovate and revise practices that might disrupt the status quo. All these reasons highlight the importance of an open architecture approach.

## Conflicts

Conflicts are a crucial yet underappreciated dynamic in a family office. Conflicts are mostly associated with external firms or counterparties, and not the family office itself. Yet internal family office conflicts also exist, and need to

be carefully considered. The more functions, responsibilities and solutions that reside within the family office itself, the less objective the family office becomes about the quality of their offering. It can be a challenge to be solution-agnostic when you are the solution. If known to the family office and the family, these conflicts can be managed. However, many family office functions are technical and require specialization. Indeed, this is why the family hires professionals. It can be a challenge for the family to understand the technical complexities of estate planning, taxes, legal structures and even investments. Yet the family needs the ability to ask the right questions, understand the conflicts and provide sufficient oversight.

For example, suppose an internal investment staff member determined the portfolio allocation and sourced the managers. If the portfolio consistently underperforms, how should the family respond? Will the family have the time or inclination to ask the right questions, compare the performance to a benchmark or other similar analysis? It is much easier to change external investment advisors than in-house staff. This also highlights the necessity for family involvement and robust family office governance.

Family office staff have extensive institutional knowledge of the family and enterprise. Yet they do not serve a varied client base that allows them to build deep expertise across sub-specializations. This is why they still require trusted professional service firms to consult.

## Change

Change is the ability to switch solutions with ease when needed, whether in-house or external. As noted earlier, it can be challenging to change an internal solution. Changing an external solution may be easier or more difficult, depending on the contract terms and on the extent of integration, as with software platforms such as consolidated reporting. Having the ability to change solutions might become important if better solutions arise in the market.

## Confidentiality

Confidentiality relates to how information is distributed away from the family office. Generally, this should be a non-issue, as most sophisticated external service firms understand why confidentiality is so important for their clients. Indeed, information security is in a service firm's own best interest as well, since a breach of trust could prove ruinous to their business. However, some jurisdictions may place a premium on and impose more requirements for a family's safety and security, so families often prefer a narrower information distribution and prefer to keep information in-house.

## Solution sourcing analysis

Each family office will assign different weights and priorities to each function and solution. This can result from distinctions in enterprise complexity or budget. Here, the solution discussion is limited to the accounting function, although it can be applied across all functions of a family office, including investment, legal, technology and private foundation management. For example, the investment function will or at least should have a high focus on capability as well as conflicts, whereas the accounting function should more highly consider what is necessary to enable a family office to make informed decisions regarding cash flows, liquidity, budgeting and forecasting.

It's not merely a question of insourcing vs. outsourcing. It is also identifying, for example, what makes sense in terms of what technology can be adopted and controlled internally and what might be the right mix of external solutions or professional service firms to augment and complement the internal solution to obtain the desired outcomes.



## Illustration—Accounting function

Accounting is a core family office function. Accounting needs are often the reason why many family offices are started. Accounting data is the foundation for making all decisions, including changes to the investment portfolio; managing cash flows and planning for liquidity; and modeling ways to make large purchases or gift transactions for estate planning. Accounting brings clarity to a family's complexity. It is also a source of risk for many families since they have dozens, if not hundreds and thousands, of transactions a month across various individuals, vendors and entities.

The desired outcomes for the accounting function are often:

- Financial control strength
- Accurate record of all financial transactions
- Ability to budget, forecast and make informed decisions

### Unbundle the components of the functional value chain

To help you choose what and how to source, it is helpful first to unbundle various functional value chain components. It is not just a question of whether you should outsource accounting, as there are various components within and adjacent to accounting. The unbundling process helps reveal who or what is responsible for each aspect of the accounting function. More clearly defining responsibilities can also improve overall family office governance.





As part of this process, it is helpful to understand both the inputs and the outputs of each aspect or activity and how the outputs will be further used. Key is determining how the activity is constructed and whether it can yield the desired outcome. For example, inputs might include accounting data and transactions. From there, information goes into general ledgers and sub-ledgers and then to various accounts. Financial statements are then produced. The solution chosen should be able to understand the outputs in sufficient detail to enable use and further manipulation. This discussion assumes that the general ledger and sub-ledger for family office activities is provided inside of the family office by a controller.

#### **Accounting function components:**

1. Bill-pay and related bookkeeping
2. Consolidated Investment Performance Reporting
3. Payroll

#### **Bill-pay and related bookkeeping**

Bill-pay is the personal accounts payable and receivable function for a family. Families have several, if not dozens, of residences requiring payments to utility companies, landscaping firms and maintenance providers, as well as real estate tax payments that need to be made. Bill-pay includes credit card and bank accounts for often dozens of individuals and entities, which receive and send payments from various sources. Sometimes these transactions number in the hundreds, if not thousands.

This is a big source of risk for a family, as well as a high-volume activity for the family office staff. While this task is highly administrative, it is also a critical factor in the user experience the family office provides. The function often takes in dozens of paper or digital statements from banks, as well as paper receipts and invoices from various vendors and records and reconciles them for accuracy.

The family wants to know that their bills are being paid on time and accurately. Having a system in place that minimizes manual input, reduces the risk of fraud and detects changes in trends is critical. For example, a water bill that is extraordinarily high might indicate a broken water pipe at a residence, and the right system will help identify this much more efficiently than not having a system at all.

Having a bill-pay a system in place that minimizes manual input helps reduce the risk of fraud and detects changes in trends is critical.

There is also the element of expense reporting, which will include data on how much it costs to maintain an asset such as one or more vacation homes. Expense data is also critical to understand as it helps determine necessary liquidity and burn rate, which feeds into family investment portfolio construction.

### **Solution options**

The bill-pay function can be built inside of the family office with existing staff, with or without associated technology, or it can be outsourced to an external firm and coordinated by family office staff. Adopting or using dedicated technology should reduce manual input and risk to the workflow and approval process. Many bill-pay activities in a family office are manual and often prone to error. While delegating bill-pay functions to existing staff may not have a direct cost, as no new expense items are put on the family office budget, it does take up time that the staff is not spending elsewhere.

