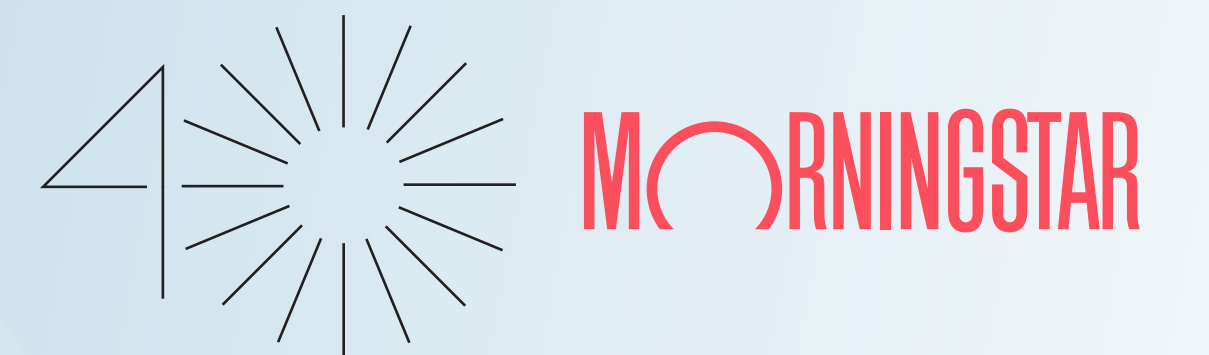


Welcome

Joe Mansueto
Executive Chairman



Today's presentations contain forward-looking statements. All statements made that are not historical facts are subject to a number of risks and uncertainties, and actual results may differ materially. Please refer to our most recent earnings release and our most recent Form 10-Q or 10-K for more information on the factors that could cause actual results to differ.

Today's presentations also contain non-GAAP financial measures. Please refer to the slides at the end of the presentations for a reconciliation to the applicable GAAP measures.

Business of Annual Meeting

Management Presentations

Questions & Answers

Virtual Meeting Access Instructions

Broadridge Platform:

www.virtualshareholdermeeting.com/MORN2024

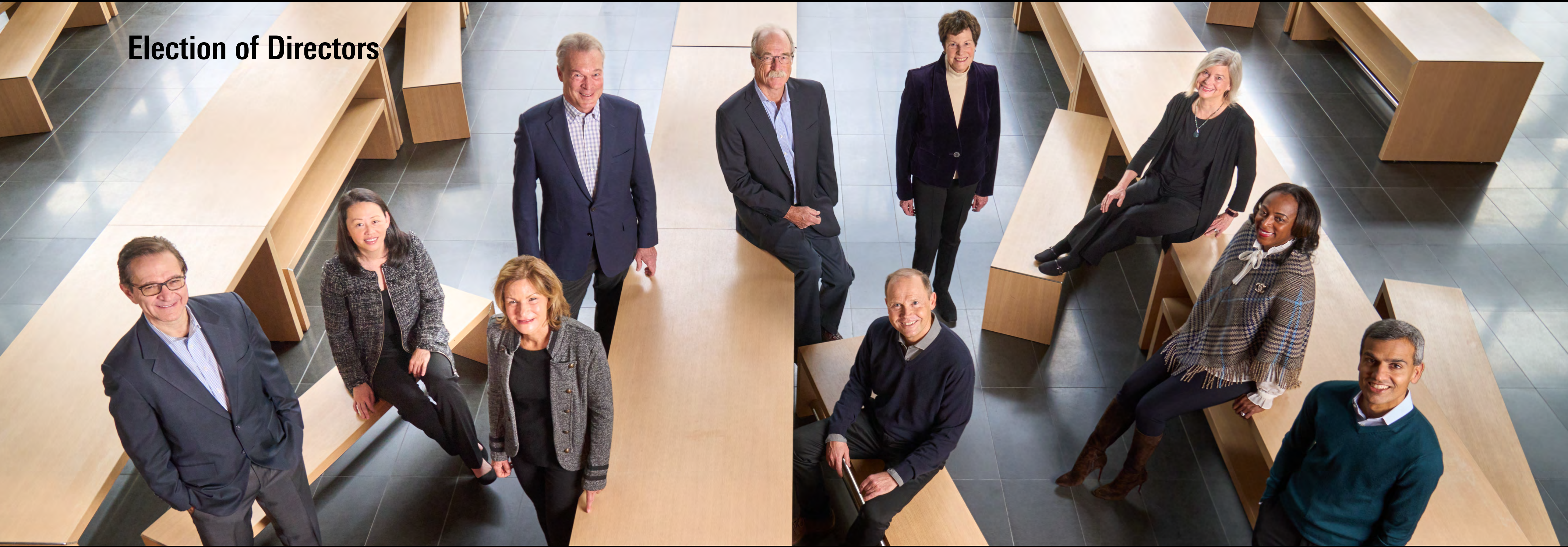
- ▷ Allows shareholders to vote during the meeting, submit written questions, and view and listen to the live webcast
- ▷ Enter the 16-digit control number found next to the label “Control Number” on your Notice of Internet Availability, proxy card, or voting instruction form, or in the email sending you the proxy statement
- ▷ For technical support please call 1-844-986-0822 (toll free) or 303-562-9302 (international)

Zoom Platform:

- ▷ Allows any participant to submit questions via a webcam or in writing, and view and listen to the live webcast
- ▷ Register to receive a link to the webinar and information regarding technical support

Proposal 1

Election of Directors



Steve Kaplan
Caroline Tsay

Robin Diamonte
Bill Lyons

Steve Joynt
Joe Mansueto

Gail Landis
Cheryl Francis

Doniel Sutton
Kunal Kapoor

Proposal 2

Advisory Vote to Approve Executive Compensation



Jason Dubinsky



Daniel Dunn



Kunal Kapoor



Joe Mansueto

Proposal 3

Ratification of the Appointment of Independent Registered Public Accounting Firm



Voting Instructions

Voting Online

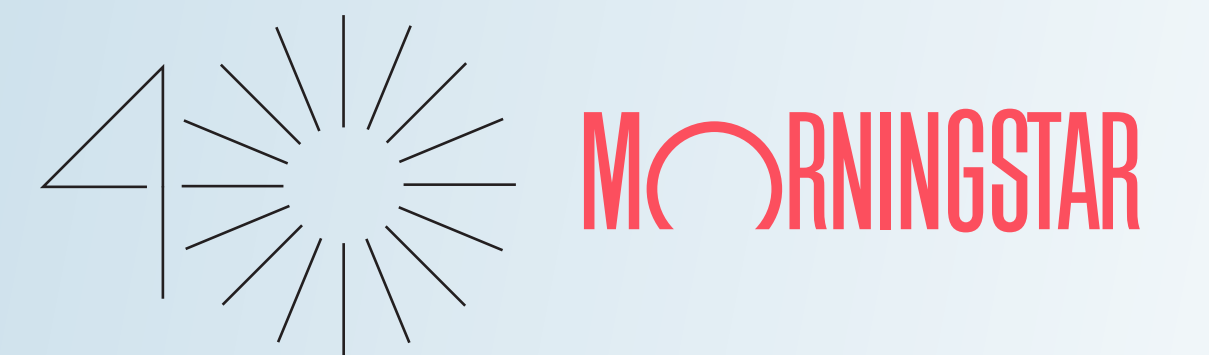
Use the 'vote here' button on the lower right portion of the Broadridge portal to vote your shares

Voting In Person

Raise your hand now and our inspector of election will bring you a paper ballot

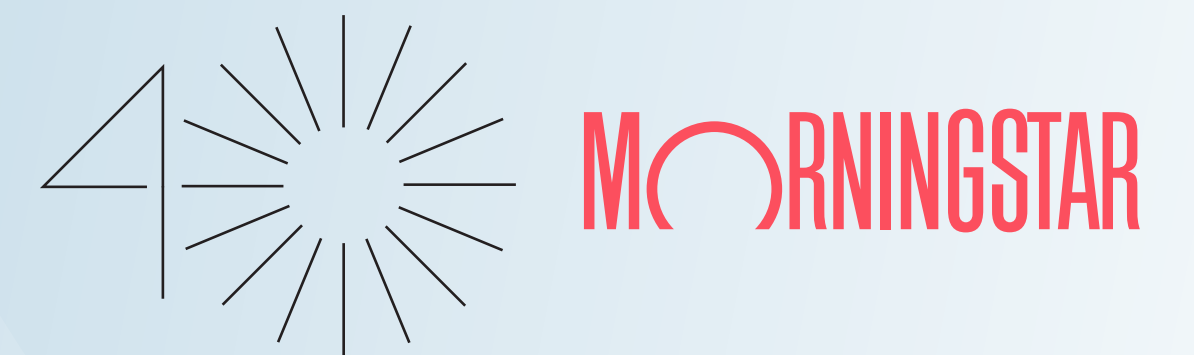
If you have already sent in your proxy card or voted by phone or online, your shares have been voted accordingly

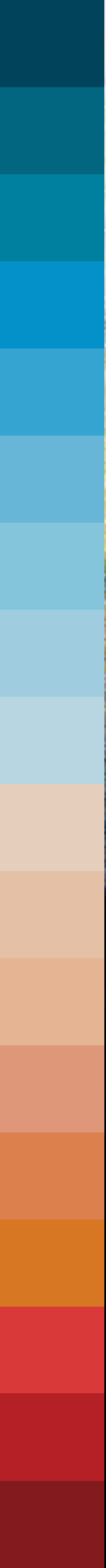
Thank You!



Empowering Investor Success

Kunal Kapoor
Chief Executive Officer

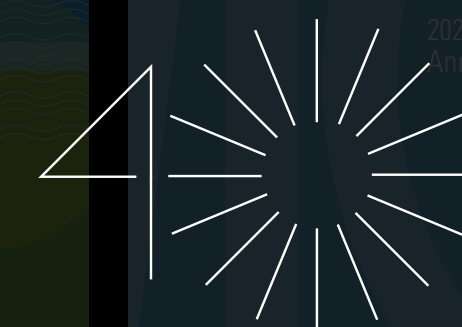




Our mission is to empower investor success.

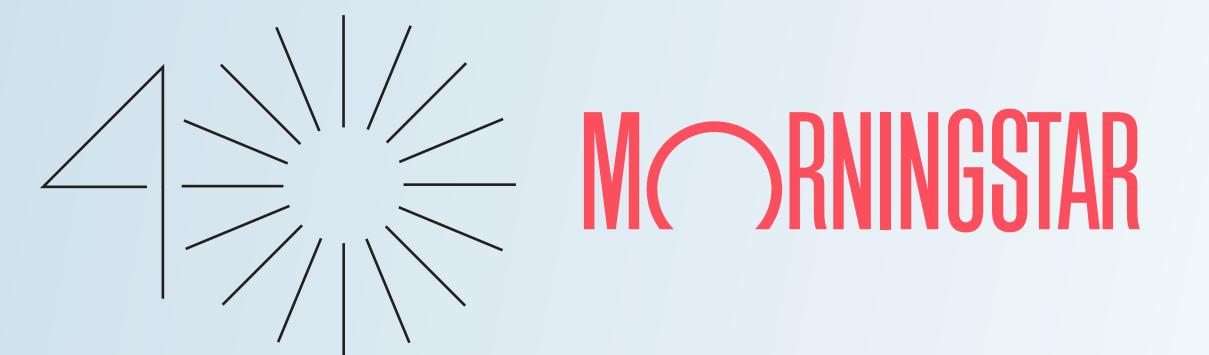


We strive to communicate with candor and tell you the unvarnished truth about our business. Our goal is to communicate equally with all shareholders, without special treatment for large shareholders or research analysts. We do not host quarterly earnings calls and our executives do not generally participate in one-on-one meetings with institutional shareholders; encouraging a focus on short-term results is inconsistent with our mission to empower investor success over the long-term.



MORNINGSTAR

Morningstar Today



Our mission is to empower investor success.

Our strategy is to deliver insights and experiences that make us essential to the investor workflow.



Morningstar Today

Our Clients



Our Employees



Individual investor data and retirement plan sponsor data are as of Dec. 31, 2023. All other data is as of Mar. 31, 2024.

We Participate in Large Markets

↑ \$42.0 Bil

Global Spend on
Financial Data/Analysis
12.6% Growth YOY

↑ \$8.8 Bil

Total Addressable Market –
PitchBook
35.4% Growth YOY*

↑ \$6.3 Tril

Total Addressable Market
AUMA—Morningstar Retirement
13.9% Growth YOY

↑ \$11.5 Tril

Total Addressable Market
AUMA—Morningstar Wealth
20.1% Growth YOY

↑ \$5.8 Bil

Global Indexes
Industry Revenue
9.4% Growth YOY

↑ \$3.0 Tril

Global Sustainable Funds AUM
11.1% Growth YOY**

↑ \$1.0 Tril

Sustainable Bonds/
Loans Issuance
15.9% Growth YOY

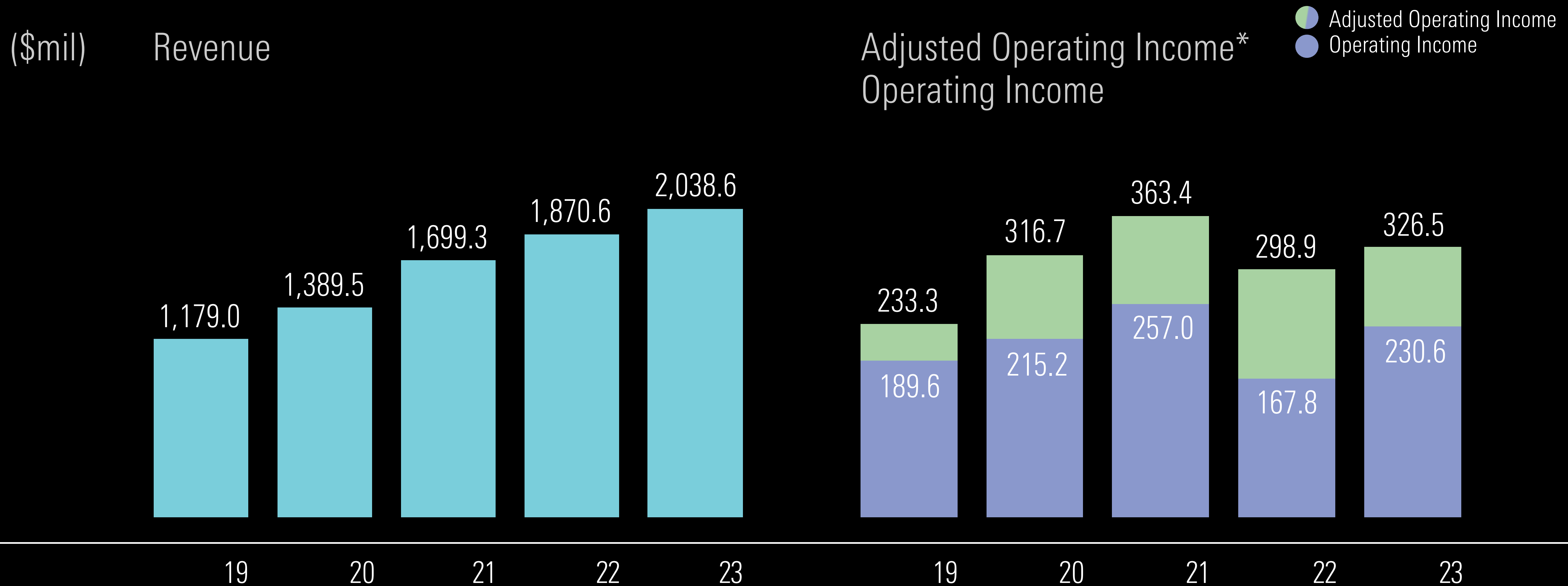
↑ \$8.2 Bil

Global Credit Ratings
Industry Revenue
6.5% Growth YOY

Source: Morningstar estimates, Burton-Taylor, Cerulli Associates, Bloomberg New Energy. Data as of Dec. 31, 2023 unless otherwise noted.

*Data as of Feb. 2024. **Data as of Mar. 31, 2024.

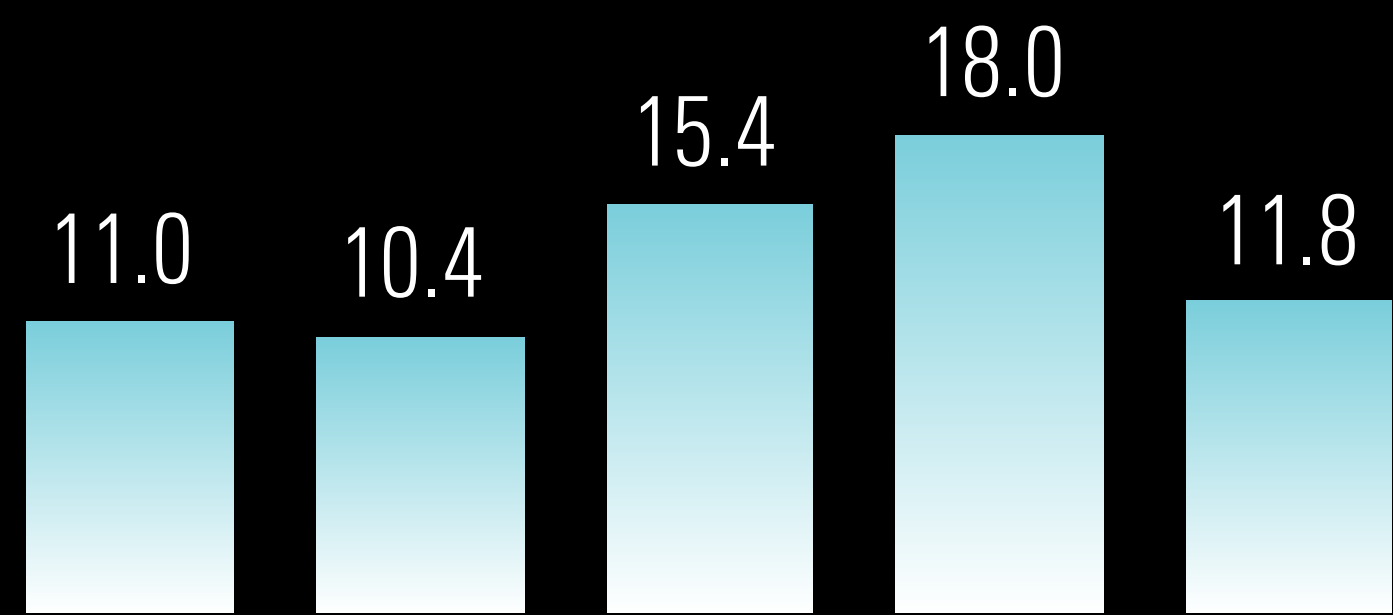
Financial Highlights 2019 – 2023



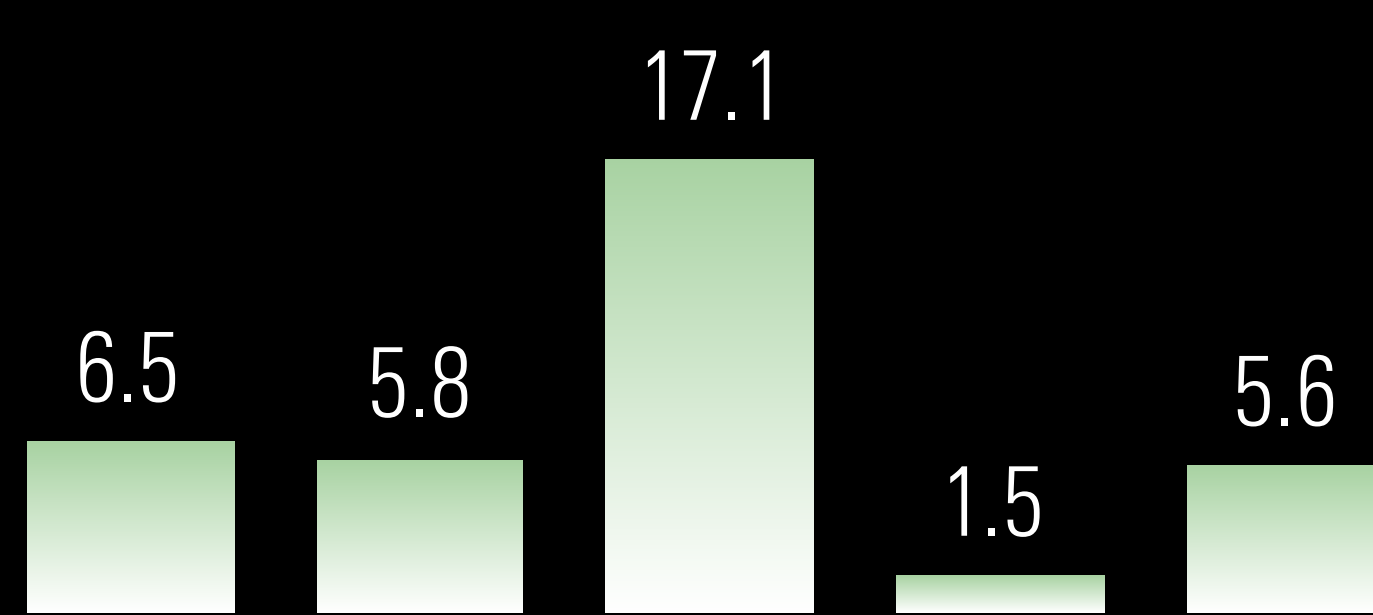
Purple bars represent operating income, and combined purple and green bars represent adjusted operating income. *Adjusted operating income is a non-GAAP measure and excludes intangible amortization expense, other merger and acquisition (M&A)-related expenses and earn-outs, and items related to the significant reduction and shift of the Company's operations in China. See reconciliation table in the appendix of this presentation.

