



Multi-Asset Portfolio Analytics: How to Do it Right Maximize the Explanatory Power of Performance Attribution

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FactSet Research Systems, Inc.



Industry Leaders in Client Data Integration, Management and Enrichment



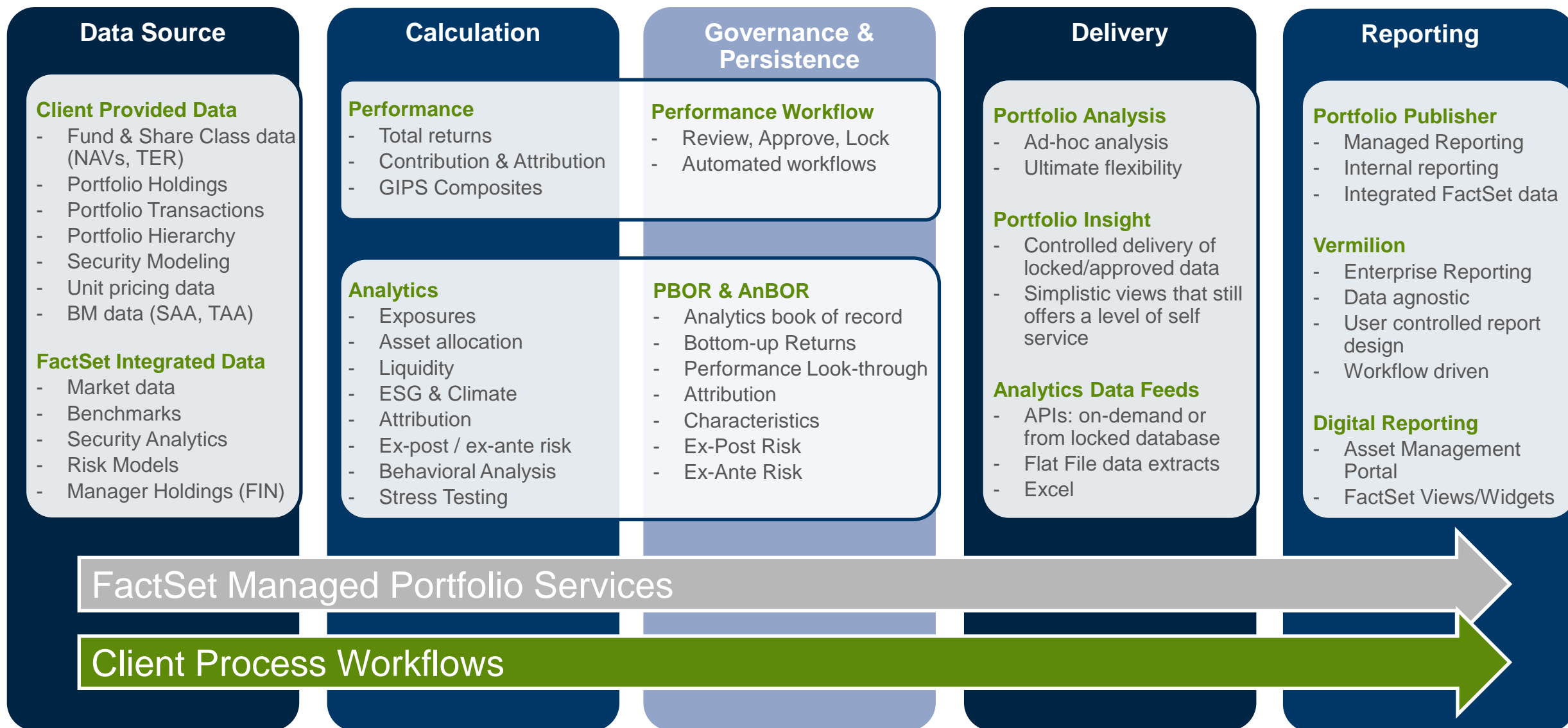
SEE THE ADVANTAGE › **FACTSET**

FactSet | To Do Portfolio Analytics Right, Get the Data Right

Areas of Focus Around the Data

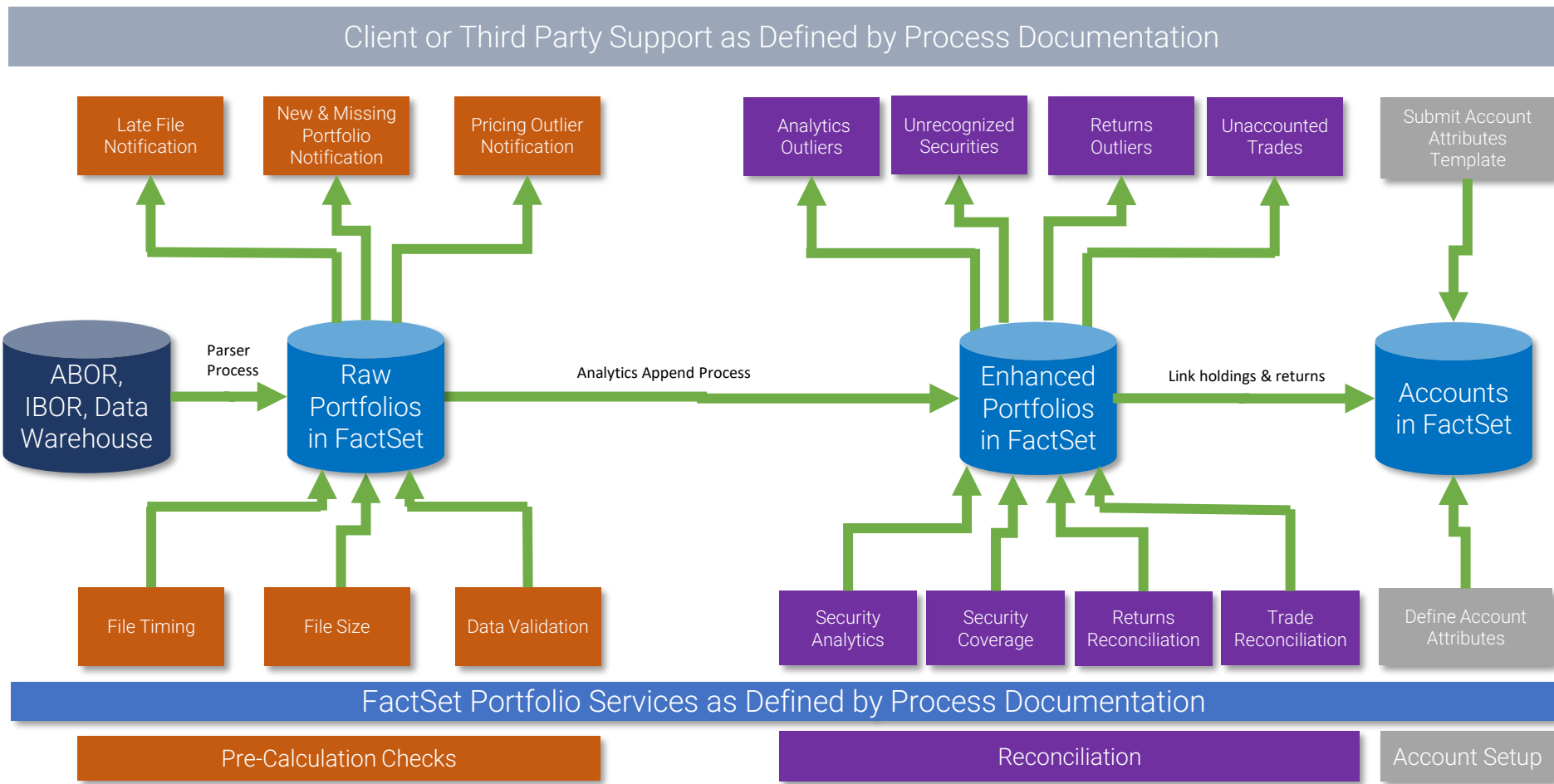
- Built upon 40 years of expertise
- Portfolio holdings & returns
- Benchmarks
- Data essential and specific to a single asset class
 - Bond analytics
 - Private capital analytics
- Groupings