If bill-pay is outsourced, it allows a family office to focus on higher value-added staff, as well as to introduce a layer of financial controls in the family office operating environment. In addition, this can lead to a higher degree of segregation of duties and control inside the family office, as an external firm is providing the bill-pay function and reconciling the data. However, the data and information that external bill-pay firms generate must be sent back to the family or family office as it is critical in budgeting and forecasting. It is also often essential in supporting the basis of asset values and tax reporting when specific assets are sold, such as residences.

However, families who prefer a higher degree of confidentiality may decide to keep the information distribution of their bill-payment activities within the family office.

Outsourcing would include not only looking at consolidated reporting platforms in the market, but also understanding how to manage the platform once selected, either internally or externally.



## **Consolidated investment portfolio reporting**

Consolidated reporting is another function that is critical in many family offices. This is because families often have assets spread across multiple custodians and also have an array of managers for specific individuals, entities and trusts. This dynamic is a challenge for a family office to manually track, and it also introduces a level of risk regarding consolidating reporting platforms. These platforms can track the allocations across managers, entities, trusts and individuals. These individuals are then expected to understand the total exposure to specific positions.

While consolidated reporting isn't always considered part of the accounting function of a family office, a strong argument can be made for its inclusion. Outsourcing would include not only looking at consolidated reporting platforms in the market, but also understanding how to manage the platform once selected, either internally or externally.

### **Solution options**

The family can choose to either directly implement a consolidated reporting platform or outsource its administration to an externally managed service provider. The managed service provider sits between the family office and the technology platform, helping to manage the technology for the family office. Either consideration also involves understanding which consolidated reporting platform within the market is the best fit.

Having a person inside the family office provides several advantages, including: close connection to the data and control over technology that allows for manipulation—which can be relevant for planning and forecasting portfolios. However, the family office must have the ability to provide this function in-house and be comfortable with a high degree of dependence on the person remaining in their role and operating the platform. It also means that an existing employee or a new employee must learn and operate the platform, which might detract from their duties elsewhere.

Family offices often choose this as the default option, as there is often no new accounting expense, since the employee would already exist within the family office and would just reposition their duties to include operating the platform.

There are also certain tradeoffs if a managed service provider firm is used to operate the reporting platform for the family office. There will be a constant solution that cannot leave the family office. It might also mean that the external operator is more efficient since the firm is doing the same function for often hundreds of other similar clients. The downside is that the family office has little to no control over the platform and might lack connection to the information necessary to make informed decisions.



## Payroll and reporting

While it is adjacent to accounting, payroll is another function that a family office requires, both for direct family office staff, as well as domestic staff such as nannies, housekeepers, estate managers and even aircraft crew.

### Payroll and reporting solution options

The family office can choose to either have this function done in-house or contract with a dedicated firm that specializes in the service. If the function is provided in-house, it would include the need to not only report and calculate benefits to domestic and family office staff, but would also require staying on top of various federal, state and local employment regulations and regimes. This is a time-consuming task with a high degree of risk due to employment law issues. The question is whether the family office has the capability to provide this function in-house. Outsourcing the function should also reduce risk to the family office and the family in general.

## The outcome: Effective financial planning and analysis (FP&A)

Choosing an accounting solution depends on whether a family office can provide effective FP&A. This would include planning, forecasting and budgeting across people, assets, entities and activities. It also entails understanding all cash inflows, outflows, sources and uses of cash to enable actionable insights. Building a budget for a household across all entities, assets, liabilities and then consolidating that budget for the total family can help to ensure global cash needs are met. The solution would include identifying any variance between budget and actual numbers.

This is why providing most general ledger functions in-house depends on the level of connection necessary for a family office. Many family offices have too much complexity to warrant having the solution outsourced to an external firm. However, the resources in the market are also changing, adapting and evolving and this function, over time, will start to be outsourced more frequently. The question remains, however, as to whether the family office provides effective financial planning and analysis—this is what will dictate how the accounting function is built.





---

85%

Almost all family offices (85%) perform strategic asset allocation in-house, with 71% financial reporting and 71% bookkeeping and accounting. Three types of specialist services tend to be outsourced: legal services (67%), cyber security (57%) and tax planning (53%). Investment research is roughly equally performed in-house (50%) and outsourced (44%). See the *2024 Global Family Office Report* for additional insights into 320 single family offices across seven regions globally.

[Download the report](#)

## The determination

Following a process is key to building the appropriate solution set. In choosing an external solution, it can be helpful and even prudent to conduct an RFP process. It is also helpful to have a short-written narrative explaining why a particular solution was chosen. Over time, the solution market will evolve, family office employees will move on and the family complexity will change. Having written documentation to reference is important as the family office itself evolves and new solution mixes are chosen.

This process can lead to higher staff retention and improved family experience. It also supports managing the family wealth like a business: organized, controlled and efficient.

### Mark R. Tepsich

Mark is the Family Office Design and Governance Strategist for UBS Family Office Solutions, advising families across the Americas on family office organizational design, structure and governance, as well as operational best practices and strategy to manage and sustain their wealth for future generations. Prior to joining UBS, Mark built a family office platform for an investment advisory firm and spent a decade as General Counsel for a large single-family office to a dynastic, multigenerational family.

Human capital

# Equity-based compensation for single-family office executives





**Patrick J. McCurry**  
Partner  
McDermott Will & Emery LLP

There is no “market” equity compensation structure for single-family office executives. These plans need to be carefully tailored to a particular family office’s unique goals and dynamics.

As single-family offices seek to attract and retain top talent—including both investment and non-investment executives—equity-based compensation structures are becoming both more prevalent and more bespoke.