Annual Organic Revenue Trend By Product Revenue Type

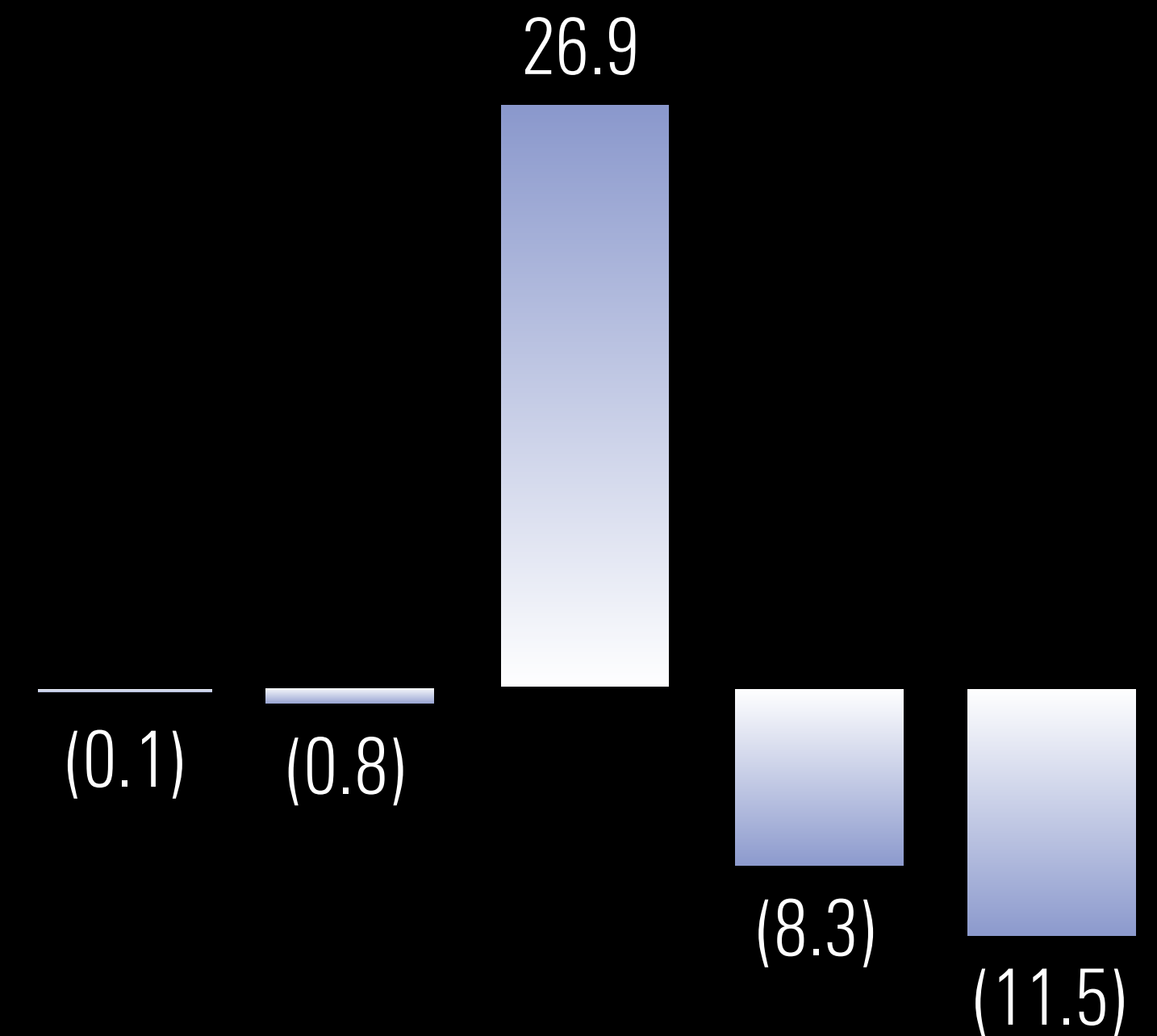
License-Based (%)



Asset-Based (%)

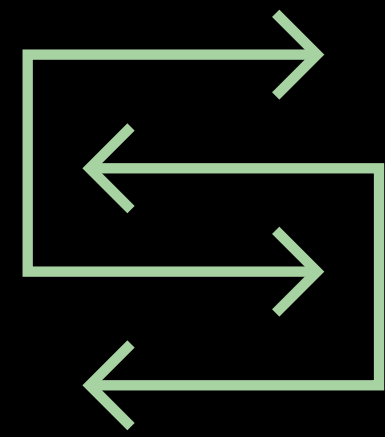


Transaction-Based (%)



Organic revenue is a non-GAAP measure. See reconciliation tables in the appendix of this presentation. Starting with the quarter ended Mar. 31, 2023, the Company updated its revenue-type product areas with more than one revenue type, impacting Morningstar Sustainalytics, Morningstar Indexes, and Morningstar DBRS. Prior-year revenue classifications have not been restated.

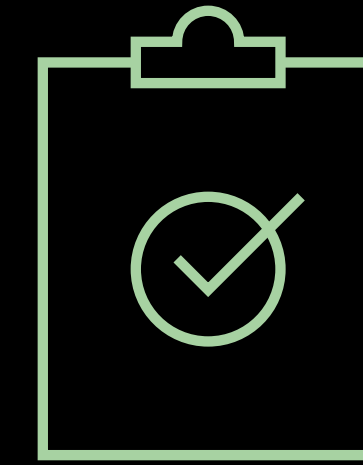
Key Recent Accomplishments



LCD integration



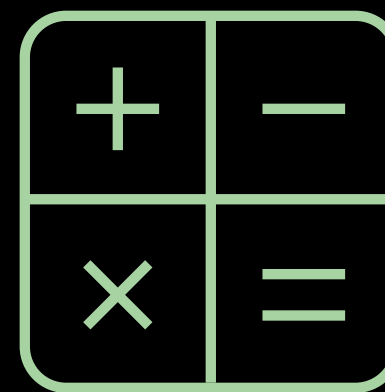
Morningstar brand
in Japan



Direct Lens



Morningstar Retirement
Managed Accounts 2 mil users



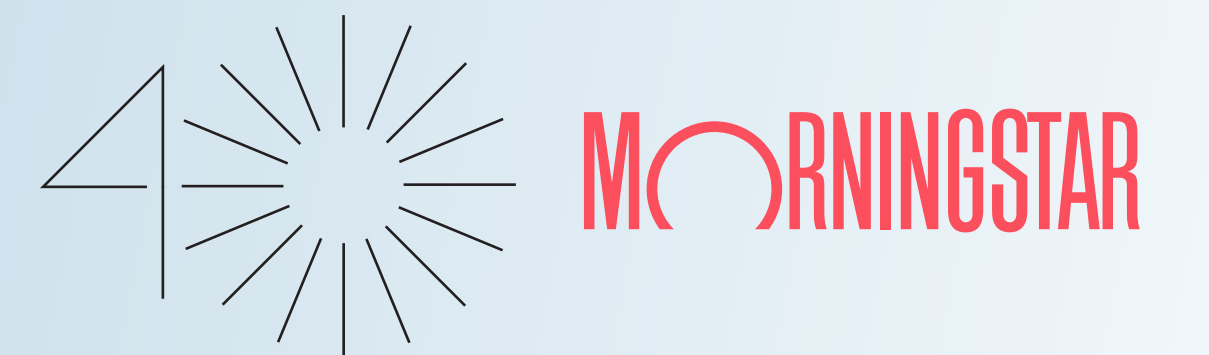
Morningstar Indexes
in-house index calculation



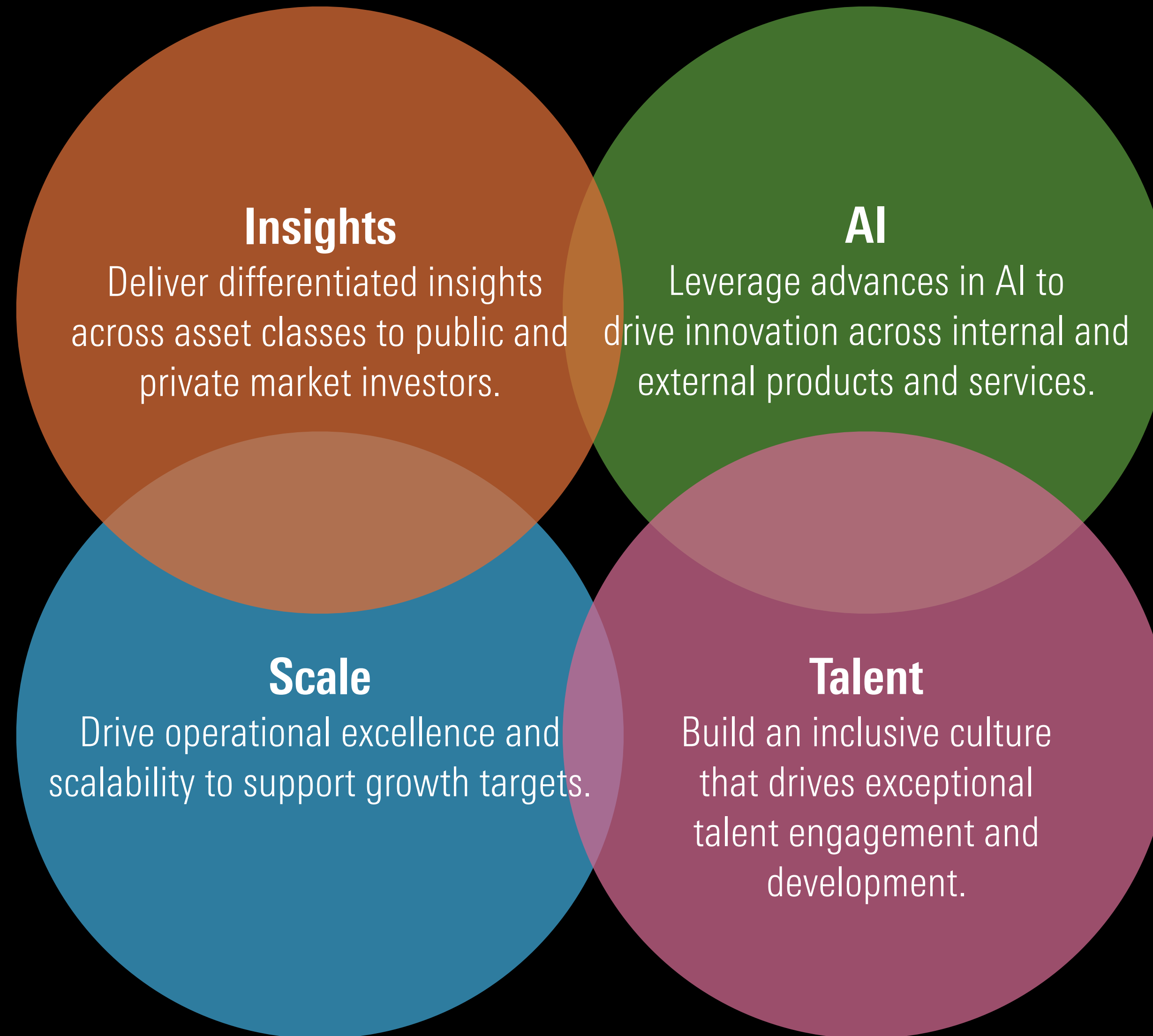
Certified as Fair Pay
Organization*

*By Fair Pay Workplace

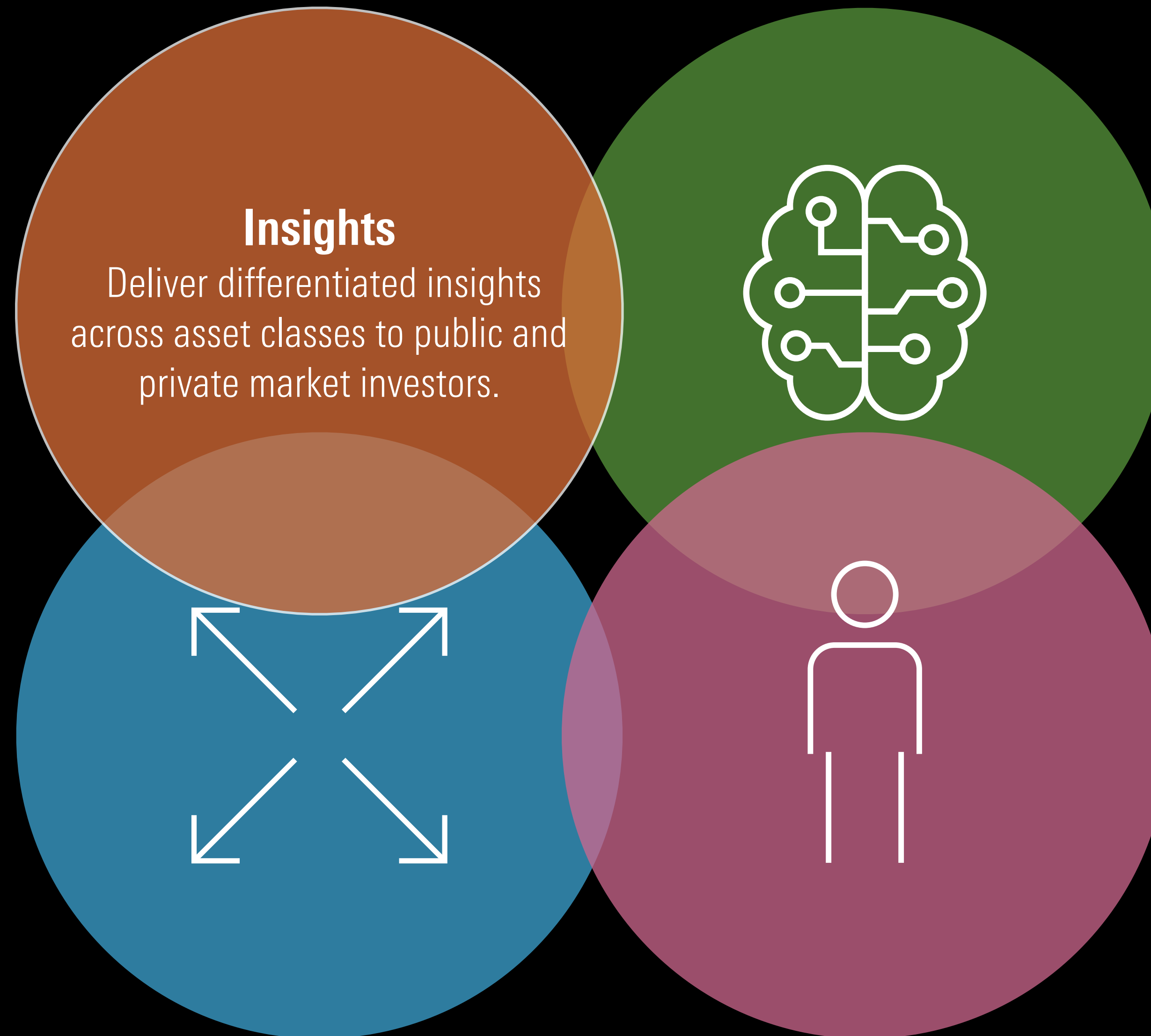
Strategic Priorities



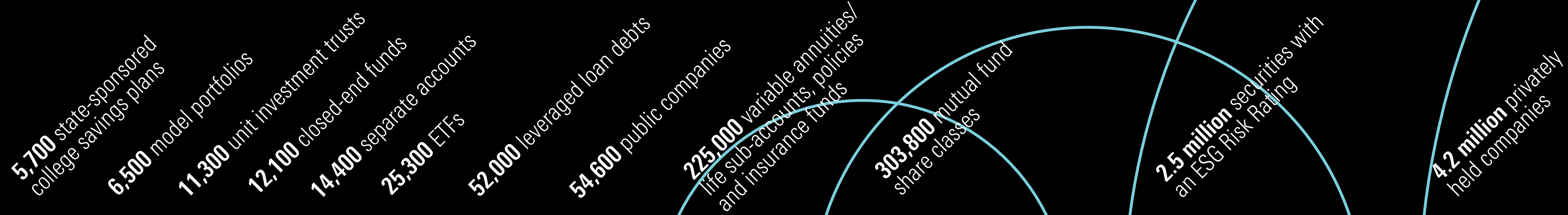
Strategic Priorities



Strategic Priorities

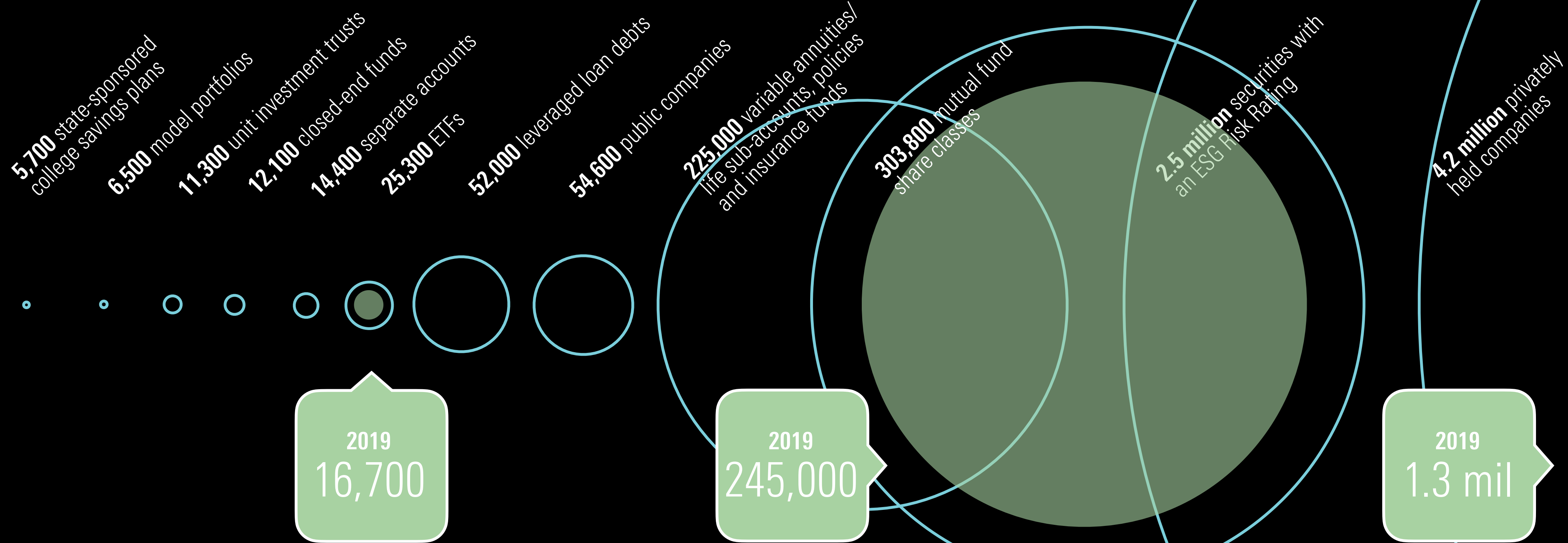


We Expand our Data Universe to Meet Evolving Investor Needs



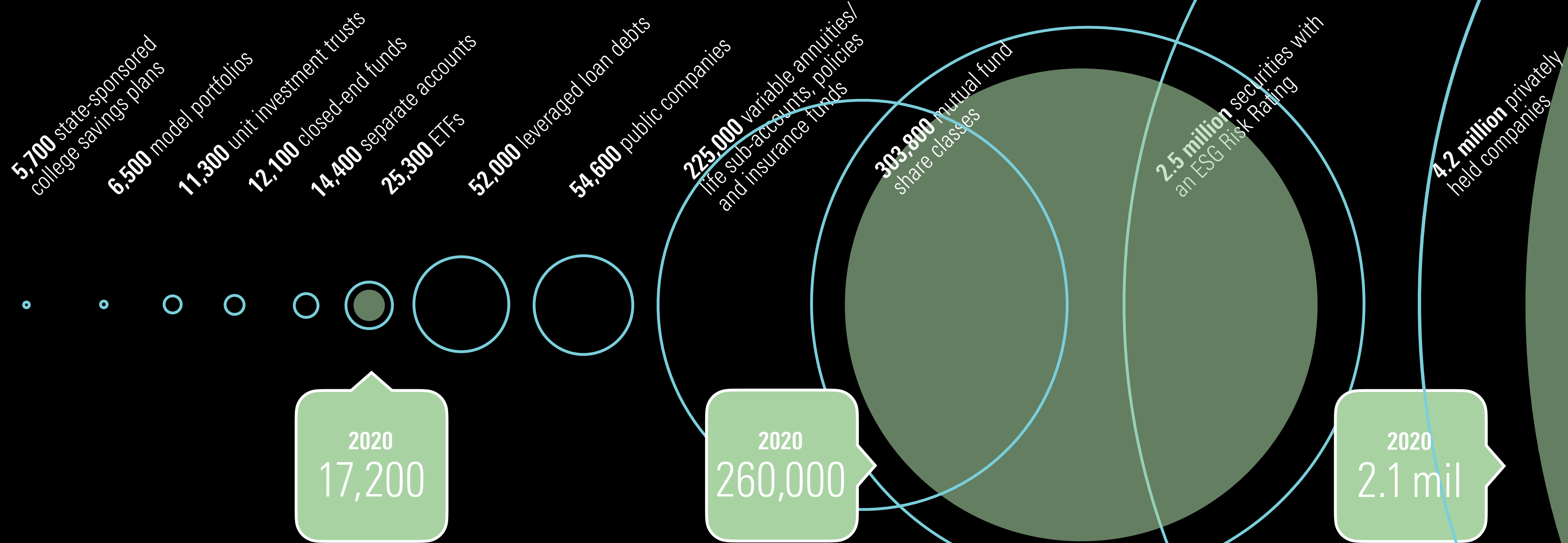
Private company data as of Apr. 25, 2024. All other data is as of Apr. 16, 2024.

