

Multi-Family Office – ClearMacro Client

Profile of Family Office

- **Location:** Singapore
- **History:** Significant heritage, 50 years+
- **Clients:** Opened to other family offices and UHNW post 2000
- **AUM:** [5B\$]
- **Services:** Asset Management and Asset Administration services. Offers global multi-asset fund and individual asset classes (gold, equities, fixed income, private ventures). Consultation services. Focus on providing end-clients transparency and efficiency.

Profile of Key User / Sponsor at Multi-Family Office

- MD, Asset Management, leads investment team and allocation process
- Background advising pension and life funds. Desire to bring institutional quality to bear.
- International experience in Europe and Asia

Specific Problems Faced

Overall Problem: MFO does not have a credible roadmap to support/improve Investment processes and may fail to capitalize on a clear demand-driven growth opportunity. Our client, the new MD of Asset Management, has concluded there isn't a sufficient critical mass of Asset Allocation tools nor investment capabilities

- **Firm is struggling to grow new clients:** Cannot service the growing needs of shifting client demographic-always on, lower cost but personalized solutions (requires automated allocation of ETFs)
- The MFO's existing clients are not fully pleased with the *investment outcomes* in recent years. Equally, clients don't feel optimally serviced in terms of investment information.
 - Consider this is a function of *suboptimal scope or investment / Asset Allocation processes*
 - Lack of relevant capabilities and bandwidth
- **Trust:** Clients lack confidence that the firm has a *credible roadmap* to building the required capabilities and are also concerned that their service levels may be diluted is the (manual) resources are spread.
- **Cost (to build Investment/Allocation tools):** *Internal build options are prohibitive.* 10-20X build vs buy-build relative + key-man risk. Equally, *current off-the-shelf solutions too heavy* on set up time.

Solutions: Real-time, lightweight "CIO-in-a-box" tools

Asset Allocation Viewer

Coherent views of the entire term structure of returns across all asset classes



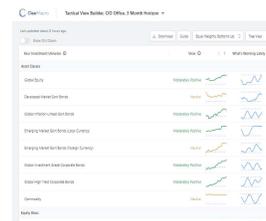
Portfolio Builder

Live updated asset optimisation across range of client portfolios



View Builder

Ability to drill down at any level and understand the forward-looking drivers



Appendix For zoom in

Comments from Family Office during onboarding (Q1-23)

- **Asset Allocation Viewer for Strategic Long-term asset allocation ("SAA"):** "Perfect for [my] needs"
- **Portfolio Builder:** "This is perfect, looks very impressive, easy, and quick to manipulate. You can easily see what the actions you need to take might be. It feels to me like a great tool to make these decisions. Definitely think Portfolio Build is a useful tool to sit down with clients with for periodic check-ins..... Summary files looks very powerful, if you want to get more granular you can all the way down."
- **TAA:** ".... like the [approach] re different models for different time frames – tactical vs cyclical vs trend ...map all our return forecast models to a single output?"
- **View Builder**
 - "I'm smiling because I think this is excellent ...[if] you have done this for a large number of asset classes already. It seems to be exactly the tool I'm looking for.
 - "Looks fantastic, intuitive, easy to use and have gone through the same pain points."
 - "I need a tool like CM.... The stuff you have showed would blow their minds. I don't anticipate having to ask for too much custom work – unlike Aladdin which we stopped using"
 - "Probably doesn't matter [how accurate it is] to most clients that its 9% its more the direction and it's the change that counts
 - Increasing returns could be used as a signal for decreasing risk "

ClearMacro: filling the gap between burdensome Aladdin and questionable Robo-advisory

Use Case at the Multi-family Office: Asset Allocation Portfolio Diagnostics

CM's Initial focus with customer
Expected to grow to other functions once initial processes bedded down