In our experience, common goals and objectives of such structures include the following:

- Maximize economic alignment between the executive(s) and the family investors in a way that is consistent with both the short- and long-term investment objectives of the family system
- Promote a culture that rewards both individual and team efforts, often at every level within the organization
- Bridge the gap between the family’s holding period objectives and the team’s liquidity needs and expectations
- Minimize structural complexity, administrative burden and tax reporting/compliance (to the extent possible)
- Balance objective and subjective measures of performance
- Consider the optimal mix between discretionary and formulaic elements of the compensation arrangement
- Incentivize employees to stay with the family office over the long haul

This article explores various equity-based compensation structures in light of these common goals and objectives. Despite what some may say, based on our experience working with hundreds of single-family offices, there is no “market” equity compensation structure for single-family office executives. Rather, these plans are and should be carefully tailored in order to conform to a particular family office’s unique goals and dynamics.





## Carried interest structures

Many single-family offices have or are considering implementing some type of profits interest structure (also known as a “carried interest” structure) for key employees.

For income tax purposes, a “profits interest” is an equity interest that entitles a service provider to a share of partnership growth and income starting from the grant date. Because a profits interest has a “liquidation value” of zero (i.e., the holder is entitled to nothing if the partnership were to sell its assets, pay its liabilities or liquidate on the date of grant), the IRS has ruled that a recipient of a profits interest does not have any income inclusion upon issuance. (See IRS Rev. Proc. 93-27, as amplified by IRS Rev. Proc. 2001-43.)

Subject to the potential application of Section 1061 of the Internal Revenue Code (the “Code”), a profits interest holder is generally entitled to the same character of tax items as the partnership itself (e.g., long-term capital gains, short-term capital gains, tax-exempt income, qualified dividend income, etc.). The potential for lower effective tax rates to the employees (i.e., a lower tax rate on long-term capital gain/qualified dividend and tax-exempt income) are often the key driver for implementing a profits interest structure. In addition, because the employee receives an allocation of income or gain in respect of their profits interest, this structure creates a synthetic tax deduction for the family investors (by reducing the family investors’ share of income/gain on their K-1s). In applicable states, the partnership can pay state income taxes, creating a federal deduction for both the employees and the family investors for state income taxes.



The potential for lower tax rates to the employees are often the key driver for implementing a profits interest structure.

As noted above, the 2017 Tax Cuts and Jobs Act enacted Code Section 1061, which did not completely close the so-called “carried interest loophole,” but rather merely requires a three-year holding period for capital gain treatment with respect to certain “applicable partnership interests” (so-called “carried interests”). Family offices will need to monitor whether a particular carried interest is an “applicable partnership interest” under Code Section 1061 and whether structuring alternatives might exist to mitigate the potential application of Code Section 1061. We believe that there are strong arguments that Code Section 1061 does not apply to many single-family office profits interest structures because many single-family offices do not “raise” or “return” capital, but rather are closed, evergreen capital systems.

The common considerations of any profits interest structure include the following:

- Vesting/repurchase rights
- Whether the profits interest is determined on a mark-to-market basis or based on realization events/cash flow
- Which assets/asset classes the profits interest applies to
- Whether there is a performance hurdle and/or high-water mark
- European v. American waterfall
- Holdbacks, escrows and clawbacks
- Optimal structure for including investments held in private foundations and charitable trusts in light of self-dealing rules
- Tax distributions to employees
- Potential application of Code Section 1061 (mentioned above) and Code Section 1202 (relating to qualified small business stock or “QSBS”) to the employee’s share of gain



## Co-investment structures

For many reasons, some family offices have or are considering implementing a co-investment structure (or “co-invest” for short) for key employees in addition to, or sometimes in lieu of, a profits interest structure.

The typical co-invest structure involves employees contributing hard dollars to one or more family investment vehicles or SPVs in exchange for a full equity interest (not only upside like a profits interest).

Some family offices believe that a co-invest structure creates better economic alignment between the family and the employees than a profits interest structure given the potential downside risk (in addition to upside potential). Co-invest structures can be either “leveraged” (where the family loans money to the employee to fund some or all of the cash investment) or “unleveraged” (where the employee funds the investment completely out of pocket).

There are some clear tax benefits to co-invest structures. First, there is a clear exception to Code Section 1061 for co-investments that employees fund either out of pocket or through fully resource loans (from the family or otherwise), and so the employees will receive long-term gain treatment (assuming the underlying sale qualifies for long-term gain treatment in the first place). Second, Section 1202/QSBS clearly applies to employees’ co-investments. Finally, subject to ‘40 Act/SEC considerations and with the family’s consent, some key employees use irrevocable trusts to co-invest to maximize wealth transfer tax efficiency.

Often, co-investment structures are used in family offices that have robust direct investment platforms to allow their deal teams to have increased economic exposure to these direct deals.

The common considerations of any co-invest structure include the following:

- Whether the co-invest structure will be leveraged or unleveraged (discussed above)
- If leveraged, whether the loans will be recourse or partially recourse (non-recourse loans are generally not used due to creating tax issues for employees)
- The terms of debt service (e.g., using distributions—other than tax distributions—to pay down debt)
- Which assets/asset classes the co-invest program applies to
- Whether employees can “cherry-pick” investments or are required to make a minimum investment in every deal
- Puts/calls upon separation of service
- Whether the employees have a put right at some point in the future (e.g., in 10 years) if the family potentially plans to hold the investment for decades
- Tax distributions to employees

## Phantom compensation planning

As noted above, both profits interest and co-invest structures require the employee to hold direct equity in the applicable investment partnership (or company if the employee invests directly). Although these equity-based structures offer many income tax benefits, sometimes they are too complicated to administer (e.g., due to complex tax compliance) or are too inflexible to accomplish the parties’ objectives (e.g., the family wants the employee to be compensated based on the entire portfolio, which could be held in dozens of legal entities, trusts and charitable vehicles).