We Expand our Data Universe to Meet Evolving Investor Needs



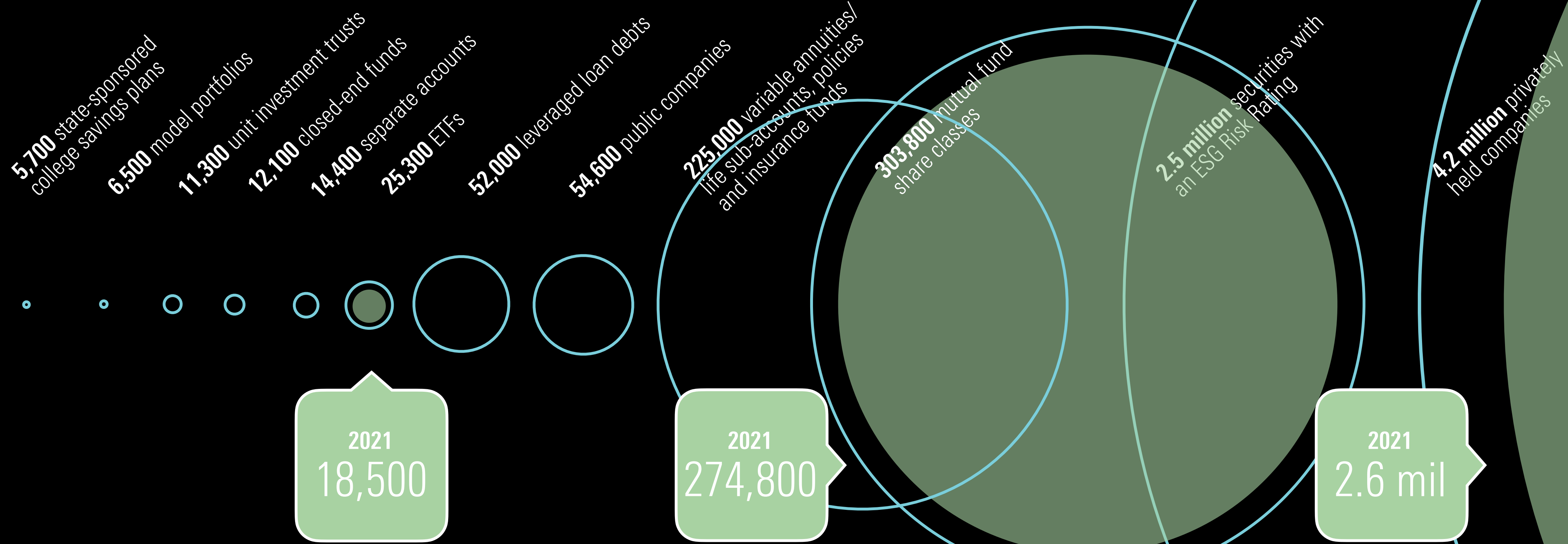
Private company data as of Apr. 25, 2024. All other data is as of Apr. 16, 2024.
ETF data as of Mar. 31. Mutual fund and private company data as of Dec 31 of the prior year.

We Expand our Data Universe to Meet Evolving Investor Needs



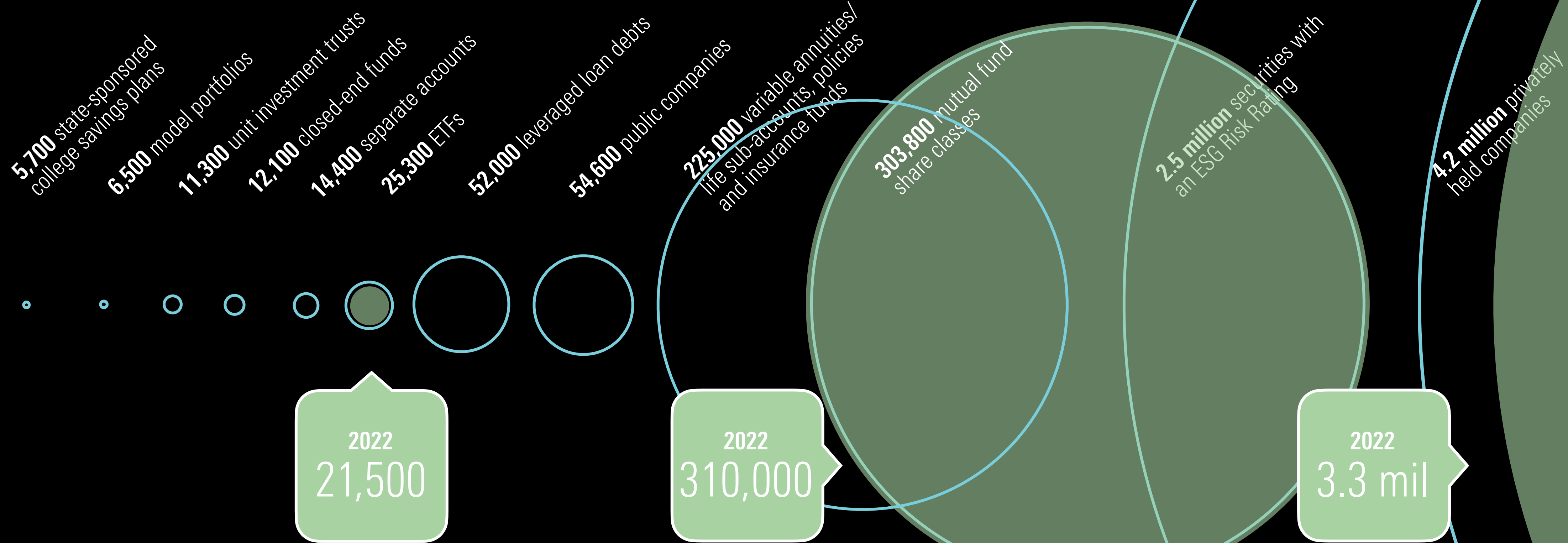
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We Expand our Data Universe to Meet Evolving Investor Needs



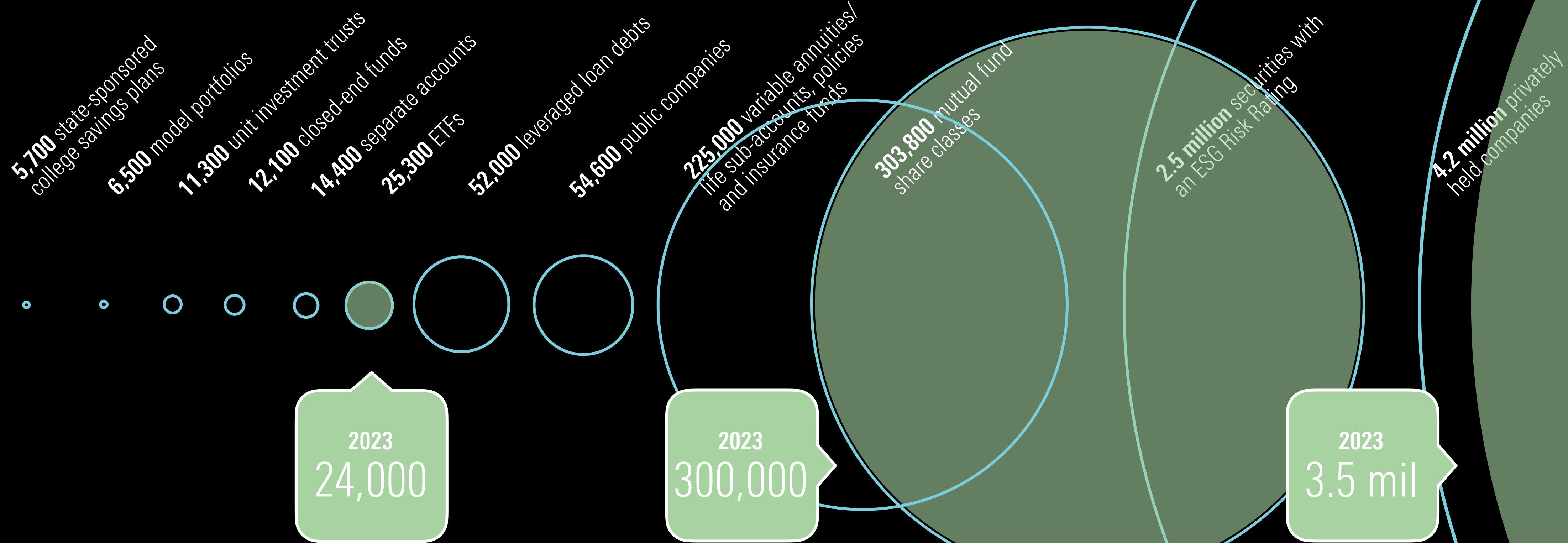
Private company data as of Apr. 25, 2024. All other data is as of Apr. 16, 2024.
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We Expand our Data Universe to Meet Evolving Investor Needs



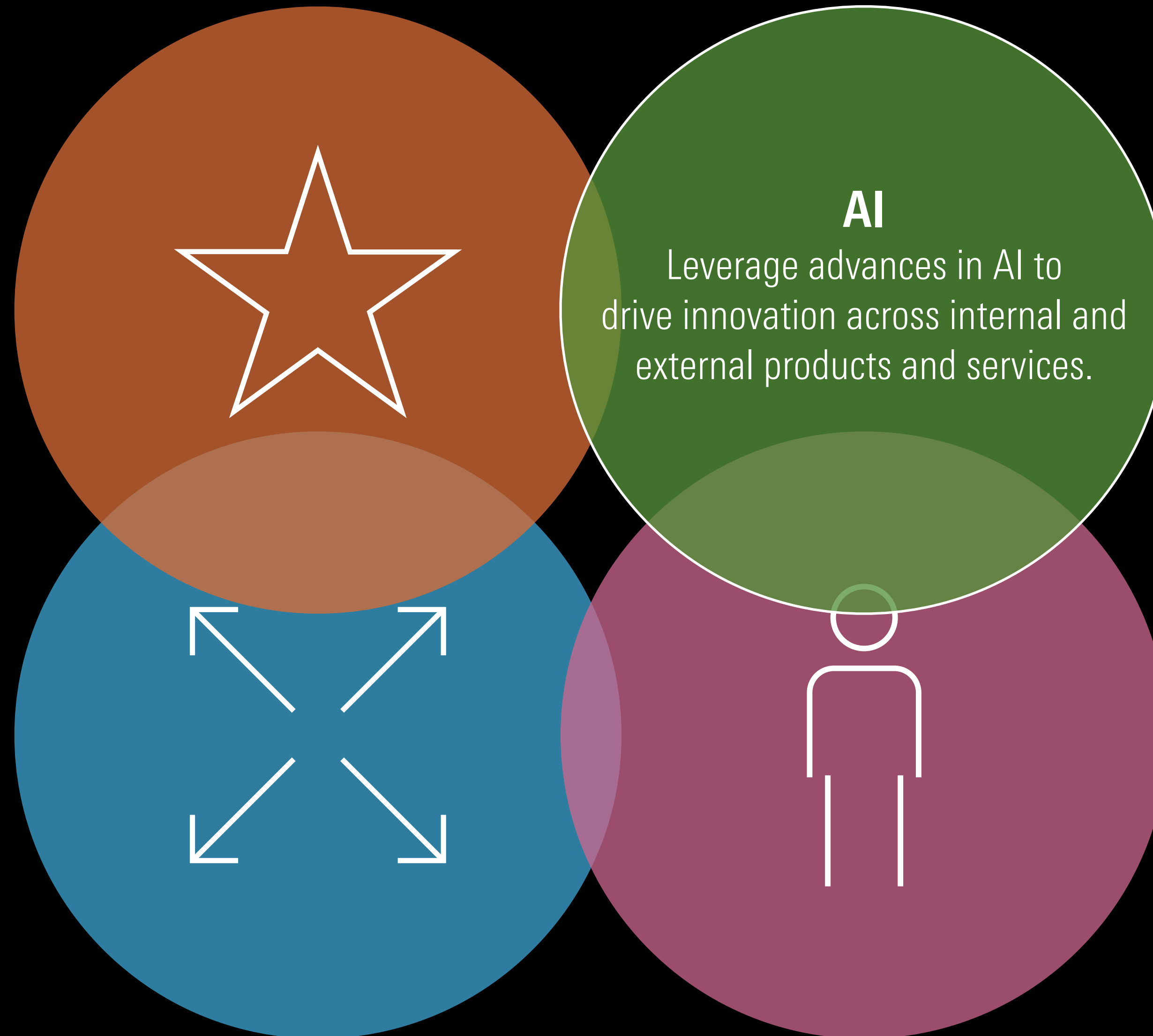
Private company data as of Apr. 25, 2024. All other data is as of Apr. 16, 2024.
ETF data as of Mar. 31. Mutual fund and private company data as of Dec 31 of the prior year.

We Expand our Data Universe to Meet Evolving Investor Needs

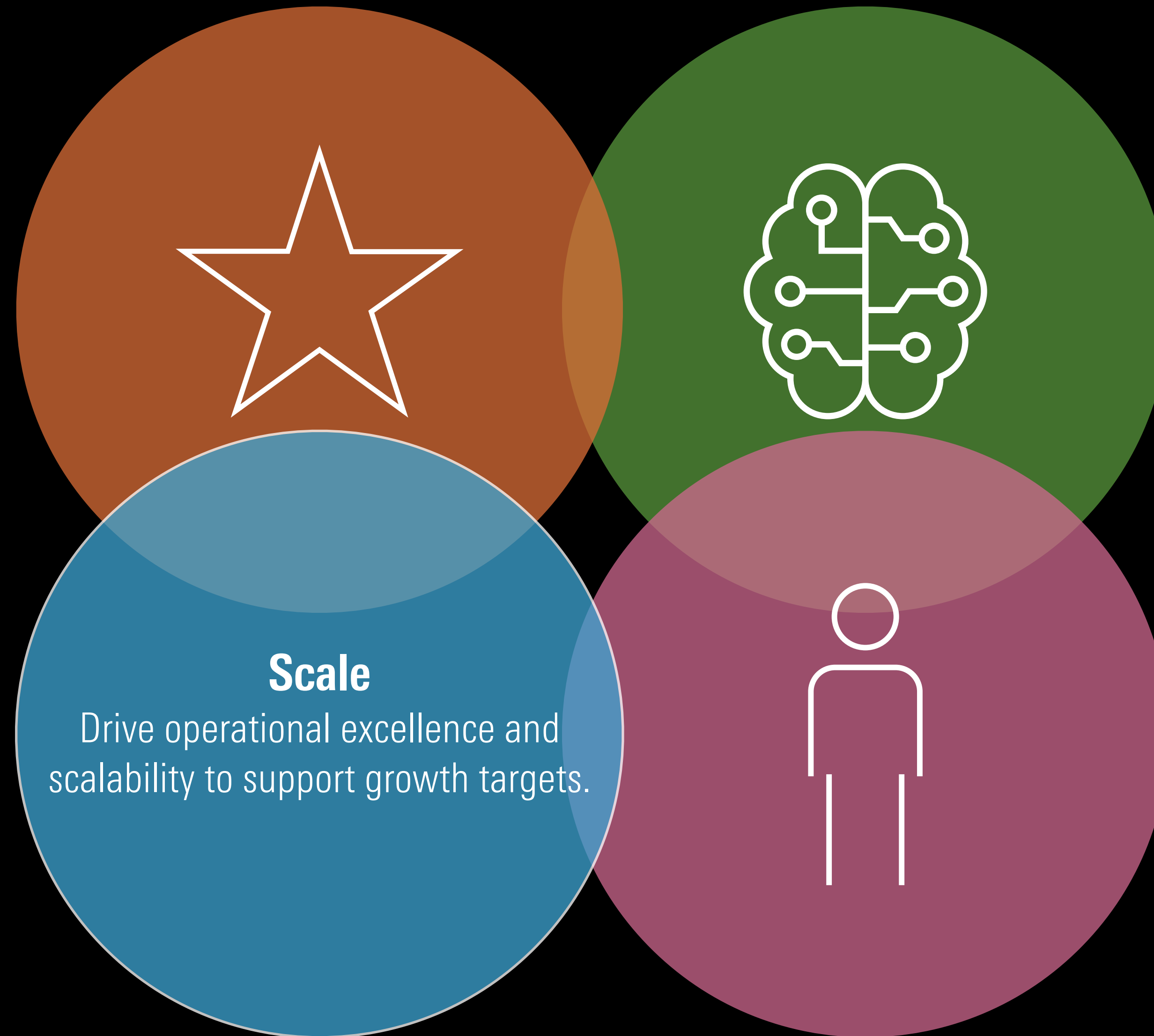


Private company data as of Apr. 25, 2024. All other data is as of Apr. 16, 2024.
ETF data as of Mar. 31. Mutual fund and private company data as of Dec 31 of the prior year.

Strategic Priorities



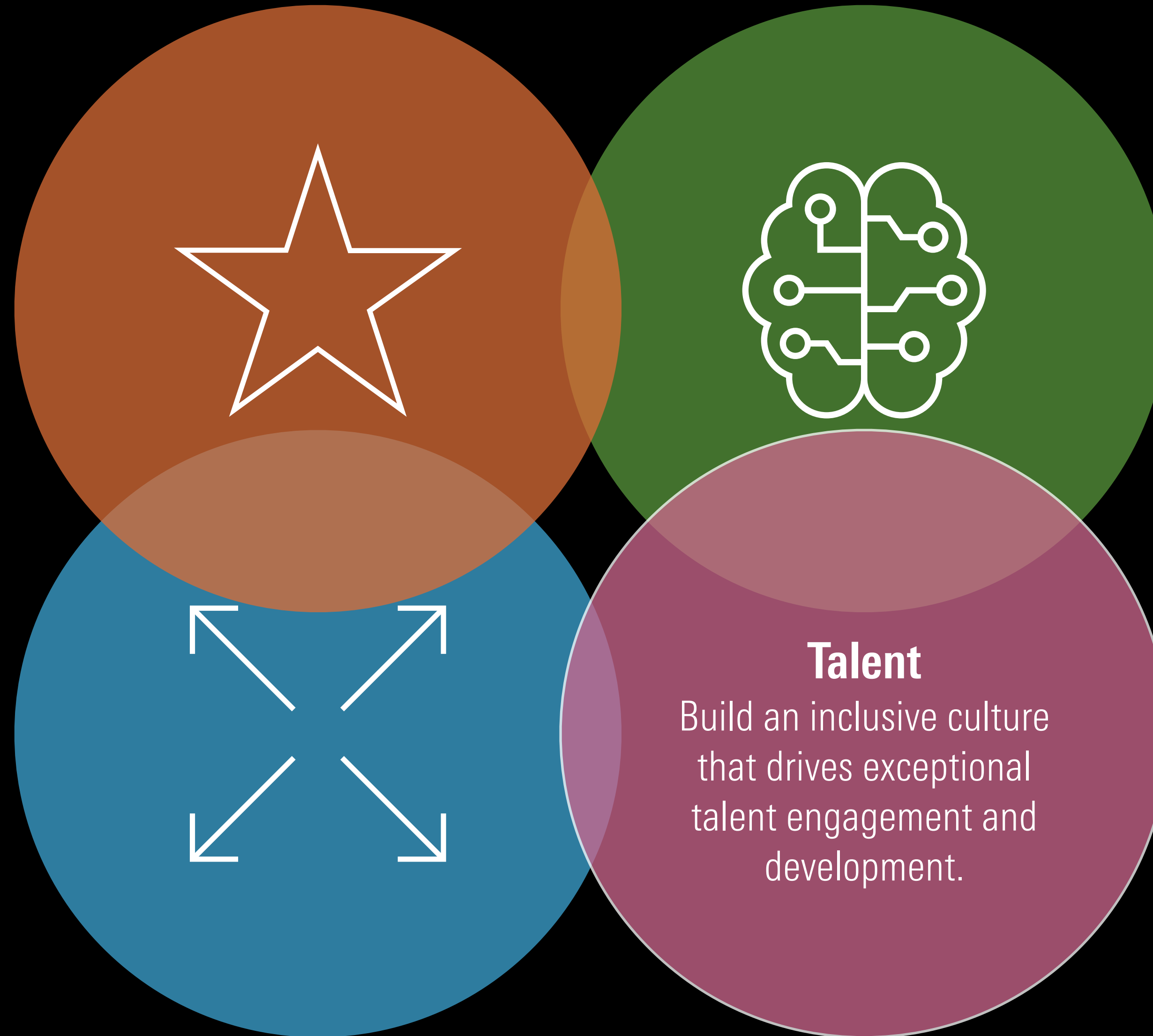
Strategic Priorities



Scale

Drive operational excellence and scalability to support growth targets.