FactSet Process of Portfolio Operations



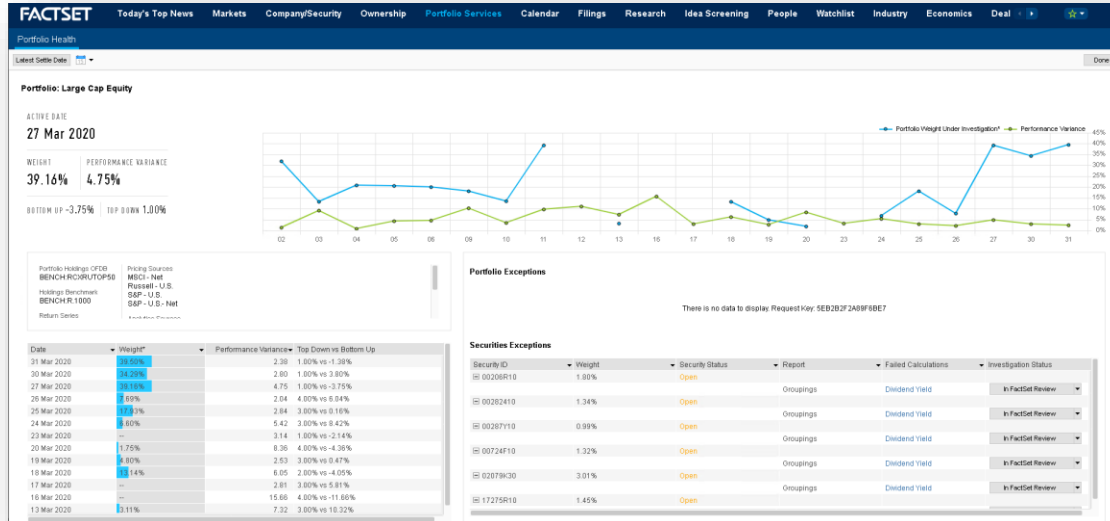


FactSet will systematically probe for outliers, unreconciled returns, coverage gaps, and unaccounted trade data. FactSet will contact <name> at your firm to resolve data discrepancies



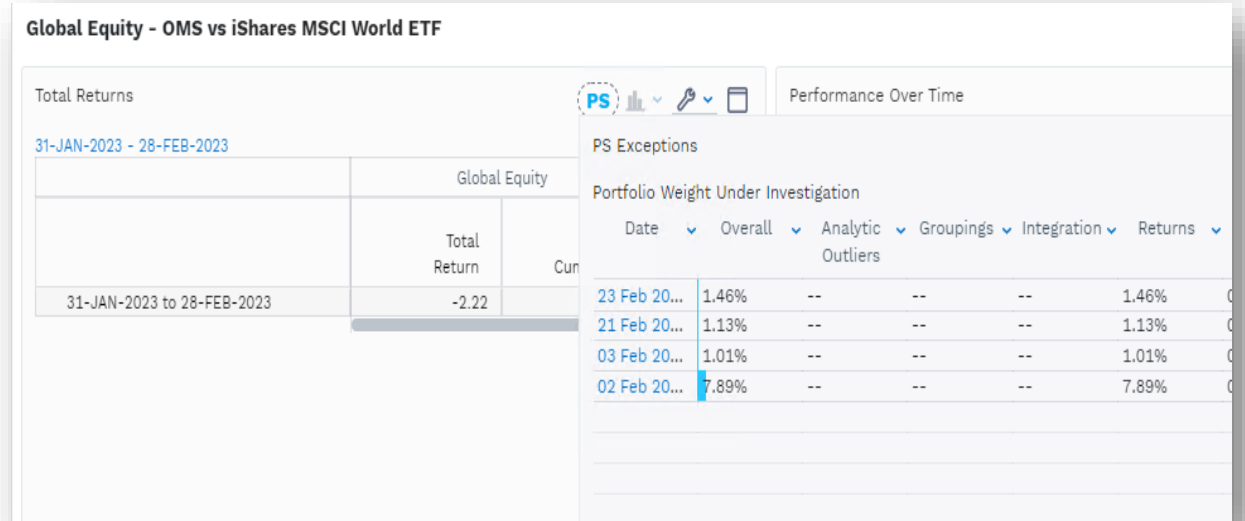
Portfolio Health

- An account-based report bringing transparency, insight, and actionable intelligence on the data reconciliation health of client portfolios.
- A hub and spoke approach with Portfolio Health at the center supporting workflows to remediate data issues



Portfolio Pulse

- Meet you where you work
- Data Reconciliation transparency directly in Portfolio Analysis



FactSet is a Data Rich Environment | Global Market Data Included

Seamless integration of global market data, connected across your Security Master



Preview of Selected Multi-Asset Content Sets

Fixed Income

- Bloomberg Barclays
- ICE BofA
- Bloomberg Ausbond
- JP Morgan
- Citigroup
- FTSE
- HSBC
- iBoxx
- SwissBond
- ChinaBond
- S&P
- S&P Leveraged Loan
- UOB SGS
- IHS Markit

Equity

- S&P
- MSCI
- Russell

FTSE

- Dow Jones
- STOXX
- Topix
- NYSE/AMEX

Private Markets

- Burgiss
- Cobalt

ESG

- MSCI
- Sustainalytics
- Trucost
- Reprisk
- + more ...