PORTFOLIO DIAGNOSTIC USE CASE STEPS AT CLIENT By Advisor/DFM	CLIENT PROBLEMS THAT CLEARMACRO IS ADDRESSING	CLEARMACRO SOLUTIONS
• Acquires a client		• N/a
• Risk profiles the client		• N/a
• Diagnoses whether the client's current portfolio is strategically optimal for that risk profile	<ul style="list-style-type: none"> • Mapping of active managers/mutual funds to asset allocation exposures/definition • Credible return and risk forecasting, across a broad investment universe, for different FX treatments (hedged vs unhedged), and able to recalibrate in real-time to respond to market shocks, and compare to different external forecasters (or vs in-house forecasts when available) • Forecasting transparency (methodology, drivers) • Multi-dimensional portfolio optimization linked to real-time return/risk forecasts 	<ul style="list-style-type: none"> • Instant comparison of forecast performance trajectory of an actual vs model portfolio (optimized on either 5 or 10 year investment horizon) • Deconstruction of forecasts into component drivers • Reporting of asset class, regional, country, sector, factor/style, and FX risk exposures
• Evaluates how quickly they should transition to model portfolio	• As above but now calibrated to shorter forecast horizons ranging from 1 month to 3 year investment horizon	<ul style="list-style-type: none"> • Comparison of optimal strategic portfolio to optimal model portfolios generated using shorter-term return and risk forecasts • Tactical "market view" dashboards
• Transition vehicles (e.g., passive ETFs, active managers or securities)		
• consults with relevant stakeholders (asset owner/IC)	• Generating a narrative (that stakeholders will relate to) around transition drivers and benefits	<ul style="list-style-type: none"> • Downloadable reports and tables • UI with click-throughs
• reports to relevant stakeholders (periodic newsletter/fact sheets/market commentary)	• Generating a commentary around actions taken, macro/market conditions, and the outlook for market/portfolio returns	<ul style="list-style-type: none"> • Downloadable reports and tables • UI with click-throughs
• Process repeats	As per above	Automated ("push") nudges to review actual portfolios when macro/market/return prospects change beyond a pre-set trigger level

Target Outcomes

- ✓ Improve portfolio performance
- ✓ Introduce better ability to personalize client portfolios
- ✓ Improve advisor and end-client confidence and trust in process ; reduce stress and eliminate unproductive conversations around events which often don't matter
- ✓ Delight customers with more-real time and possibly interactive options in relative to investment servicing

Appendix: generic proposition for WM

Problems

Wealth Management ("WM") firms – problems:

- Traditional investment processes & tools can result in suboptimal investment interactions and outcomes (especially during/after periods of volatility), eroding the trust of WM's end-clients.
- Legacy WM investment decision systems and processes are replete with cost and key man risks.
- Asset Allocation is becoming more important as the industry transitions to passives (over funds) but WMs are not adequately equipped. Limited credible future proofing – current systems at ceiling.
- Challenge to provide targeted insight/advice that is consistent in framework across time & advisors.

End-clients of WMs: the customer experience and investment journey often does not meet expectations - especially for the younger digital native cohort (anytime /anywhere service, interrogation, prompts etc).

Why:

- Advisors and clients are drowning in information, often resulting in stress and poor decisions.
- Research is not real-time/forward looking, portfolio contextualised or interrogatable but is expensive.
- Technology to solve for this has traditionally been 'Black-Box' and not available to WM. Equally, WMs have been deploying their tech budgets elsewhere (distribution, CRM and mid-office IT/processes).

What ClearMacro customers & reviewers like

WM firms like that ClearMacro helps them to futureproof by embarking on a credible trajectory to grow their AUM by delighting customers (higher trust in the processes and information and better investment outcomes), whilst lowering the WM's cost-to-serve (enabling a broader target market). WMs appreciate the more insightful, rigorous, and consistent Asset Allocation processes enabled by ClearMacro's technology.

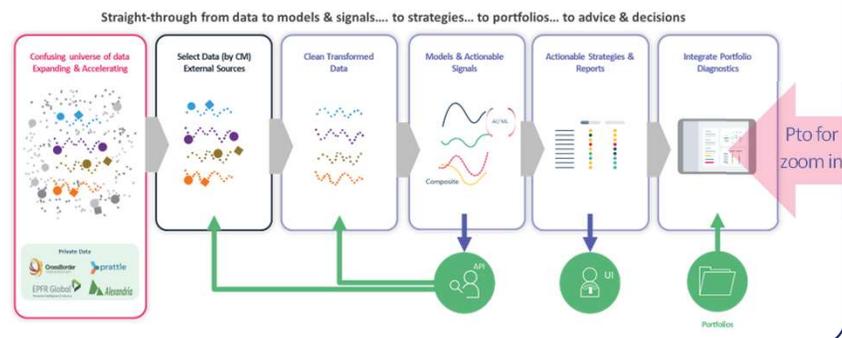
End-clients of WMs like:

- Prospect of better lifestyle and/or retirement, underpinned by better financial planning & investing.
- Cost effective, Institutional-quality investment solutions fit to life plans (vs. arbitrary benchmarks)
- Better prioritisation. Reduced time and stress on distracting/dilutive investment discussions.