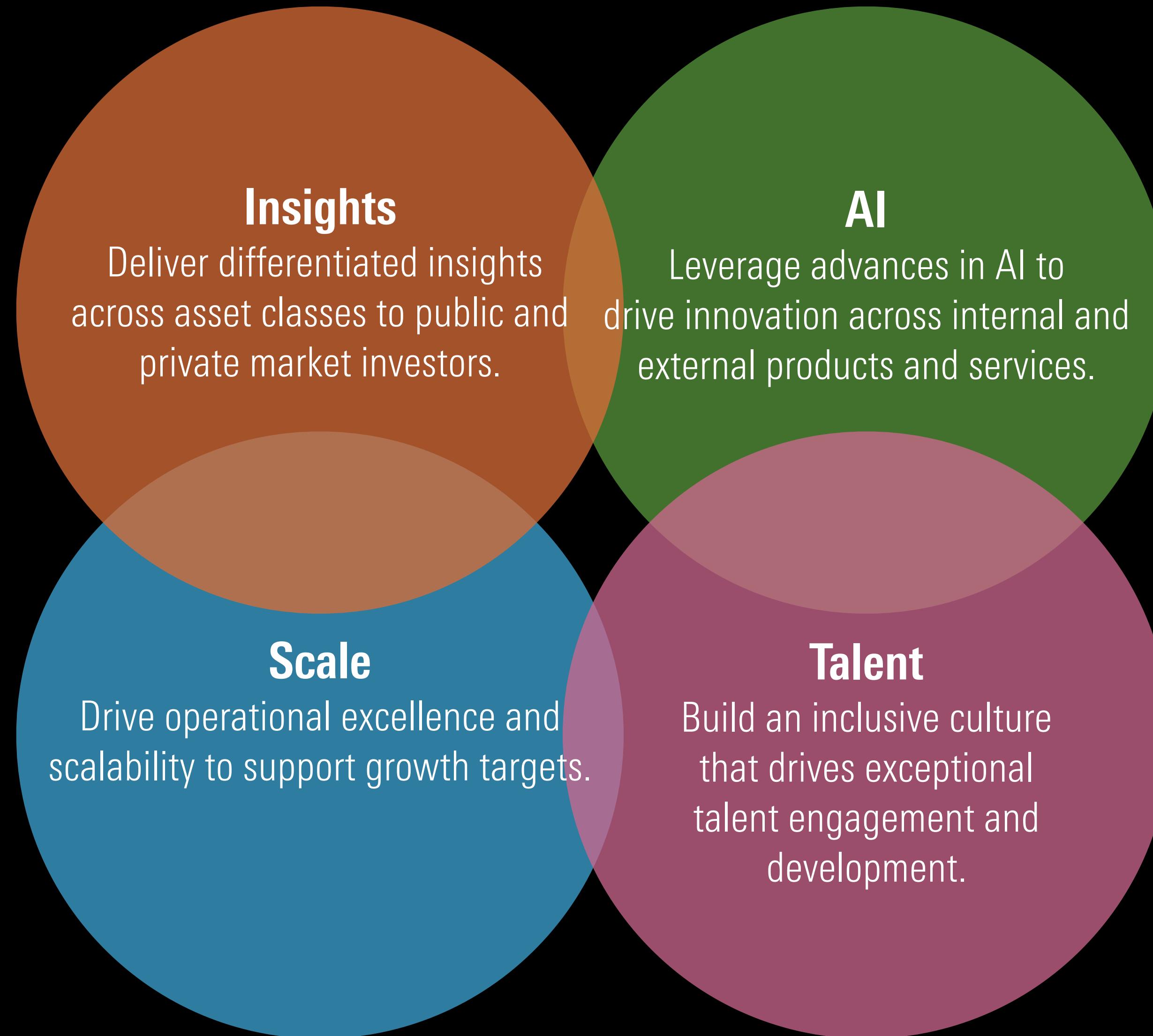
Strategic Priorities



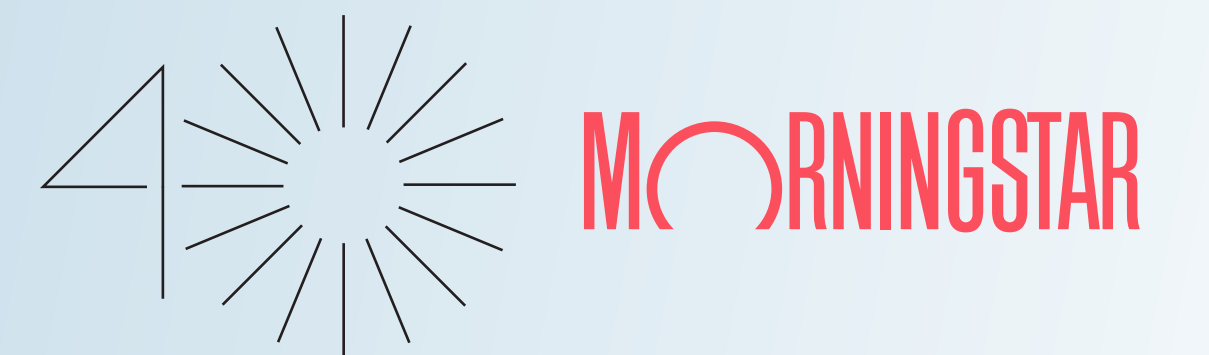
Talent

Build an inclusive culture that drives exceptional talent engagement and development.

Strategic Priorities

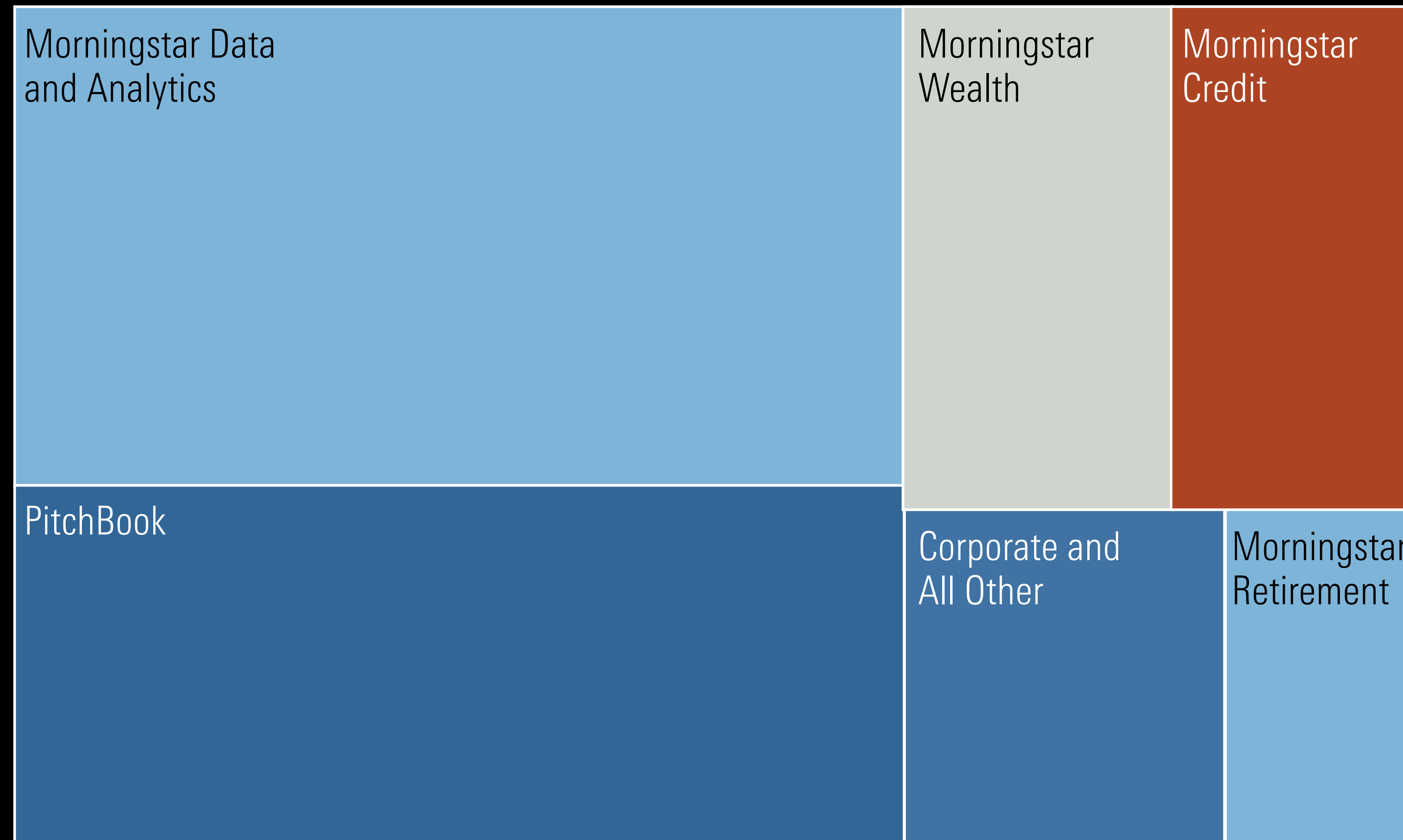
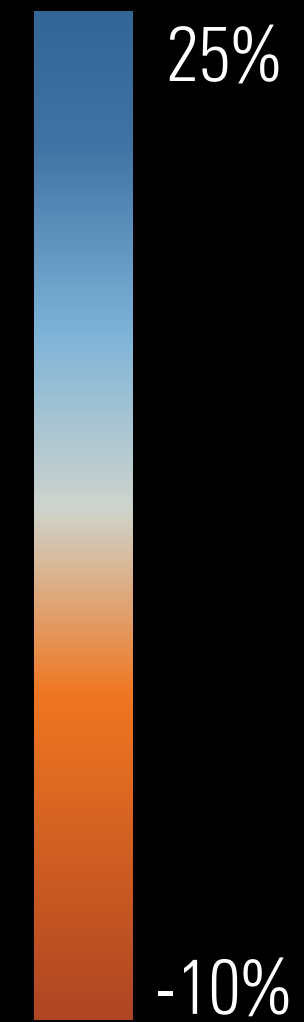


Segment Area Update



2023 Revenue Growth Drivers

Organic Revenue Growth



The size of the rectangles represents 2023 reported revenue. The color of the rectangles represents 2023 organic revenue growth compared to 2022. Organic revenue is a non-GAAP measure. See reconciliation tables in the appendix of this presentation. The operating segments of Morningstar Sustainalytics and Morningstar Indexes have been combined and presented as part of Corporate and All Other, which is not a reportable segment.

Morningstar Data and Analytics

Morningstar Data

Morningstar Direct

Morningstar Advisor Workstation

Morningstar Research

2023 Revenue Trend

7.3% Reported

7.4% Organic

Q1 2024 Revenue Trend

9.4% Reported

8.9% Organic

Global Spend on Financial Data

\$42.0 Bil

12.6% Growth YOY

Organic revenue is a non-GAAP measure. See reconciliation tables in the appendix of this presentation.

PitchBook platform

LCD

2023 Revenue Trend

22.5% Reported

17.6% Organic

Q1 2024 Revenue Trend

12.6% Reported

12.6% Organic

Total Addressable Market

\$8.8 Bil

35.4% Growth YOY

Morningstar Wealth

Investment Management /

Managed Portfolios

Morningstar.com

Morningstar Office

2023 Revenue Trend

0.4% Reported

-1.6% Organic

Q1 2024 Revenue Trend

7.5% Reported

7.7% Organic

Total Addressable Market

AUMA – Morningstar Wealth

\$11.5 Tril

20.1% Growth YOY

Organic revenue is a non-GAAP measure. See reconciliation tables in the appendix of this presentation.

Morningstar Credit

Morningstar DBRS

Morningstar Credit
(Credit data and analytics)

2023 Revenue Trend

-9.1% Reported

-8.5% Organic

Q1 2024 Revenue Trend

28.8% Reported

27.9% Organic

Global Credit Ratings
Industry Revenue

\$8.2 Bil

6.5% Growth YOY

Organic revenue is a non-GAAP measure. See reconciliation tables in the appendix of this presentation.

Morningstar Retirement

Managed Accounts

2023 Revenue Trend

6.3% Reported

6.3% Organic

Q1 2024 Revenue Trend

12.7% Reported

12.7% Organic

Total Addressable Market

AUMA – Morningstar Retirement

\$6.3 Tril

13.9% Growth YOY

Organic revenue is a non-GAAP measure. See reconciliation tables in the appendix of this presentation.

Corporate and All Other: Morningstar Sustainalytics

Morningstar Sustainalytics

2023 Revenue Trend

14.4% Reported

13.9% Organic

Q1 2024 Revenue Trend

12.8% Reported

12.2% Organic

Global Sustainable Funds AUM

\$3.0 Tril

11.1% Growth YOY

Organic revenue is a non-GAAP measure. See reconciliation tables in the appendix of this presentation. The operating segments of Morningstar Sustainalytics and Morningstar Indexes have been combined and presented as part of Corporate and All Other, which is not a reportable segment.

Corporate and All Other: Morningstar Indexes

Morningstar Indexes

2023 Revenue Trend

30.5% Reported

24.7% Organic

Q1 2024 Revenue Trend

37.0% Reported

37.1% Organic

Global Indexes
Industry Revenue

\$5.8 Bil

9.4% Growth YOY

Organic revenue is a non-GAAP measure. See reconciliation tables in the appendix of this presentation. The operating segments of Morningstar Sustainalytics and Morningstar Indexes have been combined and presented as part of Corporate and All Other, which is not a reportable segment.

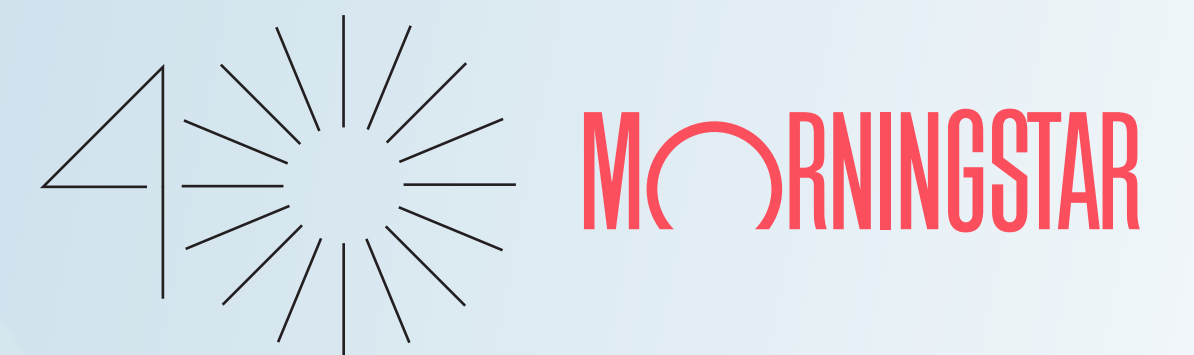
Our mission is to empower investor success.

Our strategy is to deliver insights and experiences that make us essential to the investor workflow.