Fund & Comparison

- iShares ETF
- Mercer

eVestment

- Morningstar
- FinancialExpress
- Lipper

Risk Models

- FactSet
- Axioma
- Barra
- Northfield
- ICE Liquidity

Fixed Income T&C's

- FactSet
- Markit/WSO
- Intex
- Moodys
- ICE IDC

Custom Benchmarks

Benchmark Integration

What does it mean to integrate a benchmark?



Non-Standard Benchmarks | Construct SAA, TAA, & Hedged Benchmarks

Blended Benchmarks

- Ex.: 50% MSCI Europe + 50% JPM CEMBI Europe

Hedged Benchmarks

- Barclays Global Agg Hedged to USD

Hurdle Rates

- Ex.: LIBOR + 100bps

Exclusions

- Exclusions, Caps, and Floors
- By Single Name or by Group
- Ex.: MSCI Europe ex Greece

OPTIONS

Composite

General

PA

Risk

Publisher

SPAR

GIPS®

Name

CUSTOM_BLEND

Description

50% MSCI Europe + 50% JPM CEMBI Europe

Composite Type

Simple

Returns Composite Type

Simple

Base Currency

U.S. Dollar

View By: None

Component	Description	Frequency	Start Date	End Date	Relative Weight (%)
BENCH.M90500	MSCI Europe	Daily	EARLIEST	LATEST	50
BENCH.JPM30003	JP Morgan CEMBI Europe	Daily	EARLIEST	LATEST	50
Enter New Component					

Portfolio/Benchmark:

BENCH.LHMN0036

Rebalance Frequency:

Monthly

Rebalance Start:

Latest Frequency End

Forward Rate:

1 Month

☒ Include Projected Cash Flows

☒ Match Benchmark Returns

Base Currency:

U.S. Dollar

Hedge Amount:

0

%

Hedge Summary:

Currency(ISO)	Hedge %
-Everything-	0

Group Limits

Select Group

Universe as of 2/06/2020 to 2/06/2020

☒ Show Applied Group Limits

Industry Group	Type	Weight (%)
Automobiles & Components	Cap	5
Energy	Floor	10
Food Beverage & Tobacco	Exclude	---

Portfolio/Benchmark:

BENCH.CASH_GBP_LIBOR12

Hurdle Rate:

100

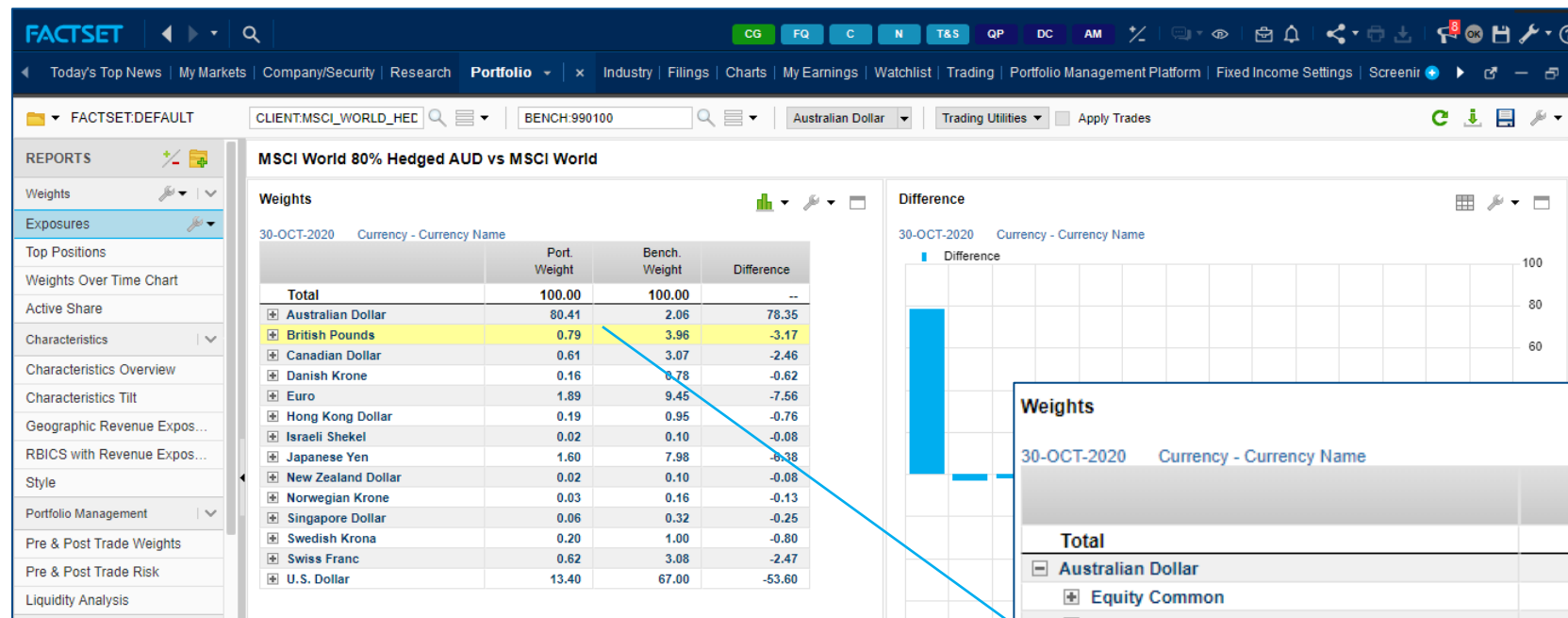
Basis Points

Reporting Currency:

British Pounds

Benchmarks | Synthetic Hedging Utility

- Enables creation of hedged Portfolios and Benchmarks for any combination of currencies
- Control rebalance, hedge ratio, and match benchmark methodology
- Hedge parts of your IBOR to track and measure effectiveness of Currency Policy, e.g., IEQ, Real Assets



Benchmark Family	Prefix	Date Settings	Projected Cash Flows	Rebalance Frequency	Rebalance Date
JP Morgan	JPG	--	N	Monthly	End of Month
MSCI	MSCI	Five Day	N	Monthly	Two business days before first day of the month
Ice BofAML	MFI	Include end of Month	N	Monthly	End of Month
Barclays	LFI	--	Y	Monthly	End of Month
CITI	CITI	Include end of Month	Y	Monthly	End of Month
Default Methodology	--	--	N	Monthly	End of Month

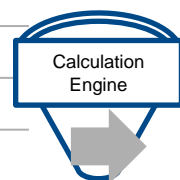
Weights

30-OCT-2020 Currency - Currency Name

	Port. Weight
Total	100.00
[-] Australian Dollar	80.41
+ Equity Common	1.83
+ Unit	0.23
[-] [Cash]	78.35
Buy Australian Dollar - Sell British Pounds	3.17
Buy Australian Dollar - Sell Canadian Dollar	2.46
Buy Australian Dollar - Sell Danish Krone	0.62
Buy Australian Dollar - Sell Euro	7.56
Buy Australian Dollar - Sell Hong Kong Dollar	0.76
Buy Australian Dollar - Sell Israeli Shekel	0.08
Buy Australian Dollar - Sell Japanese Yen	6.38
Buy Australian Dollar - Sell New Zealand Dollar	0.08
Buy Australian Dollar - Sell Norwegian Krone	0.13
Buy Australian Dollar - Sell Singapore Dollar	0.25
Buy Australian Dollar - Sell Swedish Krona	0.80
Buy Australian Dollar - Sell Swiss Franc	2.47
Buy Australian Dollar - Sell U.S. Dollar	53.60

Benchmark Analytics Enrichment

	ICE Fixed Income	Bloomberg	JPMorgan	HSBC	Nomura BPI		ICE Fixed Income	Bloomberg	JPMorgan	HSBC	Nomura BPI
Average Life	●	●	●	●	●		●	●	●	●	●
Convexity	●	●	●	●	●		●	●	●	●	●
Convexity to Worst	●	●	●	●	●		●	●	●	●	●
Effective Convexity	●	●	●	●	●		●	●	●	●	●
Duration	●	●	●	●	●		●	●	●	●	●
Macauley Duration	●	●	●	●	●		●	●	●	●	●
Modified Duration	●	●	●	●	●		●	●	●	●	●
Modified Duration To Worst	●	●	●	●	●		●	●	●	●	●
Duration to Worst	●	●	●	●	●		●	●	●	●	●
Effective Duration	●	●	●	●	●		●	●	●	●	●
KRD 6m, 2y, 5y, 10y, 20y, 30y	●	●	●	●	●		●	●	●	●	●
Spread Duration	●	●	●	●	●		●	●	●	●	●
Spread Duration – Adjusted	●	●	●	●	●		●	●	●	●	●
Spread	●	●	●	●	●		●	●	●	●	●
Spread – Swap	●	●	●	●	●		●	●	●	●	●
Spread to Worst	●	●	●	●	●		●	●	●	●	●
OAS	●	●	●	●	●		●	●	●	●	●
YTM	●	●	●	●	●		●	●	●	●	●
YTW	●	●	●	●	●		●	●	●	●	●
Effective Yield	●	●	●	●	●		●	●	●	●	●



Private Capital | Data Requirements of an Asset Owner

Private Benchmarks

- Burgiss Benchmarks
 - Time Weighted Returns
 - Peer Universes
 - Custom Benchmarks
- YFYS benchmark for private real estate and infrastructure
- Public Markets Equivalent (PME+, Direct Alpha, etc.)
- Continued Benchmark expansion in niche private markets to meet client needs

Fund Level Data

- Contributions, Distributions, Fees, Expenses & Valuations
- IRR, RVPI, TVPI, DPI, Commitment Multiples alongside time weighted returns
- Fund, Group, Sleeve & Total Plan/Option Calcs
- Continued Asset Class Expansion
- Pacing Model

Transparency & Content

- Private Capital funds transparency data | Burgiss
- Company Firmographics (4M+), Company Financials (2M+), Investments, Investors, and News
- Screen using your preferred quantitative or qualitative criteria including industry, stage, strategy, to find best managers

Groupings Reconciliation

See how your investigations impact your portfolio with [Portfolio Health](#)

REPORTS

FactSet Monitored Reports | v

Integration

Analytic Outliers

Groupings

Risk Coverage

Returns

Security Coverage

Index Services - Analytics

Multiple Portfolios

13 Mar 2023 - 13 Mar 2023

Assign Groupings

Security ID	Date	Status	Latest Note	Source	Security Name	Asset Class	Asset Type
US91412GSS56	13 Mar 2023	Client Verification	Client: Groupings override ...	CLIENT/FIXED_INCOME/US_MUNI.ACCT	University Calif Revs 5.0% 15-may-2038		
US913366GG99	13 Mar 2023	Resolved	Client: Groupings override ...	CLIENT/FIXED_INCOME/US_MUNI.ACCT	Univ Calif Repts Med Ctr Pooled Rev 5.0% 15-may-2038		
US913366GF17	13 Mar 2023	Resolved	Client: Groupings				
US67766WXM99	13 Mar 2023	Resolved	Client: Groupings				
US65000BPS15	13 Mar 2023	Resolved	Client: Groupings				
US64971Q6R96	13 Mar 2023	Resolved	Client: Groupings				
US64971Q6A61	13 Mar 2023	Resolved	Client: Groupings				
US626207X251	13 Mar 2023	Resolved	Client: Groupings				
US59447TJR59	13 Mar 2023	Resolved	Client: Groupings				
US5926467F40	13 Mar 2023	Resolved	Client: Groupings				

