



Morningstar Direct Toolkit

Prepared for Schwab

We know that you care about things like performance and risk analysis, competitive analysis, product comparisons, and reporting supporting distribution. We've prepared this toolkit for you to understand our comprehensive Direct workflows.

Morningstar Direct Toolkit: Data

The screenshot displays the Morningstar Direct interface. On the left is a navigation menu with categories like 'Equity/Credit Research', 'Local Databases', and 'Workspace'. The main area shows a table of funds with columns for Name, Ticker, Morningstar Category, Morningstar Rating, and Total Return. A modal window titled 'Growth' is open, showing a line chart for '10K Growth' from Q4 2018 to Q1 2024, comparing 'Abbey Capital Multi Asset I' and 'BlackRock Tactical Opportunities Instl'.

Modules

Workspace: Houses your saved investment searches, lists, custom data sets, and notes, alongside custom data points with values you define. From there, you can pull up Morningstar reports, dashboards, and interactive charts to stay focused and productive.

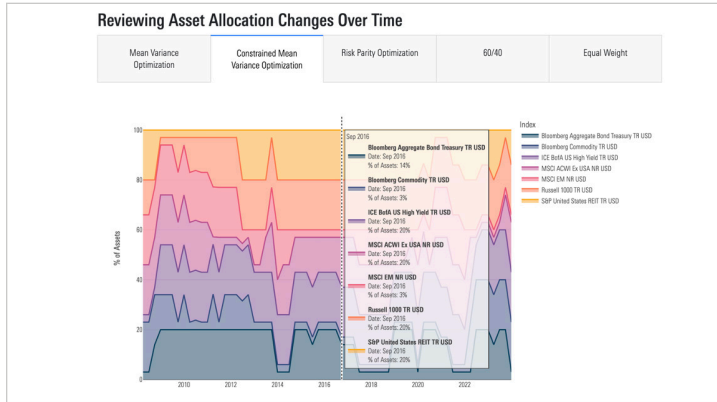
Self-Service Data Feeds

With appropriate licensing, you now have new access options for quickly creating, editing, and monitoring feeds, and for scheduling feeds in investment lists and searches. This allows for more streamlined access and extraction of Morningstar data to fuel processes off-platform.

This screenshot shows the 'Create Feed' configuration window. It includes a progress bar with steps for Source, Parameters, Format, and Delivery. The 'Format' section is expanded, showing options for 'Format Column Names' (No), 'File Format' (CSV), 'CSV TXT Include Quoting' (Minimal), 'TXT Include Delimiter' (Comma), 'Json Include Lines' (No), and 'File Compression' (None). A table on the right lists various investment categories and their corresponding Morningstar Institutional Categories.

The 'Feed Manager' interface shows a table of feeds. The table has columns for Name, Feed ID, Source Type, and Last Update. One feed is listed: 'Monthly Performance Feed' with Feed ID 42092, Source Type 'Investment List', and Last Update '2024-08-23 16:23 CDT (UTC-5)'. There are 'Export' and 'Schedule' buttons at the bottom right.

Morningstar Direct Toolkit: Performance & Risk Analytics



Modules

Asset Allocation: Models asset-class behavior optimizes for various risk and return metrics to identify optimal strategic asset-allocation policies and forecasts those policies' future performance.

Performance Reporting: Customize your analysis with custom data sets and time periods, relevant benchmarks and peer group ranking for ongoing due diligence or competitive analysis – further monitor investments through standardized or custom grades to create a scorecard.