For many reasons, family offices opt for a “synthetic” equity structure and set aside amounts in a “notional account” for the benefit of the employees. These notional accounts usually track the investment performance of the family’s core investment portfolio (or some subset thereof). These phantom equity structures allow the employee to defer income tax until they receive a payout as W-2 income (at ordinary income tax rates). Although the employee does not get long-term capital gains treatment on amounts received under the plan, they do get tax deferral and accretion of value tax-free.

The common considerations of any phantom/synthetic compensation structure include the following:

- Vesting/forfeiture terms
- Whether the employee and/or employer elects to fund the plan and in what amounts
- Which assets/entities are tracked in terms of performance by the notional account
- Making sure the plan is compliant with Code Section 409A (relating to deferred compensation arrangements)

## Conclusion

As noted above, equity-based compensation structures for family office executives vary widely due to the unique goals and dynamics of the applicable family office and broader family system. Many family offices employ some or all of the approaches described above in order to shape the culture and align the incentives of the employees and the family. Where the family office gets its compensation structure right, a positive culture is fostered with proper alignment among all parties. On the other hand, a poorly designed plan may lead to radical misalignment, mistrust, conflict and a family office that has a difficult time attracting and retaining top talent or talent that is most aligned with their long-term interests.

### **Patrick J. McCurry**

Patrick is a Partner at McDermott Will & Emery LLP based in Chicago. His practice focuses on working with single-family offices in connection with the formation and/or restructuring of family offices and private trust companies, the creation of internal investment funds, the establishment of incentive equity programs for key employees and related income tax planning. Patrick and McDermott are ranked as “Band 1” by Chambers High Net Worth in its national Family Offices & Funds Restructuring category.



In conversation

# Moving organizations toward their North Star





**Leora Zach, CFA**  
Client Solutions Specialist,  
UBS Family Office Solutions

**Charles Soriano**  
Operating Partner  
Humankind Capital

Our Family Office Solutions podcast features a conversation with Charles Soriano, a consumer products executive focused on strategic repositioning, operational transformation and sustainable growth of public, private and private equity-backed international brands.

With a background in financial services and consumer products, Charles' current focus on operations, finance and value-creation led him to develop the North Star strategic planning framework. Designed to reposition the business of a portfolio company or direct investment, the framework provides guidance to define and advance toward newly established long-term goals.

Highlights of their conversation include:

- The North Star strategic planning framework and how it can guide companies in creating a vision for the future
- How the framework connects business activities to products and customers, ensuring an appropriate product-market fit and aligning stakeholder goals, energy and resources
- Reasons why a family office might consider using the framework, including a new direct investment, merger/acquisition, governmental regulation or unforeseen macro developments
- The six phases of the planning that unfolds over a series of workshops to include all pertinent stakeholders
- A real-world example illustrating the phases

## Excerpt

**Leora:** Charles, can you briefly describe the North Star strategic planning framework that you've created?

**Charles:** The North Star framework is a construct that institutionalizes and governs the process in which an organization creates a vision of the future and identifies, then prioritizes, the goals and objectives to achieve the vision. It's the framework that ensures a consistent output of quality decisions in harmony with the organization's mission and goals.

The North Star framework ensures quality decisions in harmony with the organization's mission and goals.

**Leora:** Why is it important for a family office to consider this?

**Charles:** The framework is a post-investment portfolio support, business planning and value creation opportunity truly focused on long-term compounding growth. This notion fits nicely with family offices' "patient" capital mindset.

The framework creates a road map, a series of steps, transitioning a company from the current state to the future state, to achieve the newly established organizational vision, aptly called the "2030 Vision." It connects business activities to products and customers, ensuring an appropriate product-market fit, and aligns stakeholder goals, energy and resources with the unified company vision and mission.

**Leora:** Why would a family office consider applying for the North Star strategic planning process to their portfolio companies?

**Charles:** A family office could have many reasons to consider a plan with a North Star. Maybe there's a new direct investment that requires initial guidance. Or, maybe there's a merger/acquisition and the combined entity requires a strategic focus. Perhaps a portfolio company has an experience in management turnover or a reorg that demands a talent reset. Or the company could

The framework creates a road map, transitioning a company from the current state to the future state.

be facing an evolving competitive landscape, perhaps additional governmental regulation, or unforeseen macro developments—you can think of Porter's Five Forces. Or, they may have a limited mature product assortment with plateauing sales, dictating growth avenues and go-to-market acceleration. These are some of the reasons that come to mind.

**Leora:** Got it. So if you have a direct investment in need of a new direction as one example, what does the North Star strategic planning process entail?

**Charles:** There are six essential phases to the North Star process: first, there's the Initial Audit. Second, the Current State; third, the Future State; fourth, the North Star Guide; the fifth, the Gap Analysis; and the sixth and final, the Success Pathway. It is presented as a series of questions for the family office staff and is meant to provoke thought, analysis and more likely, additional questions to consider. The process unfolds over a series of workshops to include all pertinent stakeholders. Now, although the framework is meant to guide the strategic direction of an operating company, it could easily and also be applied to a family office. Either way, the stages of the North Star process are the same and notably, the outcome of the family office process includes an investment policy statement.

**Leora:** Can you share an example to better illustrate this process?

**Charles:** Several years ago, I worked for a founder of an e-commerce apparel brand that sold a small clothing line targeting a specific male demographic. After a few years of just amazing and phenomenal growth, the brand experienced slowing sales and increased marketing cost. After the initial audit, the founder asked me to develop a growth plan for the business.





During the Current State phase, we discovered the company's strengths included the product material and its financial health.

Over the course of six weeks, I conducted several workshops addressing each phase. During the Current State, we discovered that its strengths included the product material, which was all technologically advanced performance fabric, and also its financial health, since it had already achieved a break-even and had a financial cushion for growth. But on the other hand, the company suffered from low-brand awareness, a small social media following and declining customer lifetime value. It was a clear opportunity for the brand to go beyond its core products.