Financial Highlights

Jason Dubinsky
Chief Financial Officer



Agenda and Topics

Company Performance

Segment Performance

Capital Allocation and Returns

Focused on a Path to Long-Term Sustainable Growth



Execute Strategy
Across Product Areas

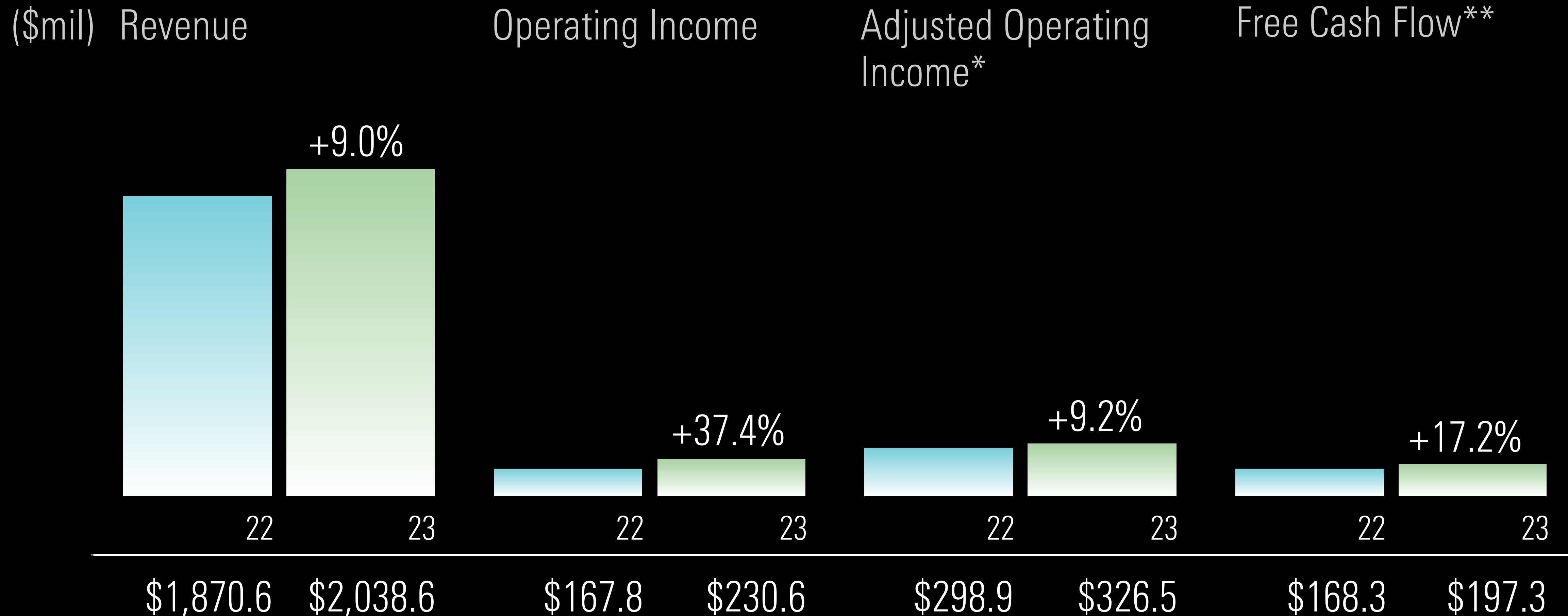


Realize Returns
on Recent Investments



Control Costs
& Drive Efficiency

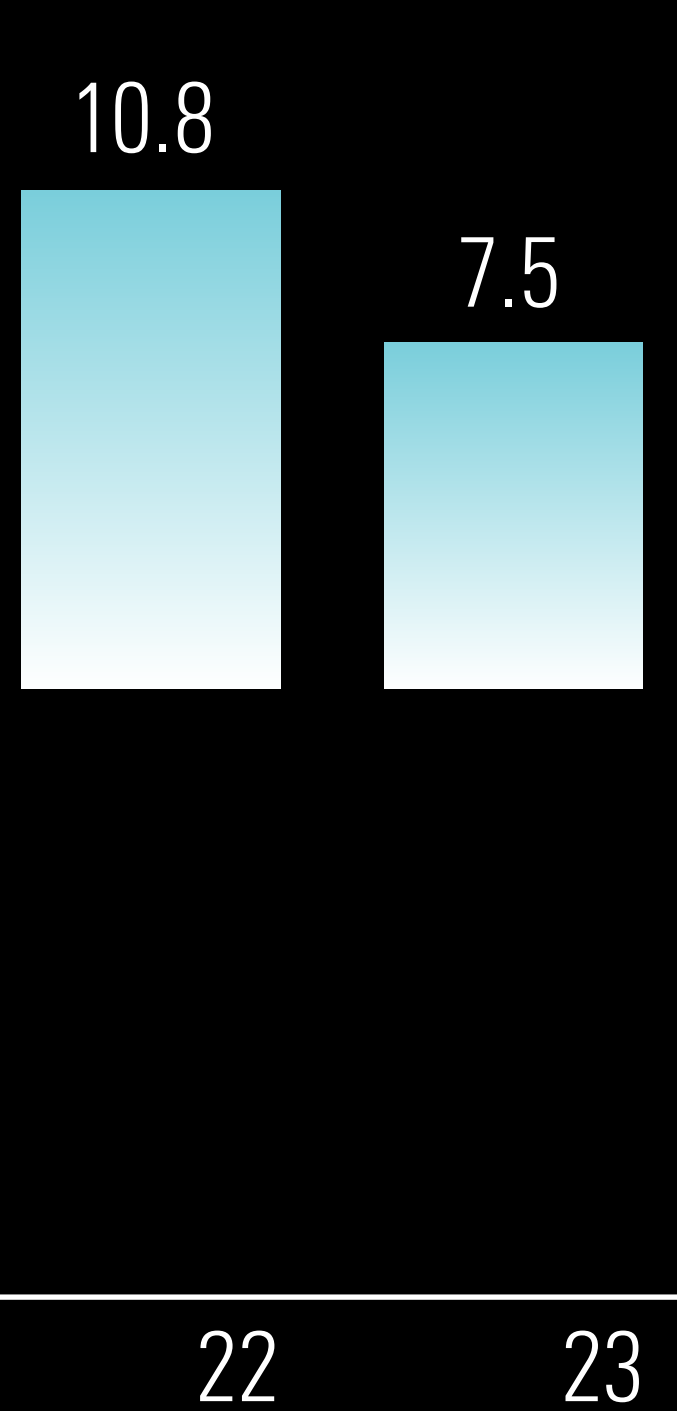
2023 Financial Performance



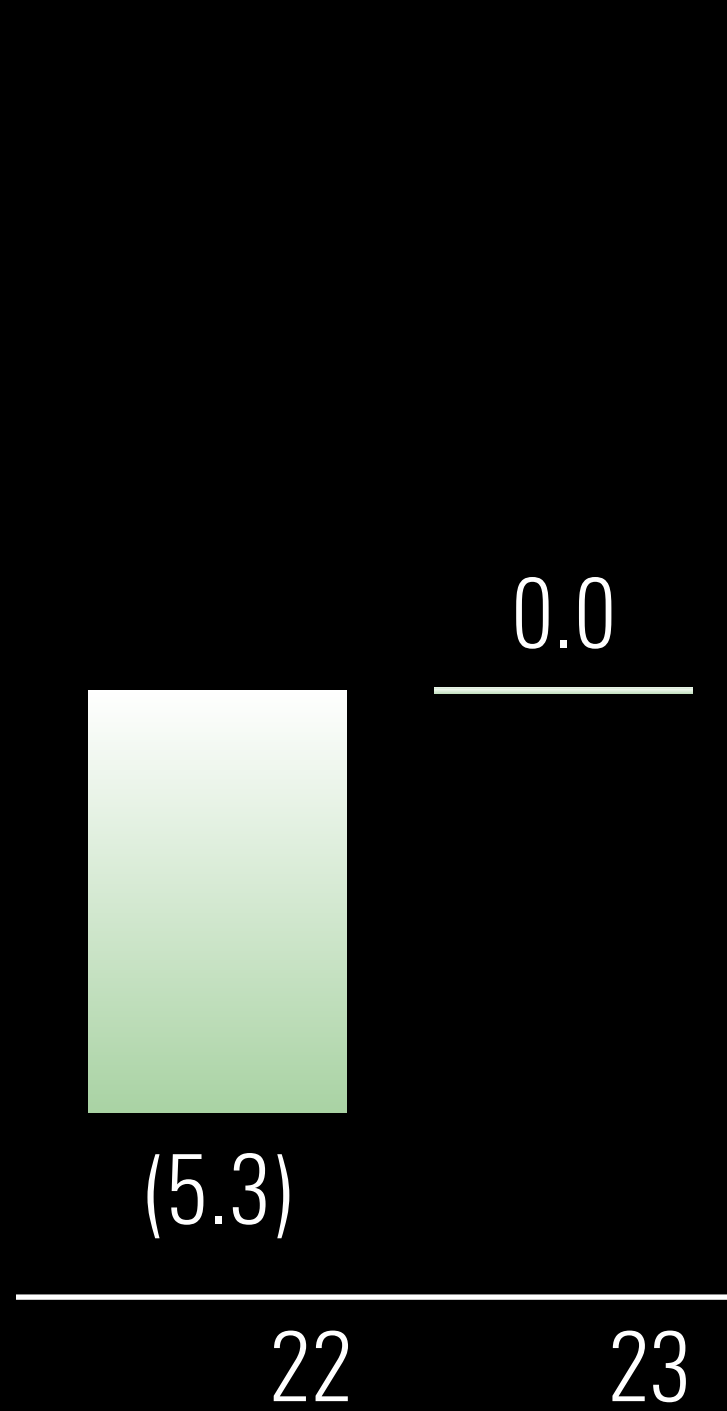
* Adjusted operating income is a non-GAAP measure and excludes intangible amortization expense, other merger and acquisition (M&A)-related expenses and earn-outs, and items related to the significant reduction and shift of the Company's operations in China. **Free cash flow is a non-GAAP measure and is defined as cash provided by or used for operating activities less capital expenditures. See reconciliation tables in the appendix of this presentation.

Improving Trends

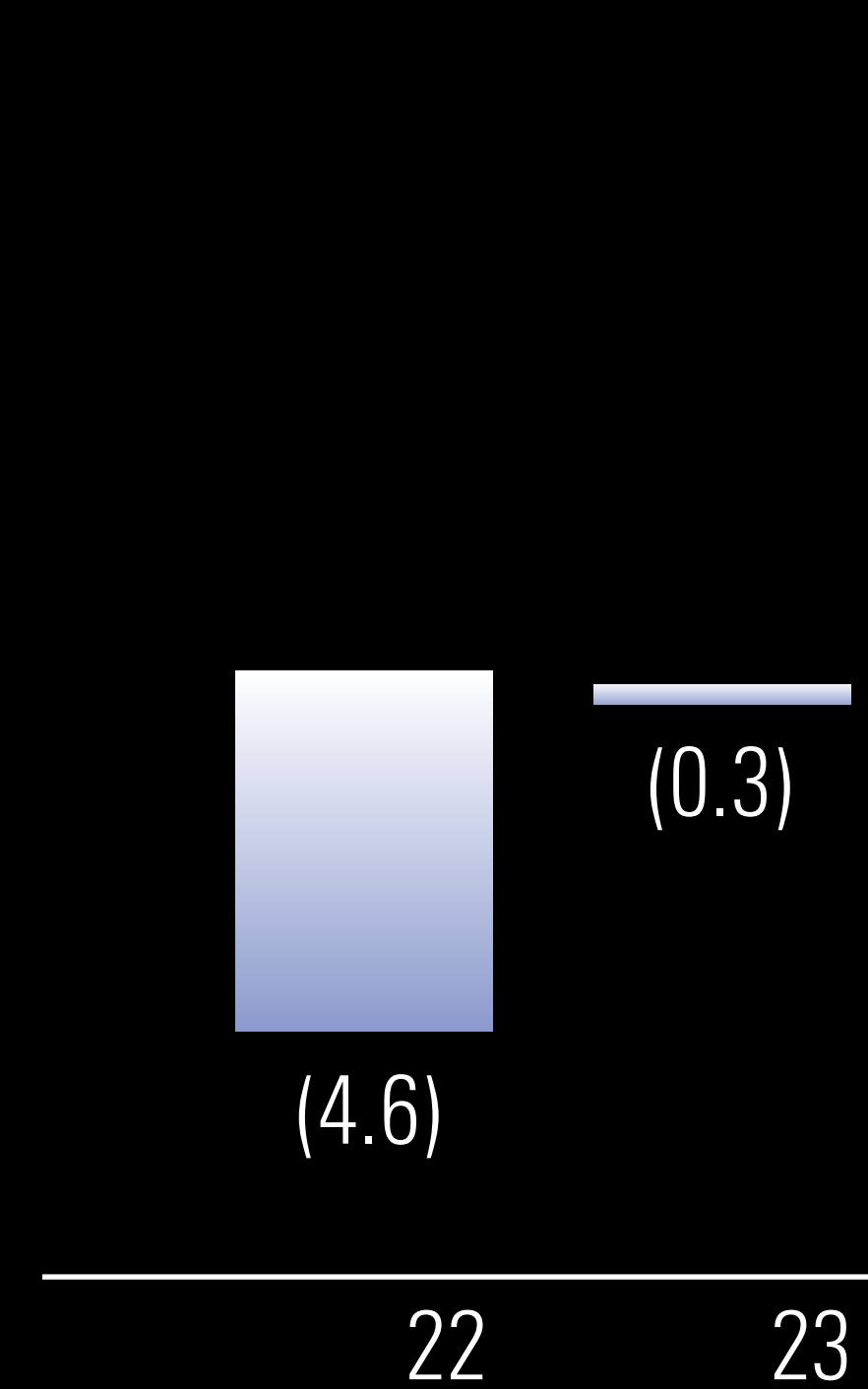
Organic Revenue
Growth (%)



Adjusted Operating
Margin Change (pp)



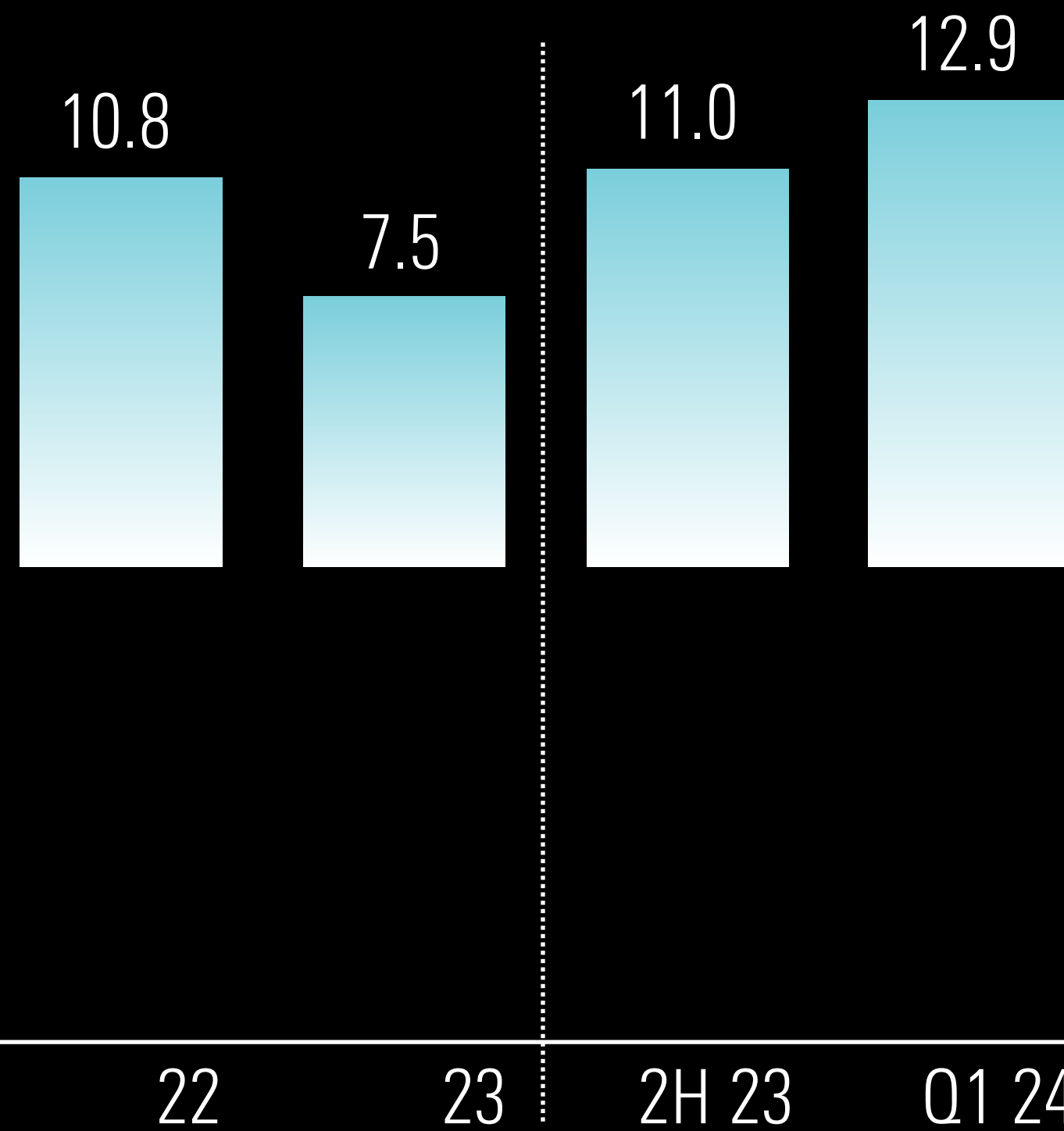
ROIC Change (pp)



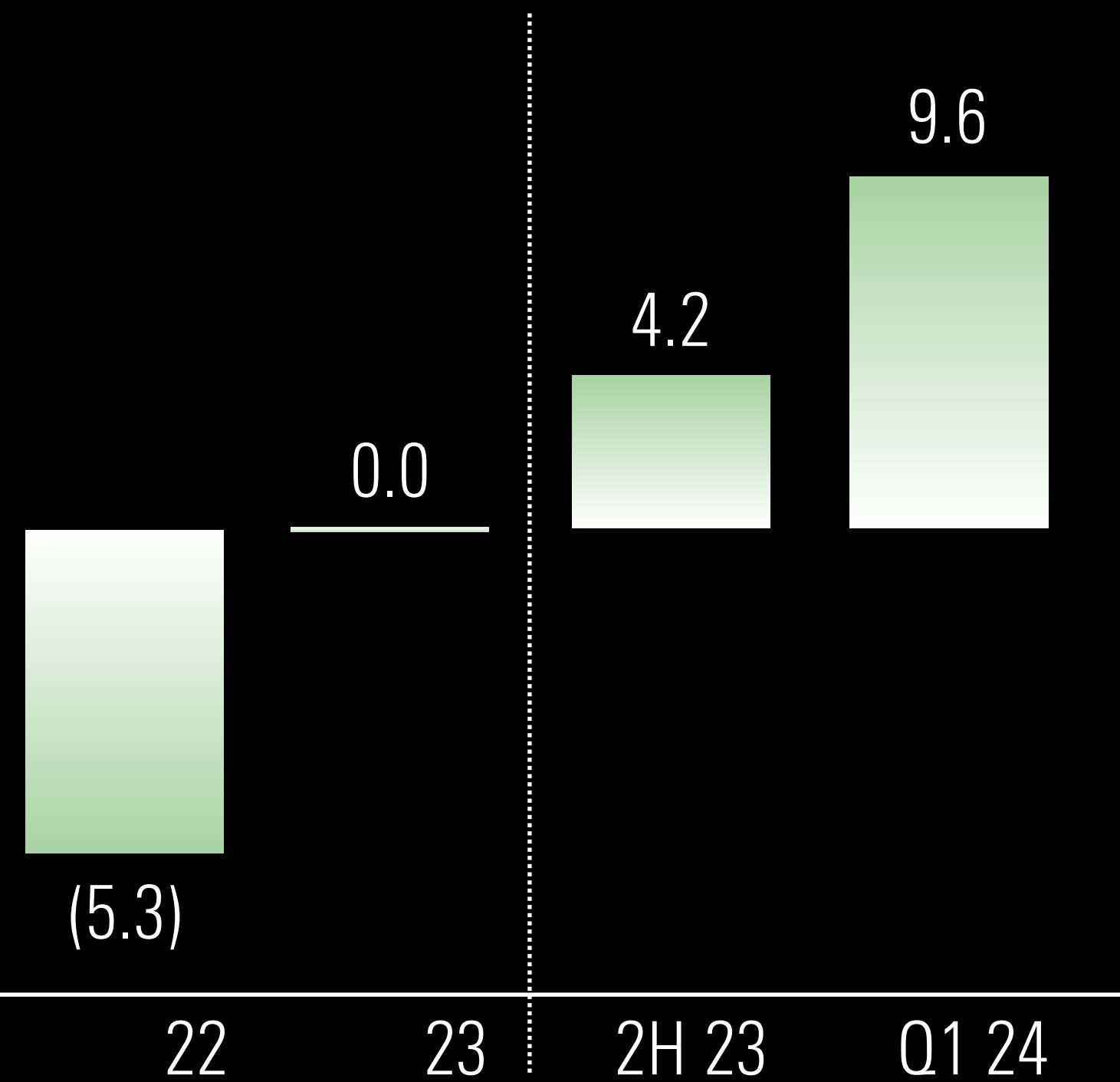
Organic revenue, adjusted operating margin, and ROIC are non-GAAP measures. See reconciliation tables in the appendix of this presentation.

Improving Trends

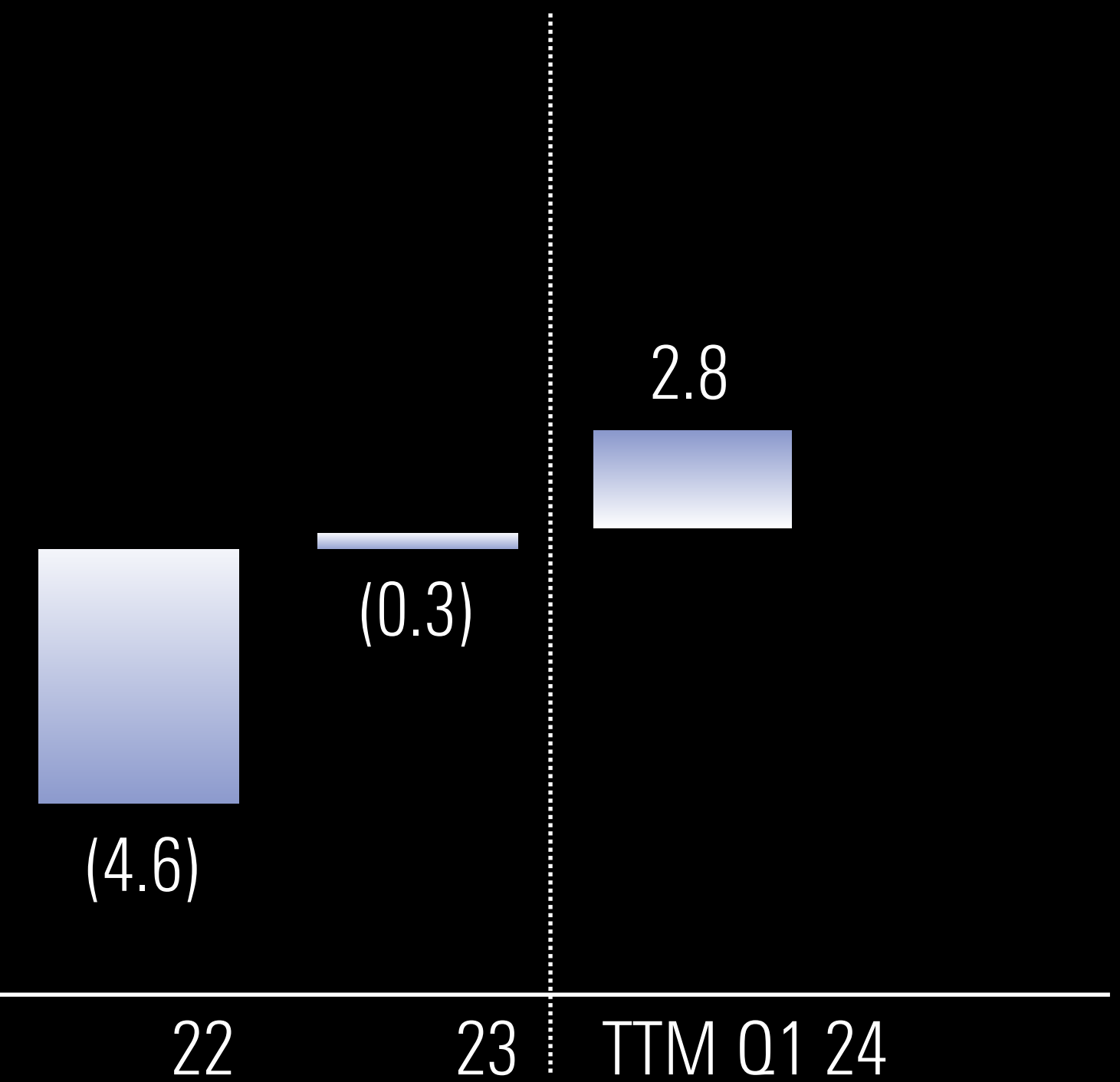
Organic Revenue Growth (%)



Adjusted Operating Margin Change (pp)



ROIC Change (pp)



Organic revenue, adjusted operating margin, and ROIC are non-GAAP measures. See reconciliation tables in the appendix of this presentation.