Name	Morningstar Rating Overall	Morningstar Analyst Rating	Morningstar Sustainability Rating	1 Year Return (Cumulative)	3 Year Return (Annualized)	5 Year Return (Annualized)
Report Search Criteria: (Morningstar Category = Large Growth Or Morningstar Category = Large Value Or Morningstar Rating Overall = 4 And Morningstar Analyst Rating = Bron...						
US OE Large Value						
American Funds American Mutual A	★★★★	Gold	④④④④	(8.37)	0.99	9.12
AMG Yackman Focused N	★★★★	Silver	④④④④	(13.53)	1.84	7.54
AMG Yackman I	★★★★	Silver	④④④④	(12.69)	0.43	8.53
Boston Partners All Cap Value Instl	★★★★	Bronze	④④④④	(10.34)	4.0	6.7
Columbia Dividend Income Inst	★★★★	Silver	④④④④	(11.79)	6.0	3.26
Dodge & Cox Stock I	★★★★	Gold	④④④④	(11.53)	5.4	11.27
Fidelity Advisor Equity Value I	★★★★	Bronze	④④④④	(9.88)	2.7	10.04
Fidelity Equity-Income	★★★★	Silver	④④④④	(10.60)	4.7	4.35
Fidelity Value Discovery	★★★★	Bronze	④④④④	(9.36)	3.0	3.41
Hartford Dividend and Growth Y	★★★★	Bronze	④④④④	(12.15)	6.7	1.98
JPMorgan Equity Income I	★★★★	Gold	④④④④	(8.62)	1.87	8.92
JPMorgan US Value A	★★★★	Silver	④④④④	(10.18)	3.4	4.04
MFS Value A	★★★★	Silver	④④④④	(13.29)	8.0	5.8
Schwab Fundamental US Large Company Idx	★★★★	Silver	④④④④	(12.33)	7.4	6.0
Vanguard Windsor Investor Shares	★★★★	Silver	④④④④	(9.03)	7.8	2.45
Vanguard Windsor II Inv	★★★★	Bronze	④④④④	(17.15)	1.5	10.73
Benchmark 1: S&P 500 TR USD				(19.96)	10.62	10.60
Peer Group: Display Group						
Number of Investments ranked					16	16
Peer Group Summary Statistics						16

Name	1-Mo	QTD	YTD	1-Yr	Active	Passive	05-2024	Mkt Sh%	Rank	05-2023	Mkt Sh%	Rank	Reported	Total	R/T %
Vanguard	(7,068)	(12,006)	(7,355)	(77,404)	(5,634)	(1,434)	5,343	27.69	1	4,584	27.13	1	280	352	80
Fidelity Investments	9,078	11,962	43,779	62,410	825	8,253	2,704	14.01	2	2,152	12.74	2	904	1,375	66
American Funds	(7,013)	(15,829)	(31,717)	(76,344)	(7,013)		2,247	11.65	3	1,960	11.60	3	634	719	88
T. Rowe Price	(2,486)	(9,202)	(18,807)	(45,788)	(2,530)	44	706	3.66	4	628	3.72	4	321	354	91
Franklin Templeton Investments	(2,836)	(6,337)	(13,530)	(36,535)	(2,839)	3	495	2.57	5	469	2.77	5	932	1,484	63
JPMorgan	(19)	(1,235)	2,224	2,383	(42)	23	462	2.39	6	393	2.32	6	356	926	38
Dimensional Fund Advisors	(2,170)	(5,379)	(10,586)	(28,404)	(2,091)	(79)	400	2.07	7	362	2.14	7	80	99	81
PIMCO	960	2,205	9,571	9,275	960		356	1.85	8	326	1.93	8	325	572	57
MFS	(1,980)	(3,709)	(8,099)	(17,278)	(1,980)		347	1.80	9	310	1.84	9	540	829	65
BlackRock	(739)	(825)	(1,329)	(20,483)	(929)	189	318	1.65	10	300	1.78	10	395	1,032	38

Asset Flows: Stay current with market trends by providing a comprehensive and timely picture of the total net assets and estimated net flows across multiple geographical markets as well as organic growth rates for specific markets.

Asset Flows Forecast: Offers insight into asset flows and factors influencing asset flows, to help inform decisions you make related to staffing and marketing.

Morningstar Direct Toolkit: Portfolio Construction & Analysis

Moderately Aggressive Growth

Holdings Analysis Reports

Moderately Aggressive Growth as of 02/29/2024

Weights as of 02/29/2024

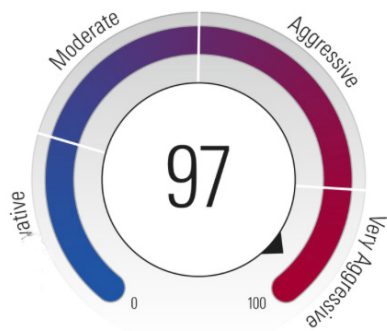
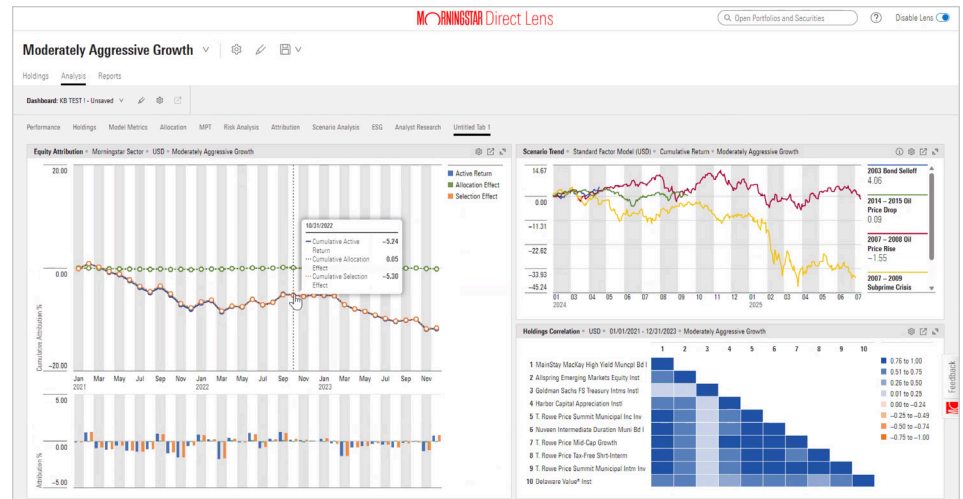
View: Portfolio Holdings Group By: Morningstar Category Data Set: Returns (Month-End - Edited)