In the future state phase, the team envisioned to become the "Patagonia" of their sector and to sell a diversified product assortment through multichannel distribution, which included retail and catalogue. From this, the team created their North Star Guide, with new values, mission statements and brand guidelines reflecting the customer, product and geographic expansion. In the Gap Analysis phase, the team determined the resources required to

grow into a dual-gender lifestyle brand, to build a team and to diversify the factory structure.

And finally, to the Success Pathway, we can see a multiyear calendar identifying critical milestones leading to their North Star, such as the timing of new products, the fifth anniversary of the first order, the first catalogue, the first store, etc. As an update, I'm very pleased to report that the company survived the pandemic and is currently thriving and firing on all cylinders.

---

71%

On average, 71% of family offices investing in private equity are doing so to diversify their investment portfolios, while 71% think the long-term returns are likely to be better than in public equities, according to the *2024 UBS Global Family Office Report*, providing insights from 320 single family offices across seven regions globally. See the report for more insights from our comprehensive analysis.

[Download the report](#)



### **Leora Zach, CFA**

Leora is an Executive Director and Client Solutions Specialist for UBS Family Office Solutions. Previously at UBS, Leora was a part of the Direct Investments Group, raising private capital for direct private equity and real estate investments; the OneBank team, assisting clients on mergers and acquisitions and equity and debt capital raising; and the Middle Market Investment Banking Network, providing pre-sale planning and investment banking services.

### **Charles Soriano**

Charles is a C-suite finance and operations executive with 15+ years of experience growing and transforming international businesses—public, private and PE-backed. He has demonstrated global operations capabilities driving value creation, concept-to-customer execution and new market entry across multiple distribution channels. Earlier in his career, Charles held executive roles at Ralph Lauren, Kate Spade and Sean John Clothing, while also providing consulting services to both start-ups and large-scale public firms. Charles holds an M.B.A. from the Harvard Business School and a B.S. in economics from the Wharton School of the University of Pennsylvania.

[Listen to the full podcast >](#)

Listen to this podcast on [ubs.com/inconversation](https://ubs.com/inconversation).

# Want to learn more about Family Office Solutions?

Family Office Solutions is a team of specialists that works exclusively with qualified US families and family offices with a net worth of USD 100 million+. The team helps clients navigate the challenges and opportunities across their family enterprises, including their businesses, family offices, philanthropic structures, and passions and interests. Having this expertise under one roof allows for integration and layering of services across the UBS ecosystem, delivering a personalized, holistic client experience.

## Stay connected

For the latest issue of the *Family Office Quarterly*, subscribe using the QR code below or visit [ubs.com/familyofficequarterly](https://ubs.com/familyofficequarterly)



For more information, please reach out to your UBS Financial Advisor.

The *2024 Global Family Office Report* brings together insights from 320 single family offices across seven regions globally. Representing families with an average net worth of USD 2.6 billion and covering over USD 600 billion of wealth, it offers a comprehensive analysis of this influential group of investors.

[Download](#)

Important note: Information on this website is directed solely at US Persons or in jurisdictions where its financial services are locally registered for public solicitation. The information does not constitute an offer to sell or the solicitation of an offer to buy an investment product in any jurisdiction in which such offer, solicitation or sale would be unlawful. If you have any questions about the information on this website, please contact your local Financial Advisor.

## UBS Family Office Quarterly Editorial Board

### **Judy Spalthoff**

Head, Family Office Solutions

### **Mark Tepsich**

Family Office Design and Governance Strategist  
Family Office Solutions

### **Leora Zach, CFA**

Client Solutions Specialist  
Family Office Solutions

### **Brittany Chajkewicz**

Business Development  
Family Office Solutions

### **Daniel J. Scansaroli, Ph.D.**

Head of Portfolio Strategy & UBS Wealth Way Solutions, Americas  
Chief Investment Office

### **Todd D. Mayo**

Senior Wealth Strategist  
Advanced Planning Group

### **Andy Andreo**

Relationship Manager, Americas  
Global Family & Institutional Wealth

### **Alicia Jayo**

Head of Business Development and Management  
Social Impact and Philanthropy US



All opinions and views expressed by third parties in this material are those of the author(s) or respective persons and do not represent—and may differ or be contrary to—the views and opinions of UBS or its affiliates. The articles profiled in this document were selected based on their experiences and professional history. Neither UBS, nor any of its employees or affiliates participated in any of the professional trajectories, corporate formations, capital funding, financing, sales, deals, transitions or other events discussed in this paper. This material is not intended to be and should not be considered or construed to be a testimonial or endorsement of a non-UBS product or service. Business Consulting Resources, InfoGrate, Major, Lindsay & Africa, January Ventures and its employees are not affiliated with UBS Financial Services Inc. or its affiliates.

Non-UBS logos, brands, other trademarks and third-party content are the property of their respective firms or its subsidiaries. This is used for illustrative purposes only and are not intended to convey any endorsement or sponsorship by, or association or affiliation with, the trademark holders.

The material presented in this podcast has no regard to the specific investment objectives, financial situation, or particular needs of any specific recipient and is published for informational purposes only. It is intended to be educational in nature; it is not an advertisement nor is it a solicitation or an offer to buy or sell any financial instruments or to participate in any particular trading strategy nor should it be viewed as such by the listener. UBS AG or its affiliates and its employees are not affiliated with any 3rd party speakers mentioned. None of UBS or its representatives is suggesting that the recipient or any other person take a specific course of action or any action at all in response to this podcast. By accessing and listening to this podcast, the listener acknowledges and agrees with the intended purpose described here and disclaims any expectation or belief that the information constitutes investment advice or a solicitation of any kind. Any financial instruments or services described in this podcast may not be eligible for sale in all jurisdictions or to certain categories of investors.