Key Actions Taken



Product Portfolio

- ▷ Refocused Wealth to our international platform and third-party platforms (US)
- ▷ Rebuilding Sustainalytics climate offering and streamlining other product areas
- ▷ Substantially completed LCD integration



Headcount

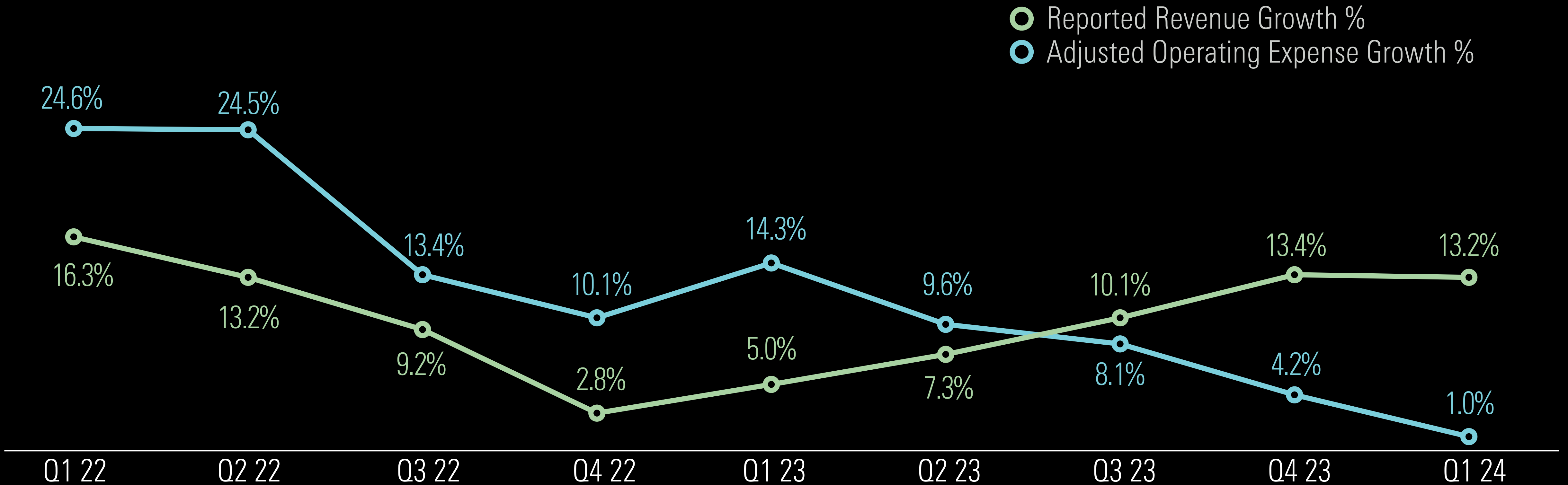
- ▷ Completed people and process migrations in China
- ▷ Targeted reorganizations in Sustainalytics, Wealth, and Credit
- ▷ Slowing and optimization of headcount in other areas including shared / corporate functions



Cost Control

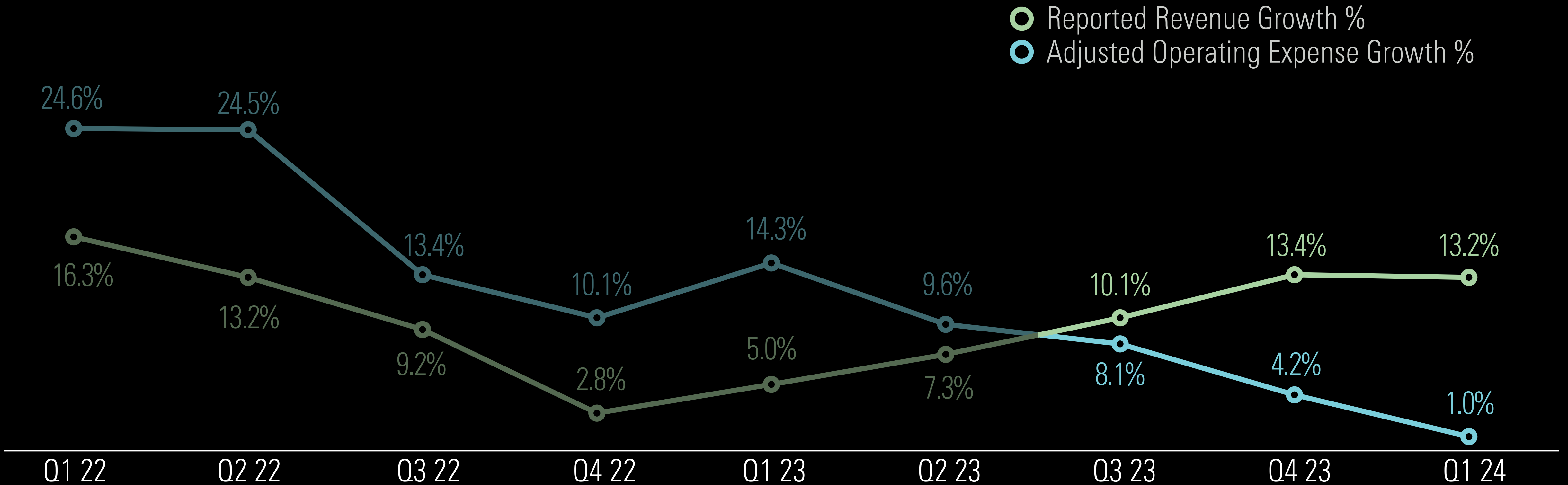
- ▷ Consolidation and rationalization of real estate portfolio
- ▷ Reduction in discretionary areas, including professional fees
- ▷ Driving automation and efficiencies in operations

Quarterly Performance Trends



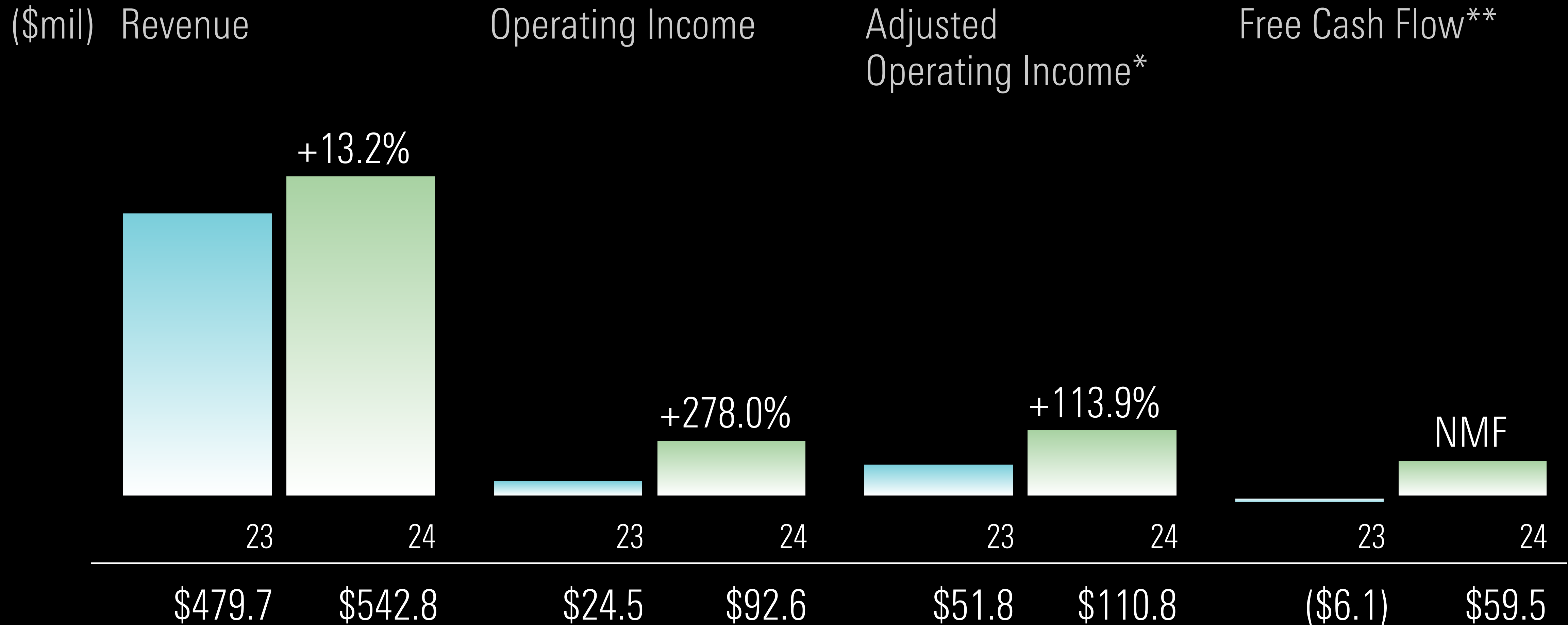
Adjusted operating expense is a non-GAAP measure. See reconciliation table in the appendix of this presentation.

Quarterly Performance Trends



Adjusted operating expense is a non-GAAP measure. See reconciliation table in the appendix of this presentation.

Q1 2024 Financial Performance

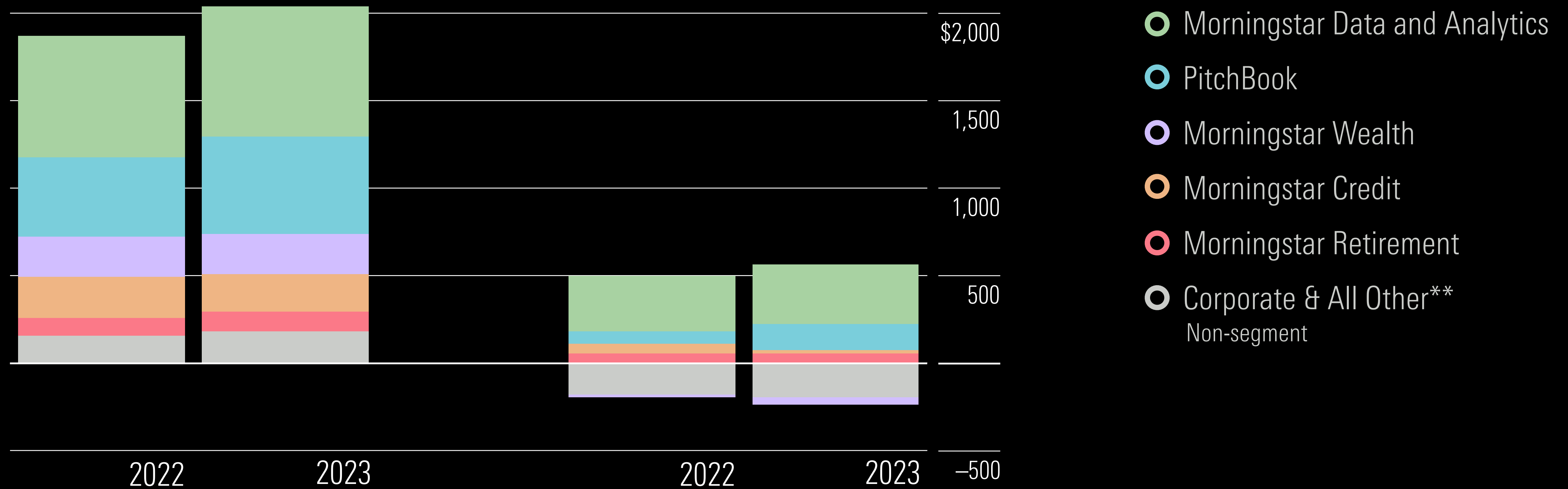


* Adjusted operating income is a non-GAAP measure and excludes intangible amortization expense, other merger and acquisition (M&A)-related expenses and earn-outs, and items related to the significant reduction and shift of the Company's operations in China. ** Free cash flow is a non-GAAP measure and is defined as cash provided by or used for operating activities less capital expenditures. See reconciliation tables in the appendix of this presentation.

Revenue and Profit Contribution

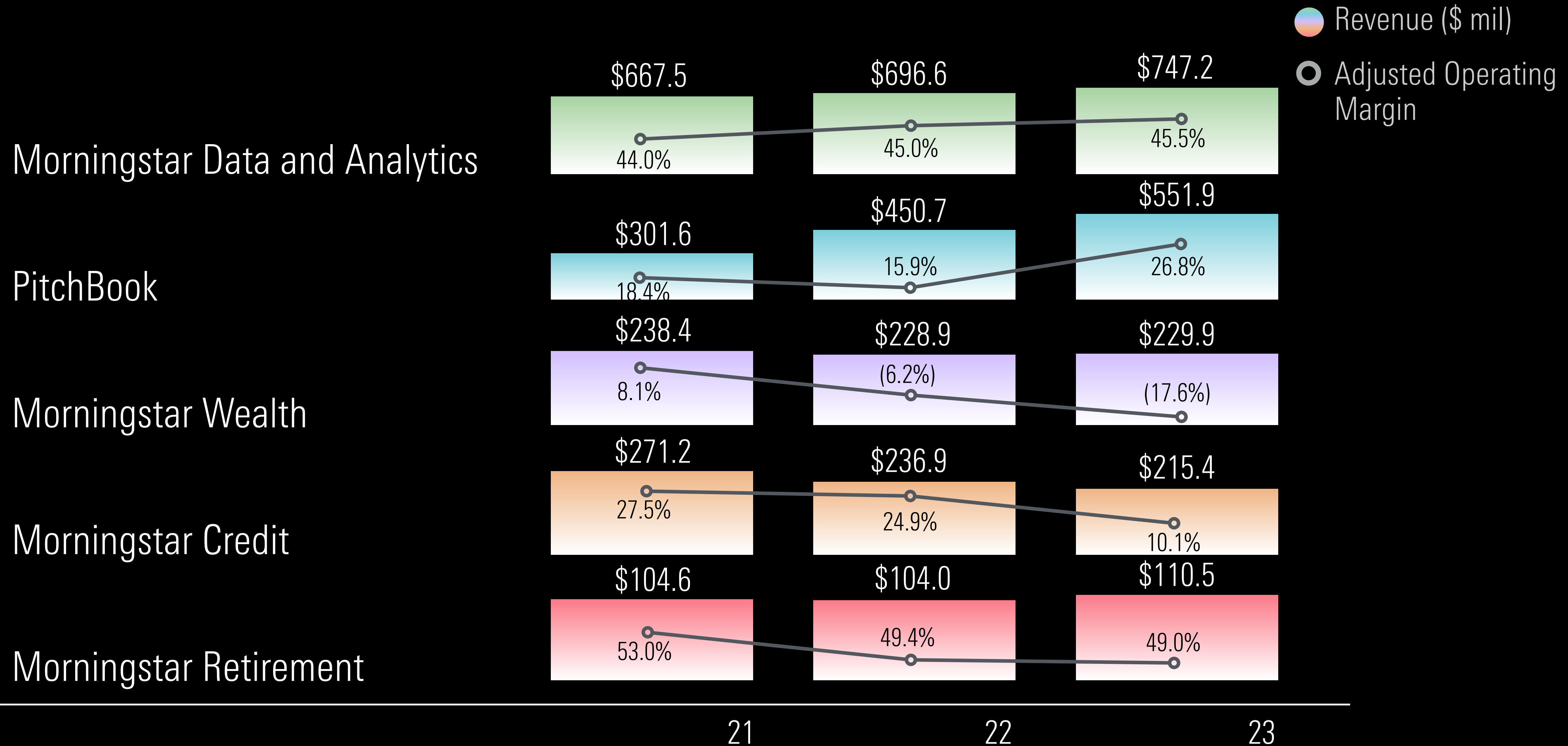
Revenue

Adjusted Operating
Income (Loss)* (\$mil)



* Adjusted operating income (loss) is a non-GAAP measure. See reconciliation table in the appendix of this presentation. **The operating segments of Morningstar Sustainalytics and Morningstar Indexes have been combined and presented as part of Corporate and All Other, which is not a reportable segment. Corporate and All Other also includes unallocated corporate expenses.

Segment Revenue and Margin Profile



Adjusted operating margin is a non-GAAP measure. See reconciliation table in the appendix of this presentation.

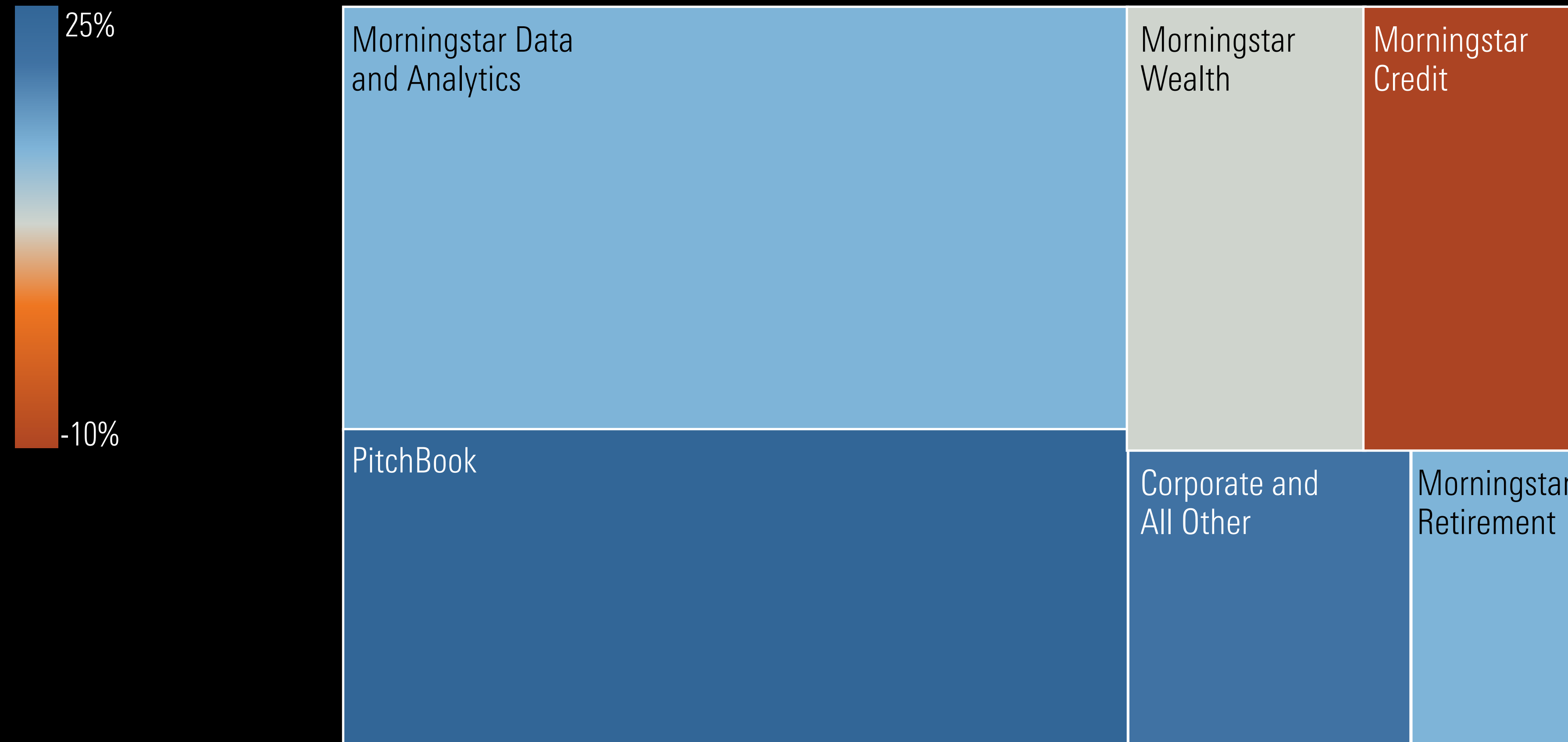
Adjusted Operating Income and Margin Walk

AOI (\$mil)	FY 2023		Q1 2024	
	Contributions to Change		Contributions to Change	
	\$	Margin	\$	Margin
Prior Period (total company)	\$298.9	16.0%	\$51.8	10.8%
PitchBook	\$76.6	3.3%	\$9.6	0.9%
Morningstar Data and Analytics	\$26.5	—	\$10.3	—
Morningstar Retirement	\$2.7	—	\$3.0	0.3%
Morningstar Wealth	(\$26.1)	(1.2%)	\$9.0	2.0%
Morningstar Credit	(\$37.4)	(2.1%)	\$16.3	3.1%
Corporate and All Other*	(\$14.7)	—	\$10.8	3.3%
End of Period (total company)	\$326.5	16.0%	\$110.8	20.4%

Adjusted operating income and adjusted operating margin are non-GAAP measures. See reconciliation tables in the appendix of this presentation.*The operating segments of Morningstar Sustainalytics and Morningstar Indexes have been combined and presented as part of Corporate and All Other, which is not a reportable segment. Corporate and All Other also includes unallocated corporate expenses.





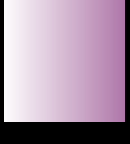

Delivering Revenue Growth

Organic Revenue Growth



The size of the rectangles represents 2023 reported revenue. The color of the rectangles represents 2023 organic revenue growth compared to 2022. Organic revenue is a non-GAAP measure. See reconciliation tables in the appendix of this presentation. The operating segments of Morningstar Sustainalytics and Morningstar Indexes have been combined and presented as part of Corporate and All Other, which is not a reportable segment.