Item	Investment Type	Portfolio Weight %	Ticker	Morningstar Rating Overall	Morningstar Sustainability Rating	Return Date (Mo-End)	Total Ret 1 Yr (Mo-End)	Total Ret Annual 3 Yr (Mo-End)	Total Ret Annual 5 Yr (Mo-End)	Total Ret Annual 10 Yr (Mo-End)	Total Ret YTD (Mo-End)	Total Ret Inception (Mo-End)
Simple Bench 1342 CG	Benchmark	—	—	—	—	02/29/2024	19.89	6.09	9.54	6.29	3.77	6.19
Moderately Aggressive Growth	Portfolio	100.00	—	—	—	02/29/2024	19.87	3.68	7.77	6.38	3.83	6.56
US Fund Large Value	Open-End Fund	15.00	—	—	—	—	—	—	—	—	—	—
1 Delaware Value* Inst	Open-End Fund	15.00	DDIVX	**	★★★★	02/29/2024	6.48	6.90	6.41	7.96	3.10	7.85
US Fund Large Growth	Open-End Fund	12.00	—	—	—	—	—	—	—	—	—	—
1 Harbor Capital Appreciation Inst	Open-End Fund	12.00	HACAC	***	★★★★	02/29/2024	99.19	7.63	17.90	14.83	12.95	12.64
US Fund Multi National Intern	Open-End Fund	12.00	—	—	—	—	—	—	—	—	—	—
1 T. Rowe Price Summit Municipal Intl Inv	Open-End Fund	7.00	PRSMI	***	★★★★	02/29/2024	-8.00	-0.16	1.87	2.17	-0.01	3.99
2 Nuveen Intermediate Duration Munl Bd I	Open-End Fund	5.00	NUVIX	****	★★★★	02/29/2024	9.42	-0.04	1.83	2.59	0.19	5.29
US Fund Foreign Large Blend	Open-End Fund	10.00	—	—	—	—	—	—	—	—	—	—
1 T. Rowe Price Divers Int'l Stock	Open-End Fund	10.00	TRDIX	***	★★★★	02/29/2024	12.77	2.76	8.48	4.42	1.20	3.96
US Fund Large Blend	Open-End Fund	10.00	—	—	—	—	—	—	—	—	—	—
1 Jansen Quality Growth I	Open-End Fund	10.00	JENIX	****	★★★★	02/29/2024	23.26	10.82	12.87	12.70	4.08	10.14
US Fund Diversified Emerging Mkts	Open-End Fund	10.00	—	—	—	—	—	—	—	—	—	—
1 Allspring Emerging Markets Equity Inst	Open-End Fund	5.00	EMDIV	***	★★★★	02/29/2024	9.92	-10.09	1.06	2.73	-1.27	2.99
2 Invesco Emerging Markets I	Open-End Fund	5.00	EDIVX	**	★★★★	02/29/2024	2.80	-9.39	0.07	1.91	-0.81	8.22
US Fund Small Blend	Open-End Fund	6.00	—	—	—	—	—	—	—	—	—	—
1 Harbor Small Cap Value Inst	Open-End Fund	6.00	HASCK	****	★★★★	02/29/2024	3.96	3.30	8.35	8.51	-0.08	9.81
US Fund Mid-Cap Growth	Open-End Fund	5.00	—	—	—	—	—	—	—	—	—	—
1 T. Rowe Price Mid-Cap Growth	Open-End Fund	5.00	RPMGX	****	★★★★	02/29/2024	20.15	3.80	9.98	10.73	5.60	13.69
US Fund Mid-Cap Value	Open-End Fund	5.00	—	—	—	—	—	—	—	—	—	—
1 JPMorgan Disruptive Value Mid Cap I	Open-End Fund	5.00	JRVIX	*****	★★★★	02/29/2024	14.96	10.05	11.48	9.78	4.13	10.12
US Fund Small Growth	Open-End Fund	4.00	—	—	—	—	—	—	—	—	—	—
1 Brown Advisory Small-Cap Growth Inst	Open-End Fund	4.00	BAPFX	****	★★★★	02/29/2024	9.99	-1.99	7.54	8.62	2.97	11.11
US Fund High Yield Bond	Open-End Fund	4.00	—	—	—	—	—	—	—	—	—	—
1 MainStay MacKay High Yield Munl Bd I	Open-End Fund	4.00	MALHX	*****	★★★★	02/29/2024	9.03	0.15	2.82	4.73	1.01	5.78