Assign Groupings

S&P Consolidated Rating: **Select Grouping** +

Search Groupings

- A
- AA
- AAA
- Agency
- B
- BB
- BBB
- C
- CC

*Only custom Groupings formulae are enabled

Submit

View Investigation Details

Open in Security Overview

Open in Security Analysis

Reply to FactSet

Client Verification

Resolved

Assign Groupings

- Daily Reconciliation on client defined list of accounts and custom groupings
- End-to-end workflow to identify unassigned securities and assign proper grouping
- Minimize impact by proactively identifying these securities as far upstream as possible
 - Identify problems on day 1 to avoid delays at Month, Quarter, Year End

SEE THE ADVANTAGE › **FACTSET**

FactSet | To Do Portfolio Analytics Right, Make the Best Configuration Choices

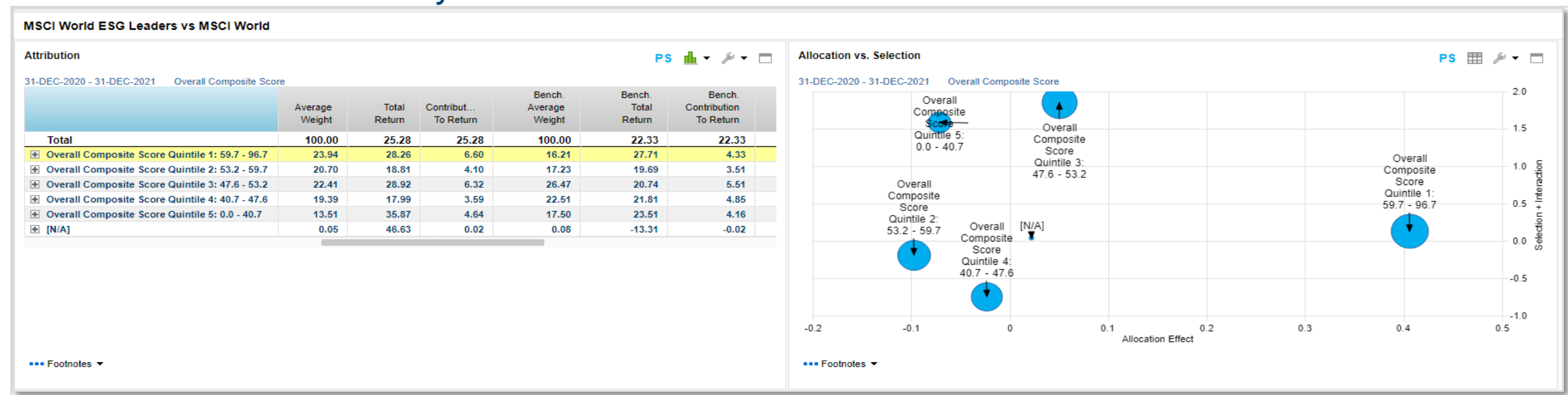
Areas of Focus Around the Configuration

- Built upon 25 years of experience working with our clients
- Groupings
- Attribution model

How to Think about Grouping Multi-Asset Portfolio Analytics

- Standardized Groupings
 - Allow for the cross-sectional comparability of performance attribution across firms
 - Sector & industry
 - Region & country
 - Risk-based attribution by an institutional quality provider
- Grouping by Key Data in the Investment Process
 - Maximize internal understanding of the sources of outperformance & underperformance
 - How does the firm quantify bullish vs. bearish views on securities
- The importance of divided groupings after asset class groupings
- Attribution by composite ESG score