This document and the information contained herein are provided solely for informational and/or educational purposes. Nothing in this document constitutes investment research, investment advice, a sales prospectus, or an offer or solicitation to engage in any investment activities. The document is not a recommendation to buy or sell any security, investment instrument, or product, and does not recommend any specific investment program or service.

Nothing in this document constitutes legal or tax advice. UBS and its employees do not provide legal or tax advice. This document may not be redistributed or reproduced in whole or in part without the prior written permission of UBS. To the extent permitted by the law, neither UBS, nor any of its directors, officers, employees or agents accepts or assumes any liability, responsibility or duty of care for any consequences, including any loss or damage, of you or anyone else acting, or refraining to act, in reliance on the information contained in this document or for any decision based on it.

These materials have been prepared by UBS AG and or a subsidiary or affiliate thereof, which are altogether referred to below as “UBS.” They have not been prepared with regard to any specific investment objectives, financial situation or particular needs of any specific recipient, current client or prospective client. These materials are published solely for informational purposes and are not to be construed as a solicitation or an offer to buy or sell any securities or related financial instruments or services of UBS or to participate in any particular trading strategy endorsed or not endorsed by UBS. Any recipient of these materials should not consider their contents to be either legal, tax, accounting, regulatory, or other specialist or technical advice or service, or investment advice, or a personal recommendation of any kind whatsoever. No representation or warranty, either express or implied, is provided in relation to the accuracy, completeness or reliability of the information contained in these materials, nor is any of the information herein intended to be a complete statement or summary of the securities markets or other developments referred to in these materials. The information in these materials should not be regarded by any recipient as a substitute for the exercise of their own judgment and any opinions expressed in these materials are subject to change without notice and may differ or be contrary to opinions expressed by other business areas or groups of UBS, which may make different assumptions or rely on different criteria. UBS is under no obligation to update or keep current the information contained in these materials. Neither UBS nor any of its directors, officers, employees or agents accept any liability for any loss or damage arising out of the use of all or part of these materials or reliance upon the information contained therein. These materials are not for distribution or redistribution, except under such circumstances as may be permitted by UBS and or applicable law. UBS specifically prohibits the redistribution or reproduction of these materials in whole or in part, without the written permission of UBS and UBS accepts no liability whatsoever for the actions of third parties in this respect.

#### **Important information in the event this document is distributed to US Persons or into the United States**

As a firm providing wealth management services to clients, UBS Financial Services Inc. offers investment advisory services in its capacity as an SEC-registered investment adviser and brokerage services in its capacity as an SEC-registered broker-dealer. Investment advisory services and brokerage services are separate and distinct, differ in material ways and are governed by different laws and separate arrangements. It is important that clients understand the ways in which we conduct business, that they carefully read the agreements and disclosures that we provide to them about the products or services we offer. For more information, please review the PDF document at [ubs.com/relationshipssummary](https://ubs.com/relationshipssummary). UBS Financial Services Inc. is a subsidiary of UBS AG. Member FINRA/SIPC.

Sustainable investing strategies aim to incorporate environmental, social and governance (ESG) considerations into investment process and portfolio construction. Strategies across geographies and styles approach ESG analysis and incorporate the findings in a variety of ways. The returns on portfolios consisting primarily of sustainable investments may be lower or higher than portfolios where ESG factors, exclusions or other sustainability issues are not considered, and the investment opportunities available to such portfolios may also differ.

#### **Important information in the event this document is distributed by the following domestic businesses**

**Canada** UBS Wealth Management is a registered trademark of UBS AG. UBS Bank (Canada) is a subsidiary of UBS AG. Investment advisory and portfolio management services are provided through UBS Investment Management Canada Inc., a wholly-owned subsidiary of UBS Bank (Canada). UBS Investment Management Canada Inc. is a registered portfolio manager and exempt market dealer in all the provinces with the exception of P.E.I and the territories.

**Denmark** if distributed by UBS Europe SE, Denmark Branch: This publication is not intended to constitute a public offer under Danish law. It is distributed only for information purposes by UBS Europe SE, Denmark Branch, filial af UBS Europe SE, with place of business at Sankt Annae Plads 13, 1250 Copenhagen, Denmark, registered with the Danish Commerce and Companies Agency, under No. 38 17 24 33. UBS Europe SE, Denmark Branch, filial af UBS Europe SE is subject to the joint supervision of the European Central Bank (“ECB”), the German Central Bank (Deutsche Bundesbank), the German Federal Financial Services Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht), as well as of the Danish Financial Supervisory Authority (Finanstilsynet), to which this publication has not been submitted for approval. UBS Europe SE is a credit institution constituted under German law in the form of a Societas Europaea, duly authorized by the ECB.

**Germany** if distributed by UBS Europe SE, Germany: This publication is not intended to constitute a public offer under German law. It is distributed only for information purposes by UBS Europe SE, Germany, with place of business at Bockenheimer Landstrasse 2-4, 60306 Frankfurt am Main. UBS Europe SE is a credit institution constituted under German law in the form of a Societas Europaea, duly authorized by the European Central Bank (“ECB”), and supervised by the ECB, the German Central Bank (Deutsche Bundesbank) and the German Federal Financial Services Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht), to which this publication has not been submitted for approval.

**Hong Kong** if distributed by UBS AG Hong Kong Branch: This publication is distributed by UBS AG Hong Kong Branch, a licensed bank under the Hong Kong Banking Ordinance and a registered institution under the Securities and Futures Ordinance. UBS AG Hong Kong Branch is incorporated in Switzerland with limited liability.