Modules

Direct Lens: A modern, intuitive user experience and a unification of portfolio capabilities where users create, edit, and analyze portfolios in one place, creating a more efficient workflow and helping you see your investments more clearly.

Portfolio Management: Curate a library of model portfolios custom benchmarks, and accounts with our creation, analysis, and management tools, then connect that library to modules across the Morningstar Direct for deeper insights.



Portfolio Analysis: Attribution analysis capabilities in the Portfolio Analysis module allow you to see how your decisions contributed to your investment results. Includes the Equity Attribution and Total Portfolio Attribution tools.

Risk Model: Stress test your portfolios across market and macroeconomic scenarios to see how they hold up.

Morningstar Direct Toolkit: Customized Reporting



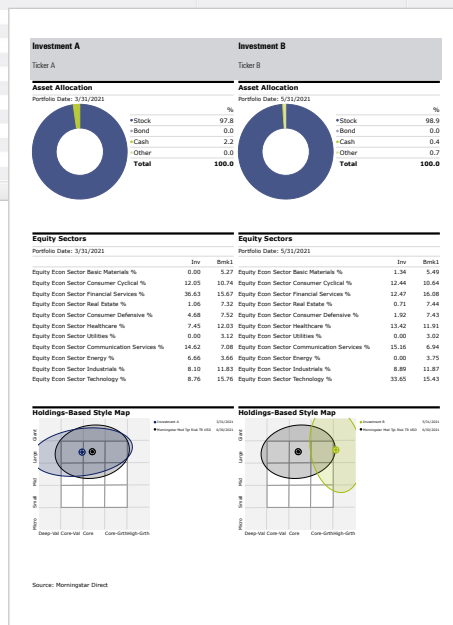
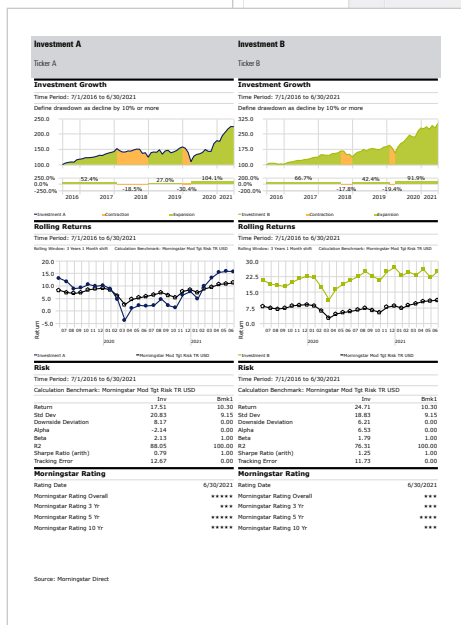
Modules

Presentation Studio: Lets you tell investment stories using Morningstar data and analytics to distill complex information into clear, custom-branded reports, product comparisons, and presentations.

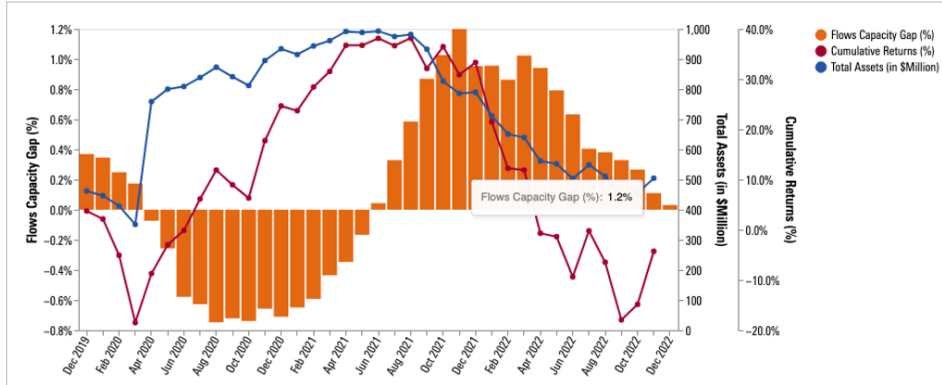
Report Portal: Share your investment stories with the world. You can share customized, strategy-aligned investment reports across your organization, so no matter where you're located, everyone is in the know.