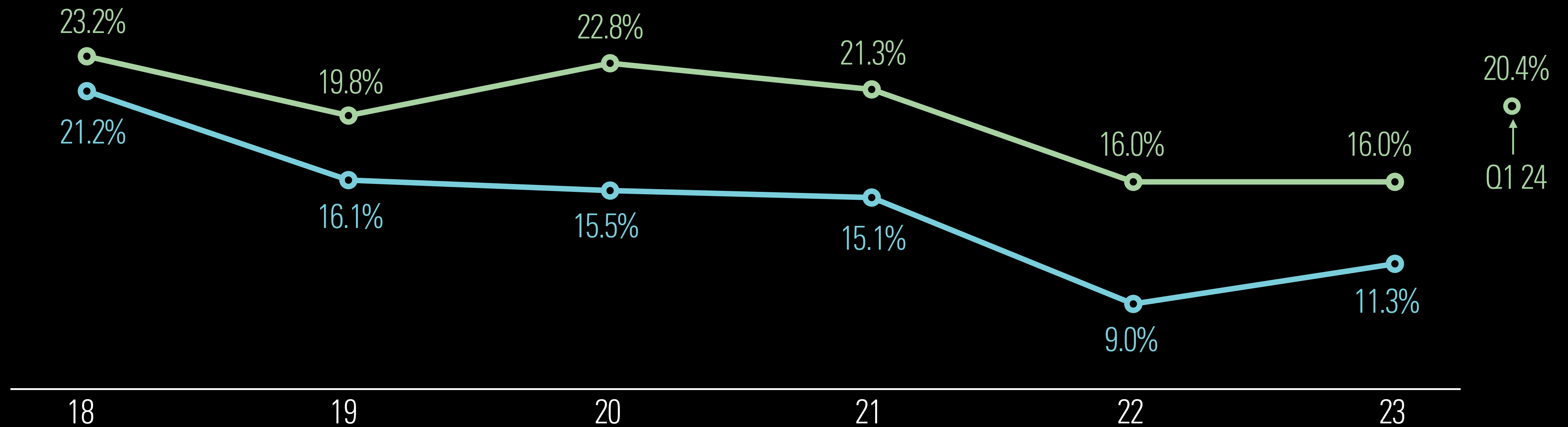
Controlling Costs

		2023	Q1 2024	(\$mil)
Compensation, Benefits, and Commissions ¹		\$137.6	\$4.7	
Infrastructure Costs and Other ²		\$21.7	\$0.7	
Targeted Reorganization Severance ³		\$9.0	\$0.0	
Morningstar DBRS SEC Settlements ⁴		\$8.0	\$0.0	
Discretionary Expenses ⁵		(\$4.5)	(\$0.9)	
Stock-Based Compensation		(\$31.4)	(\$0.4)	
Adjusted Operating Expense Increase		\$140.4	\$4.1	
Adjusted Operating Expense Growth		8.9%	1.0%	

Comparisons are to the prior year and prior-year period. (1) Includes salaries, bonus, company-sponsored benefits, and severance not related to targeted reorganizations or the Company's China activities. (2) Includes infrastructure costs (including 3rd party contracts with data providers, cloud costs, and software subscriptions), facilities, depreciation/amortization, and capitalized labor. (3) Severance from targeted reorganizations not related to the shift of the Company's China activities. (4) Expense related to the settlements between the SEC and DBRS, Inc. (5) Includes advertising and marketing, travel and related activities, and professional fees.

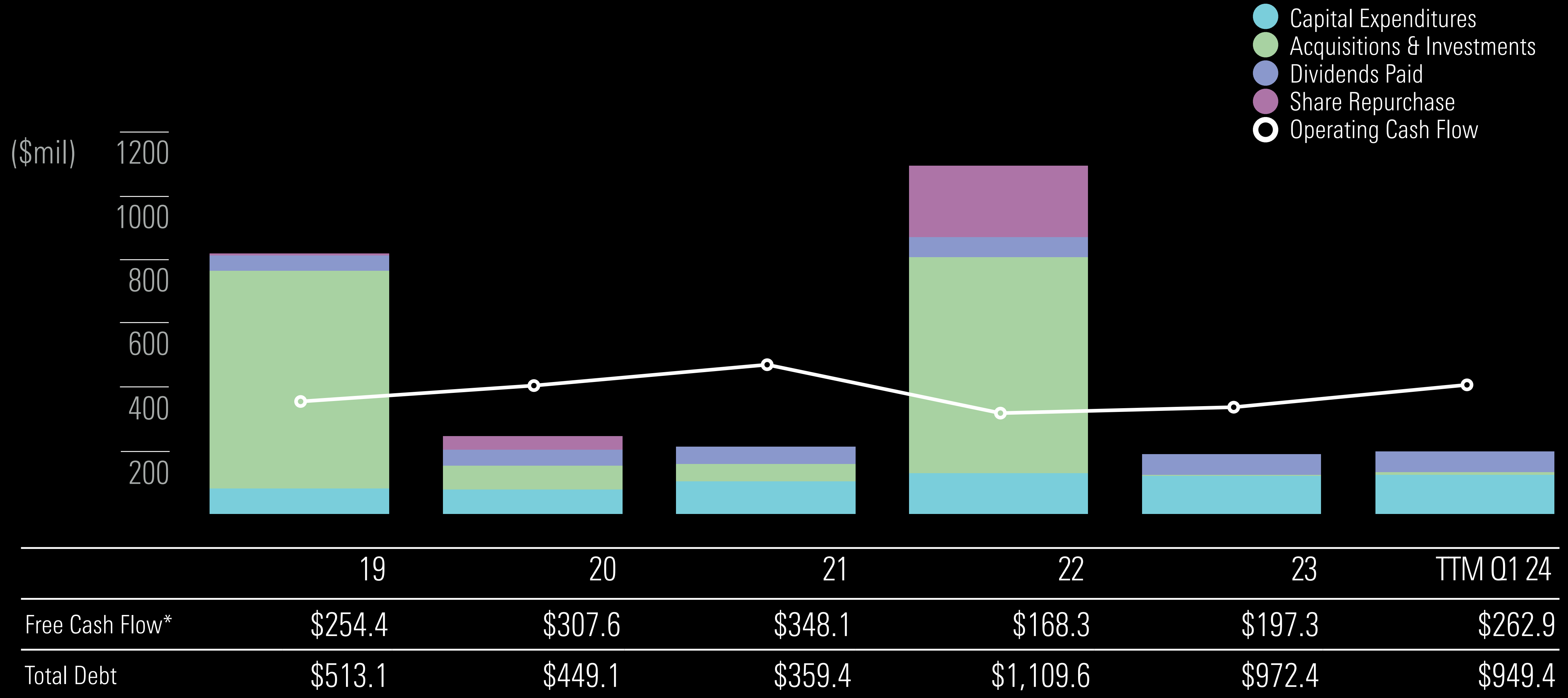
Path to Margin Expansion

- Adjusted Operating Margin
- Operating Margin



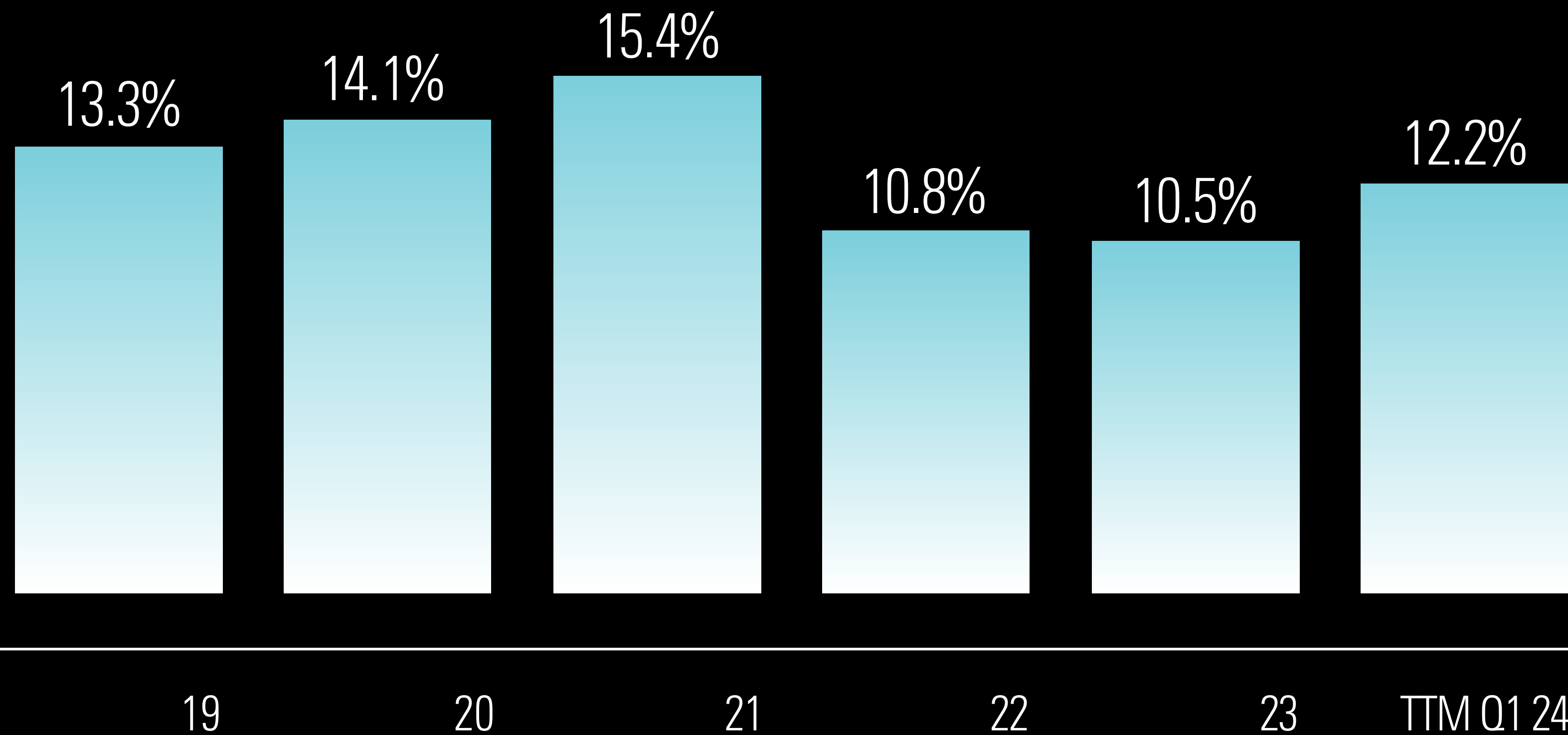
Organic revenue and adjusted operating margin are non-GAAP measures. See reconciliation tables in the appendix of this presentation.

Capital Allocation & Deployment



*Free cash flow is a non-GAAP measure. See reconciliation table in the appendix of this presentation.

ROIC: Return On Invested Capital



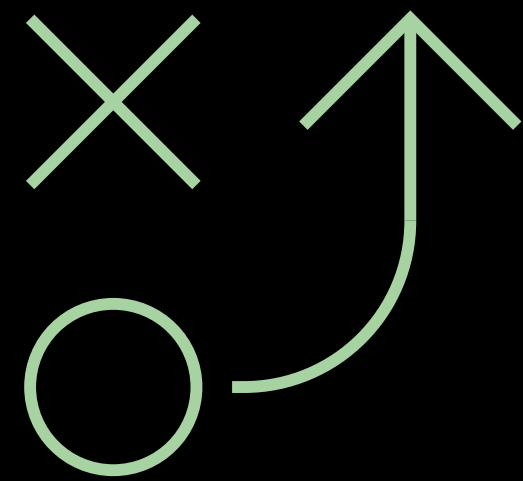
Return on invested capital is a non-GAAP measure. See reconciliation table in the appendix of this presentation for definition and calculation.

MORN Total Return

Period	MORN	Peer Group*	Morningstar US Market Total Return
10-year	15.80	17.66	12.16
5-year	16.42	11.47	12.96
3-year	4.19	4.36	7.20
1-year	62.47	15.32	27.56

Annualized returns as of May 3, 2024. *Peer group includes ENV, FDS, MCO, MSCI, SEIC, and SPGI. Source: Morningstar Direct.

Focused on a Path to Long-Term Sustainable Growth



Execute Strategy
Across Product Areas



Realize Returns
on Recent Investments



Control Costs
& Drive Efficiency

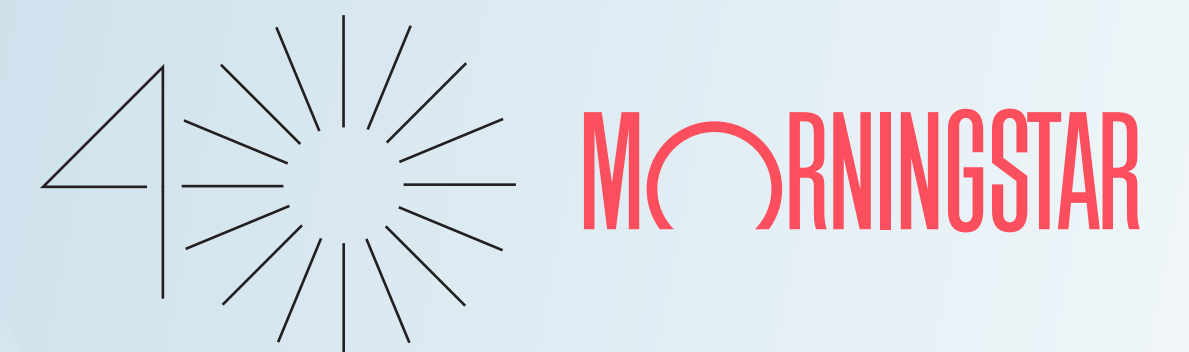
Morningstar Data + Analytics

James Rhodes

President, Morningstar Data,
Research and Enterprise Solutions

Lee Davidson

Chief Data and Analytics Officer



Portfolio Editor

Advisor Prospect: GSAM Settings

Entry Dates

Add Date

08/31/2020 ✓

12/17/2015

Dashboard: Multi-Asset Compariso... ✎ ⚙️ 📄

Performance Characteristics **Allocation** MPT Equity Risk Analysis Fixed Inc Risk Analysis Scenario Analysis

Style Box • Equity Holdings Style Map • 08/31/2023 • Advisor Prospect: GSAM

● Centroid
○ Ownership Zone

■ Advisor Prospect: GSAM as of 08/31/2023
■ S&P 500 TR USD as of 08/31/2023

Style Box • Fixed Income Style Box • 08/31/2023 • Advisor Prospect: GSAM

Fixed Income Measures	Portfolio	Benchmark
Effective Duration	6.102749	-
Modified Duration	7.419777	-
Effective Maturity	6.273673	-
Average Credit Quality	BB	-
Average Coupon	4.352091	-
Average Price	-	-

Allocation • Equity Sectors (Morningstar) • 08/31/2023 • Advisor Prospect: GSAM

Name	Portfolio %	Benchmark %	+/-
Technology	18.13	28.86	-10.7
Financial Services	16.65	12.01	4.6
Healthcare	12.97	13.21	-0.2
Consumer Cyclical	11.86	10.77	1.0
Industrials	11.86	8.29	3.5
Consumer Defensive	7.19	6.53	0.6
Communication Services	5.17	8.81	-3.6

Allocation • Fixed-Inc Super Sectors (Morningstar) • 08/31/2023 • Advisor Prospect: GSAM

Name	Portfolio %	Benchmark %	+/-
Government	39.79	-	-
Cash & Equivalents	19.54	-	-
Securitized	14.36	-	-
Corporate	13.49	-	-
Derivative	12.69	-	-
Municipal	0.12	-	-

Original Draft

Save as a new portfolio Save Portfolio

Morningstar Direct Lens

An Ever-Expanding Set of Databases 2019–2024



Data as of Mar. 2024. *Data provided by third party.

An Ever-Expanding Set of Databases 2019–2024



Data as of Mar. 2024. *Data provided by third party.

An Ever-Expanding Set of Databases 2019–2024



Data as of Mar. 2024. *Data provided by third party.

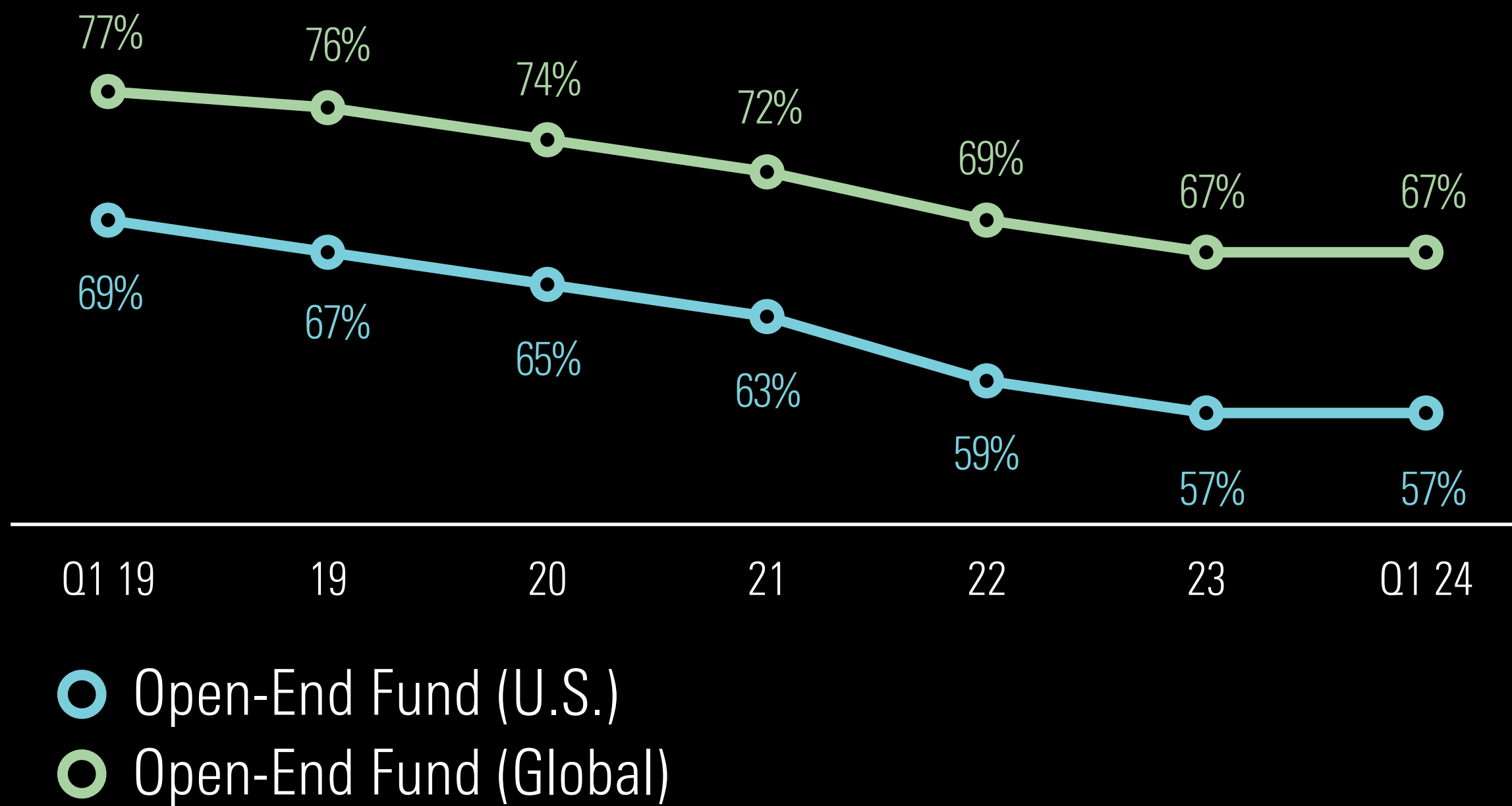
An Ever-Expanding Set of Databases 2019–2024



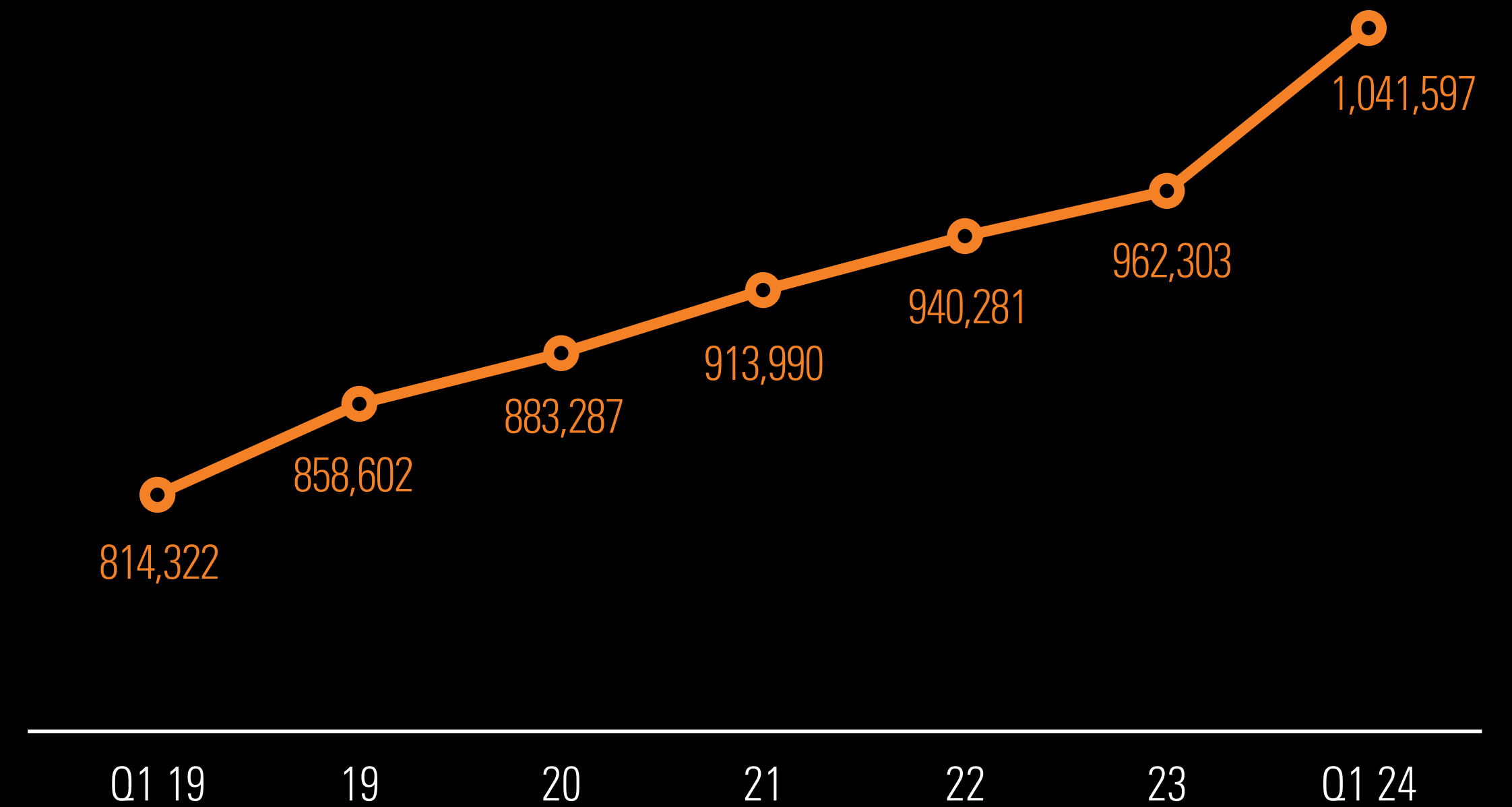
Data as of Mar. 2024. *Data provided by third party.