Performance Attribution by ESG & Climate Scores

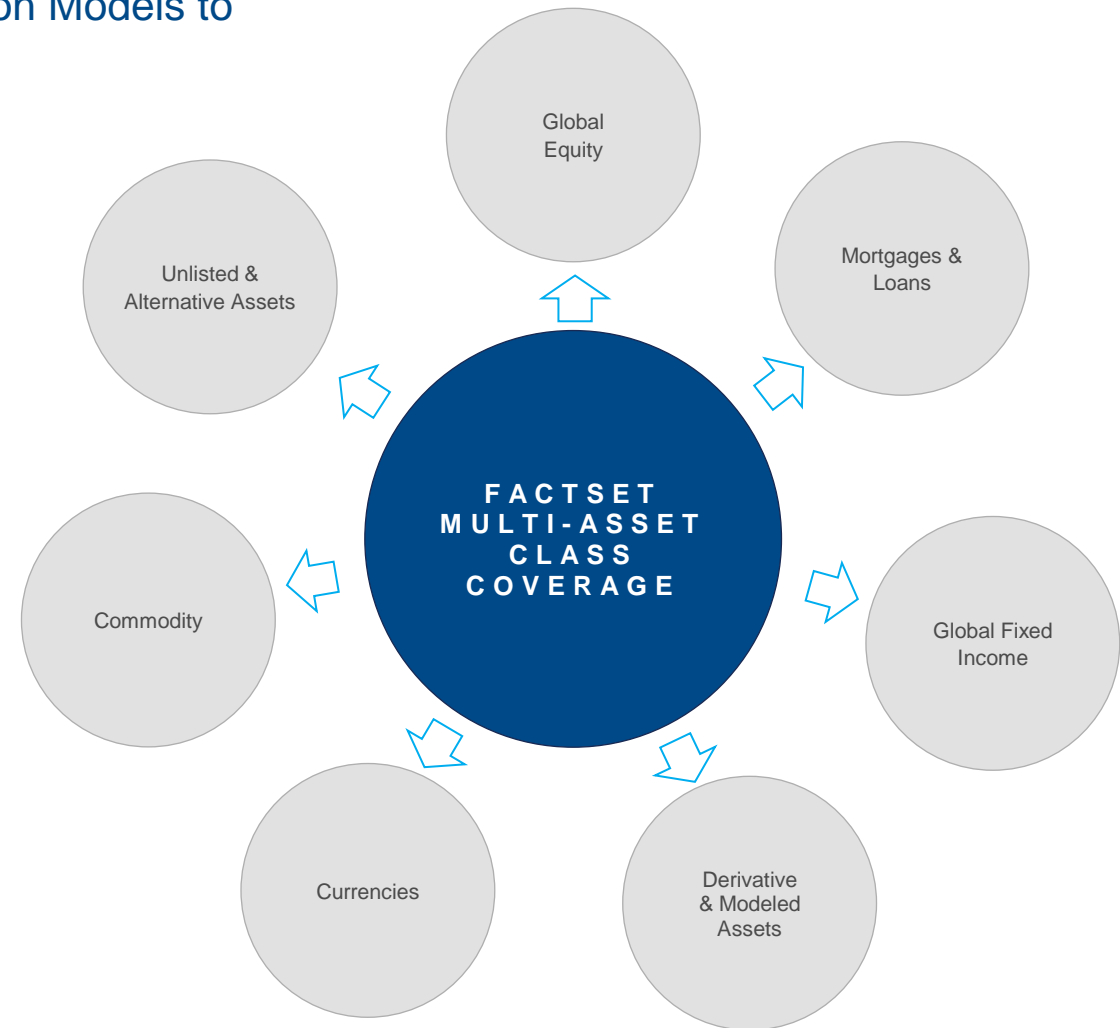


	Port. Avera... Weight	Port. Total Return	Port. Contr... To Re...	Bench. Avera... Weight	Bench. Total Return	Bench. Contr... To Re...	Avera... Weight Differ...	Total Return Differ...	Contr... To Re... Differ...	Alloc... Effect	Selectio... Interacti...	Total Effect
Total	100.00	55.30	55.30	100.00	50.19	50.19	0.00	5.11	5.11	1.53	3.58	5.11
1. Leader	41.48	123.48	29.22	37.62	110.44	24.91	3.86	13.04	4.31	0.75	4.83	5.58
2. Innovator	23.60	43.82	11.90	22.18	44.79	10.58	1.42	-0.97	1.32	-0.28	-0.33	-0.61
3. Follower	17.89	29.47	7.97	19.25	38.21	8.22	-1.36	-8.74	-0.25	-0.46	-1.21	-1.66
4. Laggard	14.13	13.20	4.22	18.88	20.13	5.05	-4.76	-6.93	-0.83	1.59	-0.03	1.56
[Cash]	0.62	6.54	0.05	0.00	0.00	0.00	0.62	6.54	0.05	-0.17	0.00	-0.17

Attribution Models

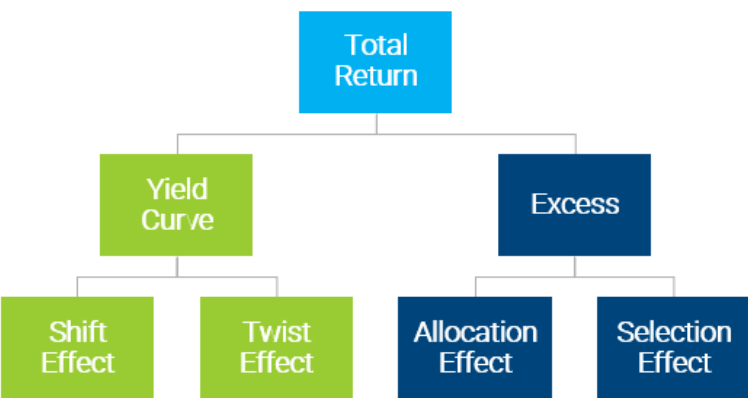
A full suite of market standard and custom FactSet Attribution Models to cover every Investment Asset Class & Investment Process

- Bottom-up Attribution Models
 - 2-Factor Brinson Attribution
 - 3-Factor Brinson Attribution
 - Geometric Attribution Models
 - Risk Attribution
 - Fixed Income Attribution
 - Balanced Attribution
 - Custom Attribution
- Top-Down Attribution Models
 - Investment Process Attribution
 - Macro Attribution
 - Top-Down Attribution
- All attribution models may run in any currency
- All models may include currency effects



Example | Fixed Income Performance Attribution

Model extends with optional effects to meet the needs of different investment process



The below effects are optional. Not all are shown, some can be broken down further and a full list available upon request



FI Performance Attribution																			
10/31/2016 - 11/30/2016																			
	Demo Fund				Demo Benchmark				Variation			Yields	Attribution						
	Avg OAD	Avg Weight	Return	Contrib. Return	Bench Avg OAD	Bench Avg Weight	Bench Return	Bench Contrib. Return	Average Weight Difference	Total Return Difference	Contrib. To Return Difference	Shift Point Yield Change	Shift Effect	Twist Effect	Allocation Effect	Selection Effect	Total Effect (Local)	Total Currency Effect	Total Effect
Total	5.44	100.00	-1.62	-1.62	5.73	100.00	-2.37	-2.37	--	0.75	0.75	0.57	0.12	-0.14	0.06	0.52	0.56	0.19	0.75
[-] Derivatives	-0.80	0.00	0.68	0.22	--	--	--	--	0.00	0.68	0.22	-0.06	0.02	0.00	0.01	--	0.03	-0.00	0.03
[+] Government Bond Futures	-0.80	0.00	0.68	0.22	--	--	--	--	0.00	0.68	0.22	-0.06	0.01	-0.01	0.00	--	0.01	-0.00	0.01
[-] Fixed Income	5.77	98.30	-2.19	-2.18	5.78	99.23	-2.38	-2.37	-0.93	0.19	0.19	0.56	0.07	-0.18	0.02	0.51	0.42	-0.15	0.27
[-] Corporate	5.95	80.34	-1.98	-1.60	7.23	25.72	-2.69	-0.69	54.62	0.71	-0.91	0.55	-1.60	0.07	0.24	0.20	-1.09	-0.00	-1.09
[+] Financial Institutions	6.56	30.25	-2.73	-0.84	5.73	8.04	-1.99	-0.16	22.21	-0.75	-0.68	0.56	-0.84	0.02	0.09	-0.02	-0.75	-0.00	-0.75
[+] Industrial	5.62	47.45	-1.45	-0.69	7.72	15.72	-2.93	-0.46	31.73	1.48	-0.22	0.55	-0.79	0.05	0.14	0.28	-0.33	-0.00	-0.33
[+] Utility	4.87	2.63	-3.02	-0.08	9.52	1.96	-3.61	-0.07	0.67	0.59	-0.01	0.56	0.04	0.00	0.01	-0.04	0.00	-0.00	0.00
[+] Government Related	6.82	3.92	-6.76	-0.27	5.36	7.90	-2.47	-0.20	-3.97	-4.29	-0.08	0.59	0.13	-0.02	0.01	0.01	0.12	-0.15	-0.02
[+] Securitized	4.44	14.03	-2.04	-0.30	4.18	29.54	-1.74	-0.51	-15.50	-0.31	0.21	0.56	0.34	-0.04	0.02	-0.01	0.31	-0.00	0.31
[+] Treasury	--	--	--	--	6.13	36.08	-2.67	-0.97	-36.08	2.67	0.97	--	1.23	-0.17	0.08	--	1.14	-0.00	1.14
[+] [Cash]	0.25	1.55	0.04	0.00	0.25	0.77	--	--	0.78	0.04	0.00	0.56	0.02	0.02	0.02	0.02	0.07	-0.00	0.06
[+] [Currency Forward]	0.00	0.16	1.12	0.34	--	--	--	--	0.16	1.12	0.34	-26.38	0.01	0.02	0.02	--	0.05	0.34	0.39