Report Portal

Folder	File Name	Template Name	Created On	File	E-mail
All Reports	CIMB_ISA_CAP_GRP_NP_FINAL_without attri_Franklin Templeton_Model 1	CIMB_ISA_CAP_GRP_NP_FINAL_without attri	5/21/2018 2:16 am		Rerun
test	CIMB_ISA_CAP_GRP_NP_FINAL_without attri_Mackay Shields Core Plus	CIMB_ISA_CAP_GRP_NP_FINAL_without attri	5/17/2018 10:05 pm		Rerun
test 1	CIMB_ISA_CAP_GRP_NP_FINAL_with Attri_Mackay Shields Core Plus	CIMB_ISA_CAP_GRP_NP_FINAL_with Attri	5/17/2018 10:05 pm		Rerun
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	20 Investments_Equity Manager Analysis_Franklin Convertible Securities A	20 Investments_Equity Manager Analysis	4/16/2018 1:55 am		Rerun
	Equity Manager Analysis_Franklin Convertible Securities C	20 Investments_Equity Manager Analysis	4/16/2018 1:49 am		Rerun
	Current vs Proposed_Franklin Templeton_Danske EM & SMID - Compass	Current vs Proposed_Franklin Templeton	4/16/2018 1:46 am		Rerun
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Morningstar Direct Toolkit: Data Science & Analytics

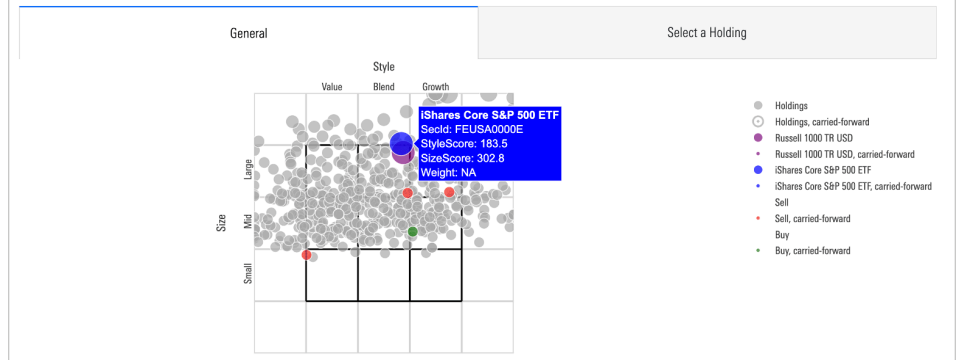


Modules

Analytics Lab: Investigates Morningstar data more deeply than ever to discover new opportunities for investing success. It combines access to all of Morningstar’s data and research with Jupyter Notebook, an open-source data-science tool, to give you a flexible coding environment that’s built for rigorous analysis.

Interactive Research: Notebooks including prebuilt data sets and analytics created by Morningstar analysts allow you to dig into Morningstar research more deeply than ever.

Equity Holdings Style View



The screenshot shows the Analytics Lab interface with the following sections:

- Unlock Data Insights with Analytics Lab.** Analytics Lab is a flexible coding environment that lets you investigate Morningstar data more deeply than ever to discover new opportunities for investing success. [Launch C2](#)
- Exercise Guide:** This guide shows you how to combine the work you've done in Morningstar Direct with the power of Analytics Lab. [Go to Guide](#)
- Getting Started:** Ready to start? Use this tutorial notebook to learn how to access Morningstar Data, and best practices for creating a notebook. [Know more](#)
- Python Documentation:** Learn to retrieve specific data sets to power your analytics by accessing Morningstar data via Morningstar Data python package. [Go to Documentation](#)
- Interactive Research:** Powered by Analytics Lab, our interactive research contains live code and doesn't require Python skills to use. [Know more](#)
- morningstar_data Python Package:** Get seamless access to Morningstar data and the flexibility to use it in your favorite coding environments with the morningstar_data Python package. [Know more](#)

Morningstar Data Python package: Brings Morningstar's industry-leading data into your favorite coding environments, giving you more time to generate insights and uncover new investment opportunities instead of collecting, cleaning, and merging data.