**Israel** if distributed by UBS Wealth Management Israel Ltd.: UBS is a premier global financial firm offering wealth management, asset management and investment banking services from its headquarters in Switzerland and its operations in over 50 countries worldwide to individual, corporate and institutional investors. In Israel, UBS Switzerland AG is registered as Foreign Dealer in cooperation with UBS Wealth Management Israel Ltd., a wholly owned UBS subsidiary. UBS Wealth Management Israel Ltd. is a Portfolio Manager licensee that engages also in Investment Marketing and is regulated by the Israel Securities Authority. This publication is intended for information only and is not intended as an offer to buy or solicitation of an offer. Furthermore, this publication is not intended as investment advice and/or investment marketing and is not replacing any investment advice and/or investment marketing provided by the relevant licensee, which is adjusted to each person's needs. The word "advice" and/or any of its derivatives shall be read and construed in conjunction with the definition of the term "investment marketing" as defined under the Israeli Regulation of Investment Advice, Investment Marketing and Portfolio Management Law, 1995

**Italy** if distributed by UBS Europe SE, Succursale Italia: This publication is not intended to constitute a public offer under Italian law. It is distributed only for information purposes by UBS Europe SE, Succursale Italia, with place of business at Via del Vecchio Politecnico, 3-20121 Milano. UBS Europe SE, Succursale Italia is subject to the joint supervision of the European Central Bank ("ECB"), the German Central Bank (Deutsche Bundesbank), the German Federal Financial Services Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht), as well as of the Bank of Italy (Banca d'Italia) and the Italian Financial Markets Supervisory Authority (CONSOB - Commissione Nazionale per le Società e la Borsa), to which this publication has not been submitted for approval. UBS Europe SE is a credit institution constituted under German law in the form of a Societas Europaea, duly authorized by the ECB.

**Luxembourg** if distributed by UBS Europe SE, Luxembourg Branch: This publication is not intended to constitute a public offer under Luxembourg law. It is distributed only for information purposes by UBS Europe SE, Luxembourg Branch, with place of business at 33A, Avenue J. F. Kennedy, L-1855 Luxembourg. UBS Europe SE, Luxembourg Branch is subject to the joint supervision of the European Central Bank ("ECB"), the German Central bank (Deutsche Bundesbank), the German Federal Financial Services Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht), as well as of the Luxembourg supervisory authority (Commission de Surveillance du Secteur Financier), to which this publication has not been submitted for approval. UBS Europe SE is a credit institution constituted under German law in the form of a Societas Europaea, duly authorized by the ECB.

**Mexico** if distributed by UBS Asesores México, S.A. de C.V.: This information is distributed by UBS Asesores México, S.A. de C.V. ("UBS Asesores"), an affiliate of UBS Switzerland AG, incorporated as a non-independent investment advisor under the Securities Market Law due to the relation with a Foreign Bank. UBS Asesores is a regulated entity and it is subject to the supervision of the Mexican Banking and Securities Commission ("CNBV"), which exclusively regulates UBS Asesores regarding the rendering of portfolio management, as well as on securities investment advisory services, analysis and issuance of individual investment recommendations, so that the CNBV has no surveillance faculties nor may have over any other service provided by UBS Asesores. UBS Asesores is registered before CNBV under Registry number 30060. You are being provided with this UBS publication or material because you have indicated to UBS Asesores that you are a Sophisticated Qualified Investor located in Mexico. The compensation of the analyst(s) who prepared this report is determined exclusively by research management and senior management of any entity of UBS Group to which such analyst(s) render services.

**Monaco** if distributed by UBS (Monaco) SA: This document is not intended to constitute a public offering or a comparable solicitation under the Principality of Monaco laws, but might be made available for information purposes to clients of UBS (Monaco) SA, a regulated bank under the supervision of the "Autorité de Contrôle Prudentiel et de Résolution" (ACPR) for banking activities and under the supervision of "Commission de Contrôle des Activités Financières for financial activities."

**Singapore** if distributed by UBS AG Singapore branch: This material was provided to you as a result of a request received by UBS from you and/or persons entitled to make the request on your behalf. Should you have received the material erroneously, UBS asks that you kindly destroy/delete it and inform UBS immediately. Clients of UBS AG Singapore branch are asked to please contact UBS AG Singapore branch, an exempt financial adviser under the Singapore Financial Advisers Act (Cap. 110) and a wholesale bank licensed under the Singapore Banking Act (Cap. 19) regulated by the Monetary Authority of Singapore, in respect of any matters arising from, or in connection with, the analysis or report.

**Spain** if distributed by UBS Europe SE, Sucursal en España: This publication is not intended to constitute a public offer under Spanish law. It is distributed only for information purposes by UBS Europe SE, Sucursal en España, with place of business at Calle María de Molina 4, C.P. 28006, Madrid. UBS Europe SE, Sucursal en España is subject to the joint supervision of the European Central Bank ("ECB"), the German Central bank (Deutsche Bundesbank), the German Federal Financial Services Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht), as well as of the Spanish supervisory authority (Banco de España), to which this publication has not been submitted for approval. Additionally it is authorized to provide investment services on securities and financial instruments, regarding which it is supervised by the Comisión Nacional del Mercado de Valores as well. UBS Europe SE, Sucursal en España is a branch of UBS Europe SE, a credit institution constituted under German law in the form of a Societas Europaea, duly authorized by the ECB.

**Sweden** if distributed by UBS Europe SE, Sweden Bankfilial: This publication is not intended to constitute a public offer under Swedish law. It is distributed only for information purposes by UBS Europe SE, Sweden Bankfilial, with place of business at Regeringsgatan 38, 11153 Stockholm, Sweden, registered with the Swedish Companies Registration Office under Reg. No 516406-1011. UBS Europe SE, Sweden Bankfilial is subject to the joint supervision of the European Central Bank ("ECB"), the German Central bank (Deutsche Bundesbank), the German Federal Financial Services Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht), as well as of the Swedish supervisory authority (Finansinspektionen), to which this publication has not been submitted for approval. UBS Europe SE is a credit institution constituted under German law in the form of a Societas Europaea, duly authorized by the ECB.