Whole of Fund | Macro Attribution

Evaluate Top-level Returns for Fund of Fund or Asset Allocation Strategies

- Isolate the value from your asset allocation, style selection, and manager selection bets
- Analyze top-down allocation, with embedded overlays, style bets within asset classes, and manager performance related to their stated benchmark
- Utilize customized groupings within Portfolio Analysis to group reports by asset class, style, region, manager, etc.

Kanga Balanced Growth Option vs 5. AAA with Dynamic FX & Dynamic Overlays										
Total Fund Attribution										
30-JUL-2021 - 27-AUG-2021 Kanga Option										
	Manager Benchmark Name	Port. Weight	Port. Return	Manager Benchmark Total Return	SAA Benchmark Weight	SAA Bench Total Return	Asset Allocation Effect	Style Selection Effect	Manager Selection Effect	Total Effect
Total		100.00	1.32	1.94	100.00	1.63	0.01	0.29	-0.62	-0.31
Option		100.00	1.32	1.94	100.00	1.63	--	0.29	-0.62	-0.31
Australian Equities		29.00	0.43	2.20	29.00	1.90	0.00	--	-0.51	-0.42
Private Equity		5.00	0.36	3.02	5.00	2.10	0.00	0.06	-0.13	-0.07
International Equities		26.00	2.46	2.34	26.00	2.82	0.00	0.00	0.03	-0.06
Pre-Overlay		26.27	2.65	2.53	26.27	3.00	-0.00	--	0.03	-0.06
Portfolio		26.27	2.65	2.53	--	--	-0.10	--	0.03	-0.06
Kanga International Equities - Fund 4	MSCI EM (Emerging Markets) - Gross Re...	2.27	0.24	0.56	--	--	--	-0.04	-0.01	-0.05
Kanga International Equities - Fund 1	MSCI AC World - Gross Return	8.58	2.53	2.73	--	--	--	0.01	-0.02	-0.00
Kanga International Equities - Fund 2	MSCI AC World - Gross Return	9.32	2.60	2.73	--	--	--	0.01	-0.01	0.00
Kanga International Equities - Fund 3	MSCI AC World Small Cap - Gross Return	6.11	3.82	2.68	--	--	--	0.02	0.07	0.08
Benchmark		--	--	--	26.27	3.00	--	--	--	--
MSCI World Index - Net Return		--	--	--	26.27	3.00	--	--	--	--
Overlay		-0.27	21.98	21.98	-0.27	22.05	0.00	0.00	--	0.00
Kanga International Equities Overlay	Kanga International Equities Overlay	-0.20	2.61	2.61	-0.20	2.61	--	0.00	--	0.00
Kanga Currency Overlay	Kanga Currency Overlay	-0.07	73.03	73.03	-0.07	73.03	--	0.00	--	0.00
Opportunistic Growth		1.00	0.36	0.36	1.00	2.60	-0.00	-0.02	--	-0.02
Cash		6.00	--	0.00	6.00	0.00	0.00	0.00	-0.00	-0.00
Global Debt		18.00	0.04	0.15	18.00	0.03	-0.00	0.00	-0.02	0.00
Alternative Credit		1.00	1.50	-0.09	1.00	1.06	-0.00	-0.02	0.03	0.00
Infrastructure		9.00	2.20	2.20	9.00	1.50	-0.00	0.08	--	0.08
Property		5.00	3.80	4.13	5.00	0.30	0.00	0.20	-0.02	0.18

Whole of Fund | Investment Process Attribution

- » Extend Macro Attribution to capture the asset owner's entire investment process, specifically around multiple asset allocation and asset class construction decisions
- » Attribute alpha at each decision level from Strategic Asset Allocation to Implemented Portfolio
- » Seamless workflow to create a custom investment process and upload data
- » Provide easy to consume reporting to the firm's executive team and investment committee



Example | Investment Process Attribution

Investment Process Summary Tile: View top-level performance of each decision across entire asset owner investment process

Decision Tile: Any decision can be further examined relative to the previous decision using FactSet’s full suite of Attribution models.