What ClearMacro users appreciate:

- Use Cases across all WM, FO mandate types. Configurable.
- ClearMacro "puts the whole picture together". Transparency and Explainability (driving client trust).
- Black-Box Quant Tech, made accessible. 10-20X buy-vs-build relative cost proposition. Independency.
- Can be deployed as standalone (Saas) or integratable (APIs).
- Very accomplished team, managed > 65 B\$ AUM institutional capital. Accretive to WM credibility.

Solutions



Credentials



Already trusted by leading Wealth Managers, Family Offices and investment firms globally



ClearMacro is to Wealth Management ("WM"), what satnav has increasingly been to driving in recent decades ...
Get you where you want, more safely, with less stress and, ultimately, reach your destination faster!

Appendix: General proposition for Family Offices and Wealth Managers

Example snapshots

Portfolio Construction & Consultation

Real-time return estimates provide prompts or optimise client portfolios, factoring in current conditions.

Scalable out to range of portfolios across a range of advisors and end clients.

Weights Returns Scenarios Optimise Portfolio US

This shows a suggested asset mix, based on your selected weight constraints, your target portfolio risk level (you can edit the default constraint in the box below), and where the optimizer objective is to maximise the portfolio Sharpe ratio over a Blended Horizon (which you can edit below).

Vol Constraint % 15 Investment Horizon Blended Horizon

Return Inputs

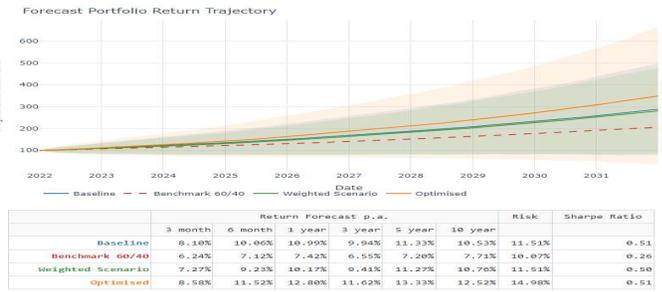
Asset	Baseline Weight %	Optimised Weight %	Change
Equities, Developed Markets	25.00%	40.00%	+15.00%
Equities, Emerging Markets	5.00%	6.00%	+1.00%
Equities, US	10.00%	10.00%	+0.00%
IG Corporate Bonds, US	2.50%	0.00%	-2.50%
HY Corporate Bonds, US	2.50%	0.00%	-2.50%
Govt Bonds Inflation Linked, US	5.00%	5.00%	0.00%
Govt Bonds, US	10.00%	5.00%	-5.00%
Commodities	5.00%	0.00%	-5.00%
Infrastructure	10.00%	13.00%	+3.00%
Private Equity	10.00%	13.00%	+3.00%
Real Estate	10.00%	13.00%	+3.00%
Cash	5.00%	0.00%	-5.00%



ClearMacro

- Asset Allocation
- Portfolio Builder
- Multi Horizon Ratings
- Portfolio Consultation
- Tactical View Builder
- Signals
- Explorer
- Glossary
- Forecasts and Nowcasts
- Forecast Viewer
- Nowcasting
- Glossary
- Forecasts and Nowcasts
- Forecast Viewer
- Nowcasting

	TAA			SAA			Change
	3m	6m	1yr	3yr	5yr	10yr	
Equities							+15.00%
Equities, US	■	■	■	■	■	■	+1.00%
Equities, Emerging Markets	■	■	■	■	■	■	+0.00%
Equities, Developed Markets	■	■	■	■	■	■	-2.50%
Corporate Bonds							-5.00%
HY Corporate Bonds, US	■	■	■	■	■	■	+3.00%
IG Corporate Bonds, US	■	■	■	■	■	■	+3.00%
Govt Bonds							-5.00%
Govt Bonds, US	■	■	■	■	■	■	-5.00%
Govt Bonds Inflation Linked, US	■	■	■	■	■	■	-5.00%
HT Corporate bonds, US	■	■	■	■	■	■	-5.00%
IG Corporate Bonds, US	■	■	■	■	■	■	-5.00%
Govt Bonds							-5.00%
Govt Bonds, US	■	■	■	■	■	■	-5.00%
Govt Bonds Inflation Linked, US	■	■	■	■	■	■	-5.00%
Commodities	■	■	■	■	■	■	-5.00%
Infrastructure				■	■	■	+3.00%
Private Equity				■	■	■	+3.00%
Real Estate				■	■	■	+3.00%



Multi-Asset, Multi-horizon view

Real-time views across all asset classes over different horizons (configurable)