**Taiwan** if distributed by UBS AG, Taipei Branch: This material is provided by UBS AG, Taipei Branch in accordance with laws of Taiwan, in agreement with or at the request of clients/prospects.

**UK** if distributed by UBS AG UK Branch: UBS AG is registered as a branch in England and Wales Branch No. BR004507 (a public company limited by shares, incorporated in Switzerland whose registered offices are at Aeschenvorstadt 1, CH-4051, Basel and Bahnhofstrasse 45, CH-8001 Zurich). Registered Address: 5 Broadgate, London EC2M 2QS. Authorised and regulated by the Financial Market Supervisory Authority in Switzerland. In the United Kingdom, UBS AG is authorised by the Prudential Regulation Authority and subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. Details about the extent of our regulation by the Prudential Regulation Authority are available from us on request.

#### **Important information in the event this document is distributed cross-border**

**Bahrain:** UBS is a Swiss bank not licensed, supervised or regulated in Bahrain by the Central Bank of Bahrain and does not undertake banking or investment business activities in Bahrain. Therefore, clients have no protection under local banking and investment services laws and regulations.

**Mainland China:** This report is prepared by UBS Switzerland AG or its offshore subsidiary or affiliate (collectively as "UBS Offshore"). UBS Offshore is an entity incorporated out of Mainland China and is not licensed, supervised or regulated in Mainland China to carry out banking or securities business. The recipient should not contact the analysts or UBS Offshore which produced this report for advice as they are not licensed to provide securities investment advice in Mainland China. UBS Investment Bank (including Research) has its own wholly independent research and views, which at times may vary from the views of UBS Global Wealth Management. This report shall not be regarded as providing specific securities-related analysis. The recipient should not use this document or otherwise rely on any of the information contained in this report in making investment decisions and UBS takes no responsibility in this regard.

**Czech Republic:** UBS is not a licensed bank in the Czech Republic and thus is not allowed to provide regulated banking or investment services in the Czech Republic. Please notify UBS if you do not wish to receive any further correspondence.

**Greece:** UBS Switzerland AG is established in Switzerland and operates under Swiss law. UBS Switzerland AG and its affiliates (UBS) are not licensed as a bank or financial institution under Greek legislation and do not provide banking and financial services in Greece. Consequently, UBS provides such services from branches outside of Greece only. No information in this document is provided for the purpose of offering, marketing and sale by any means of any capital market instruments and services in Greece. Therefore, this document may not be considered as a public offering made or to be made to residents of Greece.

**Indonesia, Malaysia, Philippines, Thailand:** This material was provided to you as a result of a request received by UBS from you and/or persons entitled to make the request on your behalf. Should you have received the material erroneously, UBS asks that you kindly destroy/delete it and inform UBS immediately. Any and all advice provided and/or trades executed by UBS pursuant to the material will only have been provided upon your specific request or executed upon your specific instructions, as the case may be, and may be deemed as such by UBS and you. The material may not have been reviewed, approved, disapproved or endorsed by any financial or regulatory authority in your jurisdiction. The relevant investments will be subject to restrictions and obligations on transfer as set forth in the material, and by receiving the material you undertake to comply fully with such restrictions and obligations. You should carefully study and ensure that you understand and exercise due care and discretion in considering your investment objective, risk appetite and personal circumstances against the risk of the investment. You are advised to seek independent professional advice in case of doubt.

**Jersey:** UBS AG, Jersey Branch, is regulated and authorized by the Jersey Financial Services Commission for the conduct of banking, funds and investment business. Where services are provided from outside Jersey, they will not be covered by the Jersey regulatory regime. UBS AG, Jersey Branch is a branch of UBS AG a public company limited by shares, incorporated in Switzerland whose registered offices are at Aeschenvorstadt 1, CH-4051 Basel and Bahnhofstrasse 45, CH 8001 Zurich. UBS AG, Jersey Branch's principal place business is 1, IFC Jersey, St Helier, Jersey, JE2 3BX.

**Nigeria:** UBS Switzerland AG and its affiliates (UBS) are not licensed, supervised or regulated in Nigeria by the Central Bank of Nigeria or the Nigerian Securities and Exchange Commission and do not undertake banking or investment business activities in Nigeria.

**Poland:** UBS is a premier global financial services firm offering wealth management services to individual, corporate and institutional investors. UBS is established in Switzerland and operates under Swiss law and in over 50 countries and from all major financial centres. UBS is not licensed as a bank or as an investment firm under Polish legislation and is not allowed to provide banking and financial services in Poland.

**Portugal:** UBS Switzerland AG is not licensed to conduct banking and financial activities in Portugal nor is UBS Switzerland AG supervised by the Portuguese regulators (Bank of Portugal "Banco de Portugal" and Portuguese Securities Exchange Commission "Comissão do Mercado de Valores Mobiliários").

**Singapore:** This material was provided to you as a result of a request received by UBS from you and/or persons entitled to make the request on your behalf. Should you have received the material erroneously, UBS asks that you kindly destroy/delete it and inform UBS immediately.

**UAE:** UBS is not licensed in the UAE by the Central Bank of UAE or by the Securities & Commodities Authority. The UBS AG Dubai Branch is licensed in the DIFC by the Dubai Financial Services Authority as an authorised firm.

**Ukraine:** UBS is a premier global financial services firm offering wealth management services to individual, corporate and institutional investors. UBS is established in Switzerland and operates under Swiss law and in over 50 countries and from all major financial centers. UBS is not registered and licensed as a bank/financial institution under Ukrainian legislation and does not provide banking and other financial services in Ukraine.

© UBS 2024. All rights reserved. The key symbol and UBS are among the registered and unregistered trademarks of UBS. UBS Financial Services Inc. is a subsidiary of UBS AG. Member FINRA/SIPC. IS2403479; Exp.: 7/30/2025. 2024-1509452

UBS Financial Services Inc. [ubs.com/fs](https://ubs.com/fs)