Stress Tests

Other Options

Internal

Attribution

Investment Decision

None

None

2. Strategic Asset Allocation

3. Tactical Asset Allocation

4. Actual Asset Allocation

5. Manager Selection

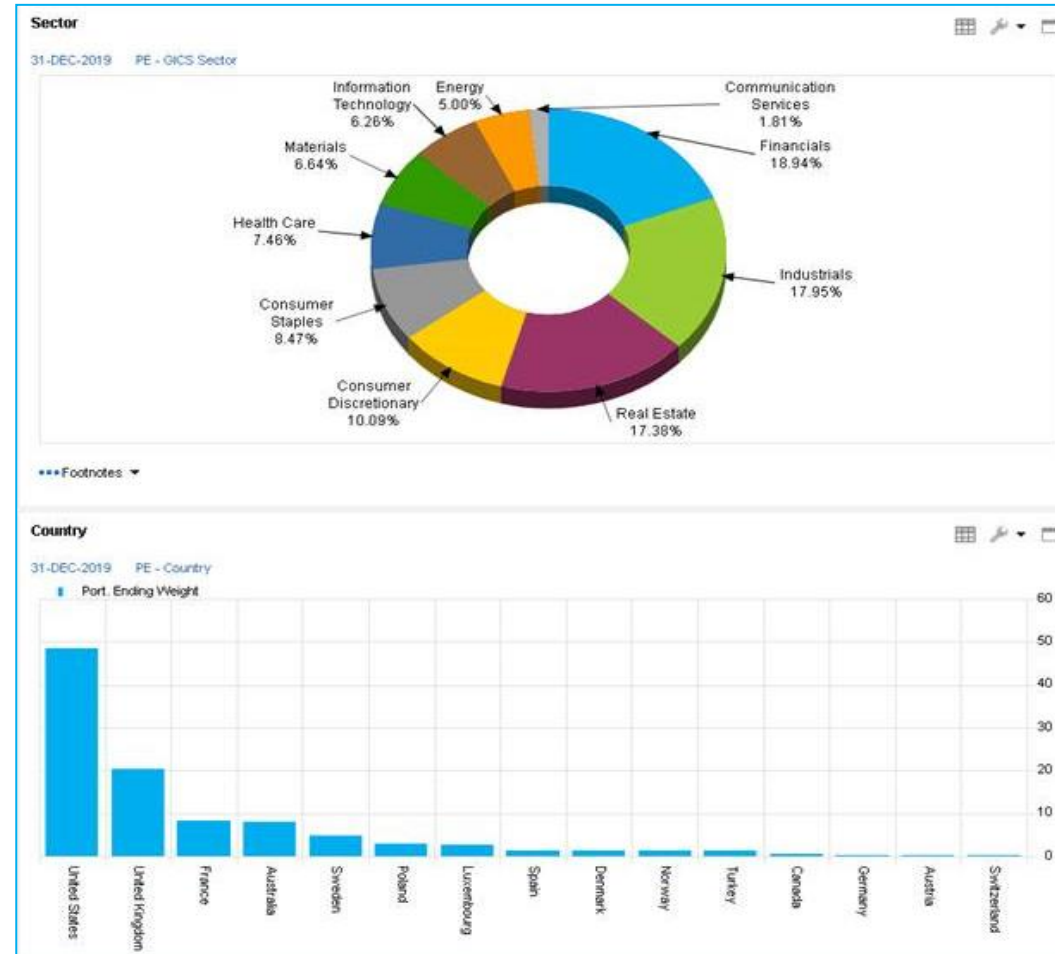
Moderate Investment Plan							
Summary Tile							
31-DEC-2019 - 31-DEC-2020							
	Return	Value Add					
Total		0.972					
1. Target Return - 7.50	7.500	--					
2. Strategic Asset Allocation	7.840	0.340					
3. Tactical Asset Allocation	8.203	0.363					
4. Actual Asset Allocation	8.675	0.472					
5. Manager Selection	8.472	-0.203					

Tactical Asset Allocation							
31-DEC-2019 - 31-DEC-2020							
Asset Class							
	Tactical Asset Allocation		Strategic Asset Allocation		Brinson Attribution		
	Weight	Return	Weight	Return	Allocation	Selection	Total
+ Cash	4.97	0.240	5.00	0.240	0.002	--	0.002
+ Commodities	3.95	-5.838	2.00	-5.838	-0.285	--	-0.285
+ Domestic Equity	25.05	10.817	21.00	10.785	0.118	0.008	0.126
+ Fixed Income	11.91	-1.588	15.00	-1.588	0.305	0.000	0.305
+ Hedge Funds	2.98	-0.240	5.00	-0.240	0.169	--	0.169
+ Infrastructure	4.99	5.158	5.00	5.158	0.000	--	0.000
+ International Equity	20.01	8.688	20.00	8.666	0.000	0.004	0.004
+ Private Equity	12.16	26.824	12.00	26.824	0.028	--	0.028
+ Real Estate	13.98	6.676	15.00	6.676	0.012	--	0.012
Total	100.00	8.203	100.00	7.840	0.350	0.012	0.363

Analyze Public Equity, Fixed Income and Private Capital in an Integrated Platform

- Drill into the Holdings to Study Sector or Geographic Exposures
- A Composite of Private Capital Portfolios with relevant groupings eg Vintage, Type, Stage etc

	Port. Ending Weight	Port. Ending Market Value	# of Securities
Total	100.00	374,999,996.92	114
[-] Albuquerque Partners II	8.00	30,000,000.00	3
Furnished for You	0.62	2,307,011.31	1
Pulsante Petrochem	1.23	4,615,498.12	1
Transport NYC, Ltd	6.15	23,077,490.58	1
[+] Andorra Properties II	2.00	7,500,000.00	2
[+] Bakersfield Capital IX	7.00	26,250,000.00	23
[-] Barcelona Partners V	12.00	44,999,996.81	3
Aurantium Chemicals	4.76	17,634,858.09	1
Bondutle Communal Industries	1.86	6,978,917.74	1
Holyrood Properties	5.38	20,186,220.99	1
[-] Bridgepoint Europe IV A	20.00	75,000,000.00	12
AHT Cooling Systems GmbH	0.05	195,050.61	1
Cambridge Education Group, Ltd.	1.34	5,014,204.98	1
Care UK, Ltd.	4.67	17,507,189.81	1
Dorma SBK	1.27	4,777,342.83	1
Dr Gerard	0.81	3,025,485.12	1
Flexitallic Group, Inc., The	1.96	7,349,293.36	1
Histoire d'Or & Marc Orian	1.55	5,807,052.19	1
HobbyCraft Trading, Ltd.	1.43	5,361,167.32	1
Infront Sports & Media AG	0.01	32,520.08	1
Moneycorp	3.36	12,583,943.26	1
TuvTurk	1.07	4,022,779.19	1
Wiggle, Ltd.	2.49	9,323,971.25	1
[+] Chicago River Partners IX	5.00	18,750,000.00	6
[+] Crevasse Management II	10.00	37,500,000.00	7
[+] Georgia Timber Partners IV	5.00	18,750,000.00	9
[+] LA East Partners II	2.00	7,500,000.00	3
[+] Oxford Partners III	11.00	41,250,000.41	19
[+] Tasmania Equity Partners IV	8.00	29,999,999.70	4
[+] Thirteenth Street Partners	10.00	37,500,000.00	23



Closing Thoughts

- How will your process ensure high quality, reliable and repeatable data for your portfolios and benchmarks?
 - Be self-aware about what portion of data management should be a managed service for your firm
- Select institutional-quality sources for the data that is specific to the asset classes in the portfolios and benchmarks
- Thoughtfully choose a set of groupings that address the objectives of the analysis
- Always guarantee that the attribution model is consistent with the investment process