The Evolution of Managed Investments

Open-End Fund (U.S. and Global)

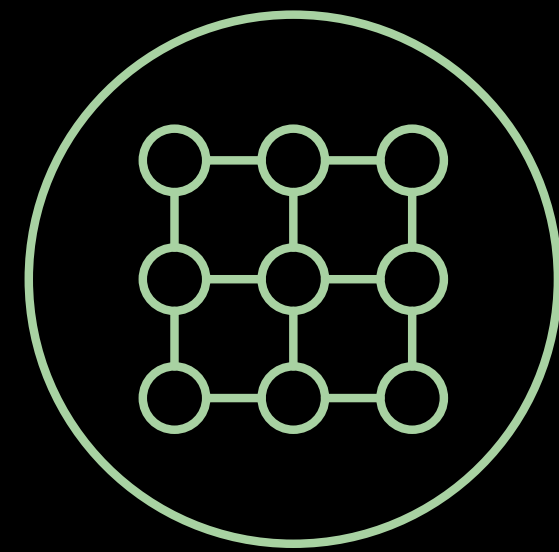


Total Managed Investments



All data as of Dec. 31, except where noted.

Walk the Data Factory



Sourcing

5 Year Growth

Sources: 135%

Volume: 262%

Portfolios: 176%

Standardization

5 Year Growth

Investments: 26%

Analytics

Unique Methodologies:
450+

Delivery

Total Data Elements:
117bn+

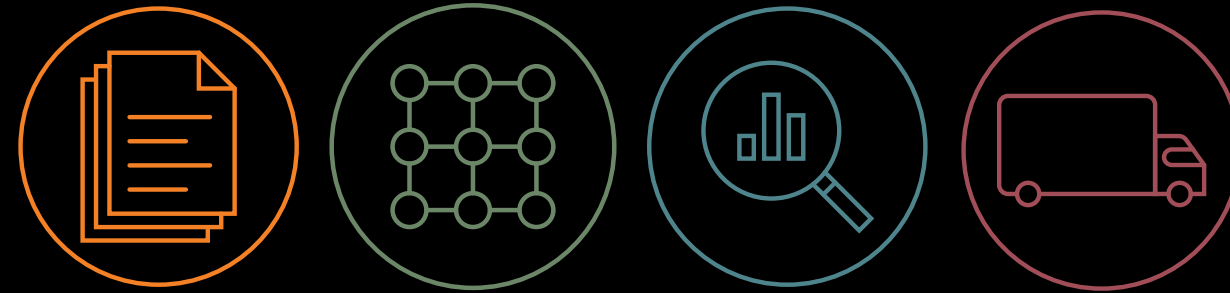
Expand

Extract

Extend

Explain

Walk the Data Factory



Sourcing

Annual Report

J.P. Morgan Exchange-Traded Funds

June 30, 2023

Fund

- JPMorgan ActiveBuilders U.S. Large Cap Equity ETF
- JPMorgan Active Growth ETF
- JPMorgan Active Small Cap Value ETF
- JPMorgan Active Value ETF
- JPMorgan Equity Premium Income ETF
- JPMorgan Nasdaq Equity Premium Income ETF

Prospectus

J.P. Morgan Exchange-Traded Funds

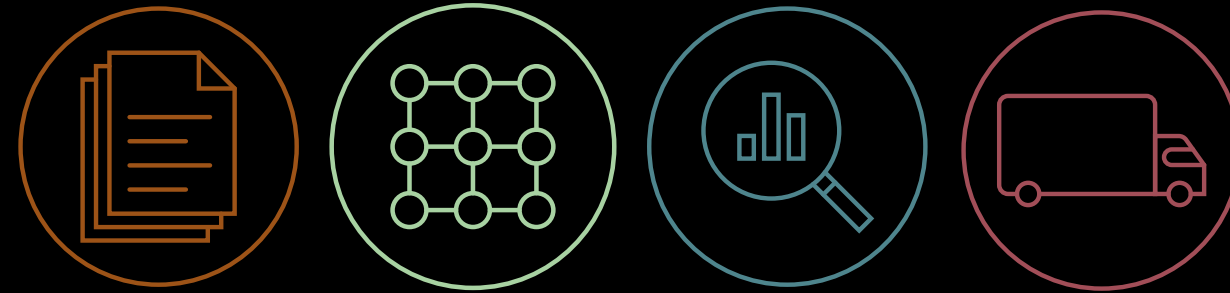
November 1, 2023

	Ticker	Listing Exchange
JPMorgan Active Growth ETF	JGRO	NYSE Arca
JPMorgan Active Value ETF	JAVA	NYSE Arca
JPMorgan Equity Premium Income ETF	JEPI	NYSE Arca
JPMorgan Nasdaq Equity Premium Income ETF	JEPQ	The NASDAQ Stock Market LLC

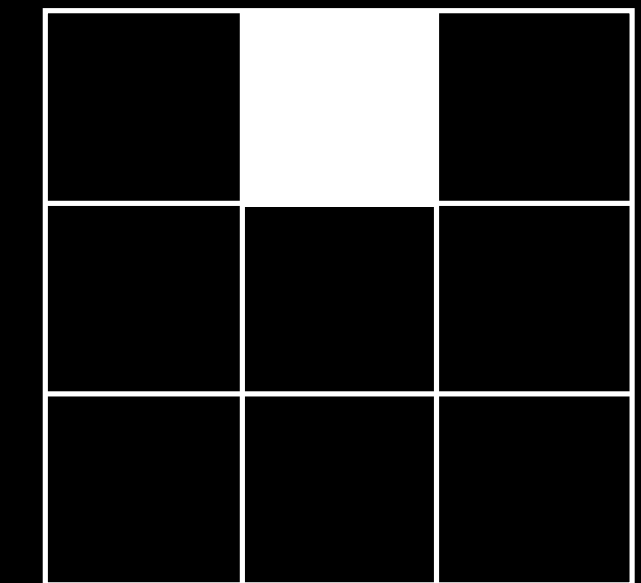
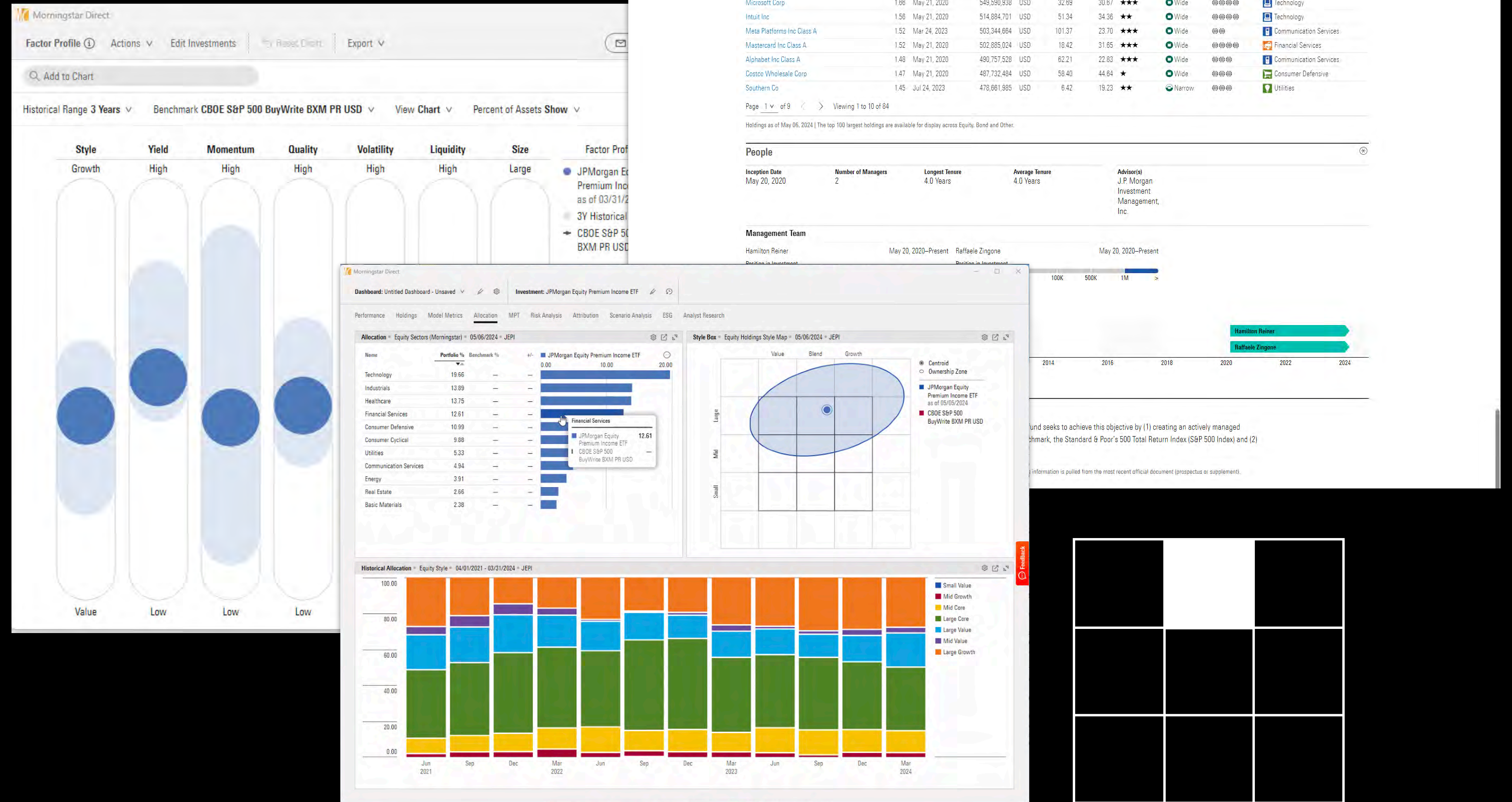
The Securities and Exchange Commission and the Commodity Futures Trading Commission have not approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

J.P.Morgan
Asset Management

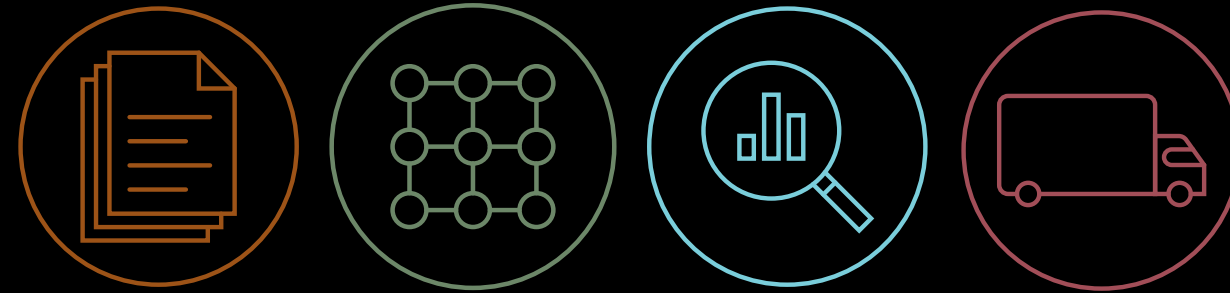
Walk the Data Factory



Standardization



Walk the Data Factory



Analytics

Morningstar Managed Investment Report | Report as of 7 May 2024 18:52 UTC Page 1 of 27

JPMorgan Equity Premium Income ETF JEPI

Morningstar Medalist Rating Bronze 26 Sep 2023 18:32 UTC Lan Anh Tran, Analyst	Morningstar Rating ★★★★ 30 Apr 2024 73 Inv. in Category	Sustainability Rating ★★★★ 29 Feb 2024	Morningstar Category US Fund Derivative Income	Category Index CBOE S&P 500 BuyWrite BXM PR USD	Prospectus Benchmark S&P 500 TR USD
Total Assets \$3.2 USD Bn	Expense Ratio % 0.35	12-Month Yield 7.63	Replication Method Not Applicable	3-Mo. Avg. Daily Vol. (\$Hrs '000) 3,457,280	Exchange NYSE ARCA

Lan Anh Tran
Analyst

Analyst Driven % 100.0
Data Coverage % 100.0

Morningstar Pillars

- Process (26 Sep 2023) Above Average
- People (26 Sep 2023) Above Average
- Parent (06 Feb 2023) Above Average
- Performance (26 Sep 2023) Above Average
- Price (26 Sep 2023) Above Average

Historical Medalist Rating

Analyst: Quantitative Q | Medalist Start

Gold
Silver
Bronze
Neutral
Negative

2022 2023 2024

Role in Portfolio —

Morningstar Medalist Rating
Morningstar Medalist Ratings/Pillar Scores are assigned based on (1) an analyst's qualitative assessment, which directly or indirectly (2) using algorithmic techniques intended to be similar to those an analyst might apply if he/she had covered the vehicle. Investment vehicles are awarded stars in three key pillars. Qualitative investment research is produced and shared by subsidiaries of Morningstar, Inc. Quantitative-driven analysis is generated using internal models, based on either analyst-driven or written analysis.

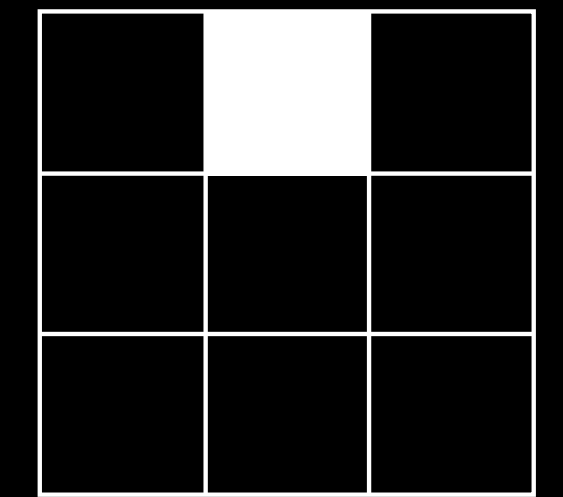
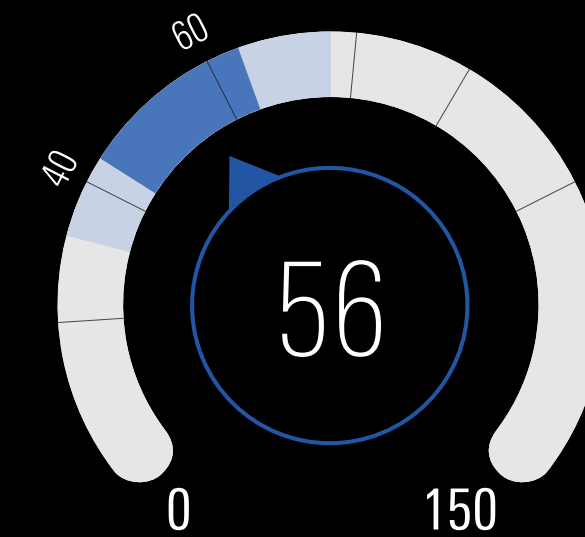
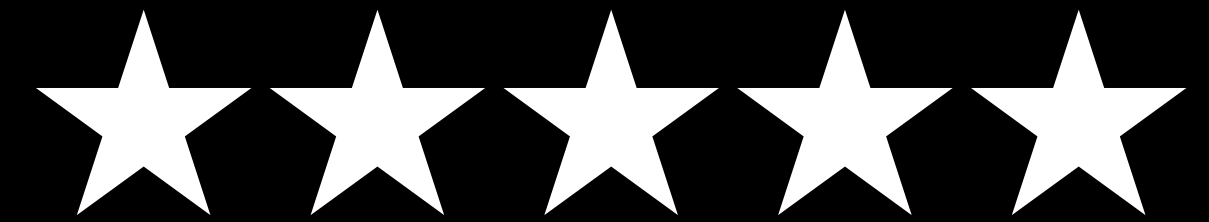
Equity Style

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	YTD	Investment Style
Value												Equity Style Box
Blend												Total Return % (USD)
Growth												Investment
												Category Index
												Performance Quartile (within Category)
												Percentile Rank
												# of Inv in Cat.

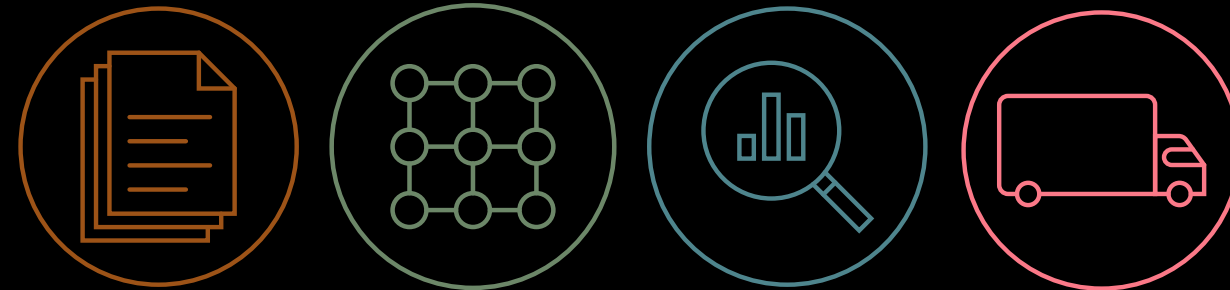
YTD investment as of 30 Apr 2024 | Category: US Fund Derivative Income as of 7 May 2024 | Index: CBOE S&P 500 BuyWrite BXM PR USD as of 7 May 2024 | Index: S&P 500 TR USD as of 7 May 2024 | Index: S&P 500 TR USD as of 7 May 2024

Performance: Standard performance is an estimate based on the performance of the fund's closest peers, adjusted for fees. Performance data presented is not standardized. For standardized performance see the Standardized and Tax-Adjusted Return Disclosure Statement. *Performance Disclaimer: The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://www.morningstar.com/fundfacts.asp>.

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Walk the Data Factory



Delivery



The screenshot shows the Morningstar website interface. On the left is a dark sidebar with navigation options: Home, Watchlists, Bookmarks, Topics (Morningstar Insights, Stocks, Mutual Funds, ETFs, Economic and Market, Credit, Morningstar Webinars), Investment Ideas (Pick Lists, Model Portfolios), and Tools (Screen, 529 Plan Center, Compare, Chart, Calendar, Investing Classroom). The main content area features a 'Direct Compass' header with a search bar. Below this are several sections: 'U.S. Market Fair Value (6M)' with a bar chart showing overvalued and undervalued periods; 'Latest in U.S. Stocks' with an article about Apple; 'Global Market Barometer (1Y)' with a world map; 'Market Indexes' table; and 'Actives' table. A chatbot window titled 'About Mo' is overlaid on the right, containing text about the AI chatbot and a 'Continue' button.

Name	Value
Europe	Closed 1,838
Global Markets	Closed 4,604
Japan	Closed 2,096
S&P 500	5,188
U.S. Markets	12,683
U.S. Sustainability	Closed 3,487

Name	Change	Chg
Tesla	-3.18	

Looking Ahead



Driving Scale



New Insights

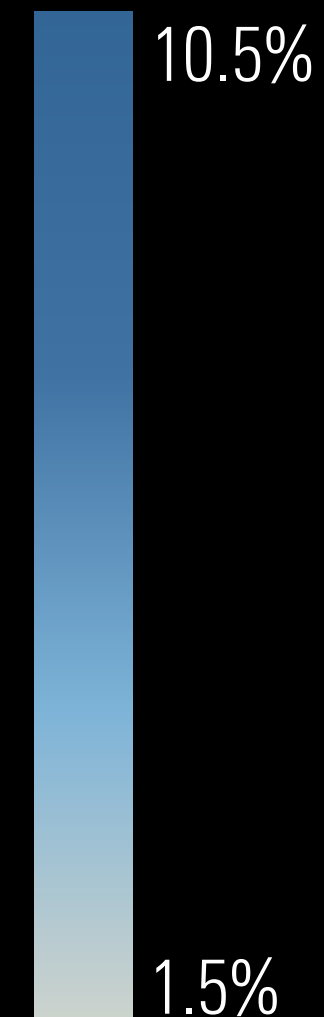


Frictionless,
Consistent Delivery

Morningstar Data + Analytics Product Portfolio

Revenue and Growth Rate

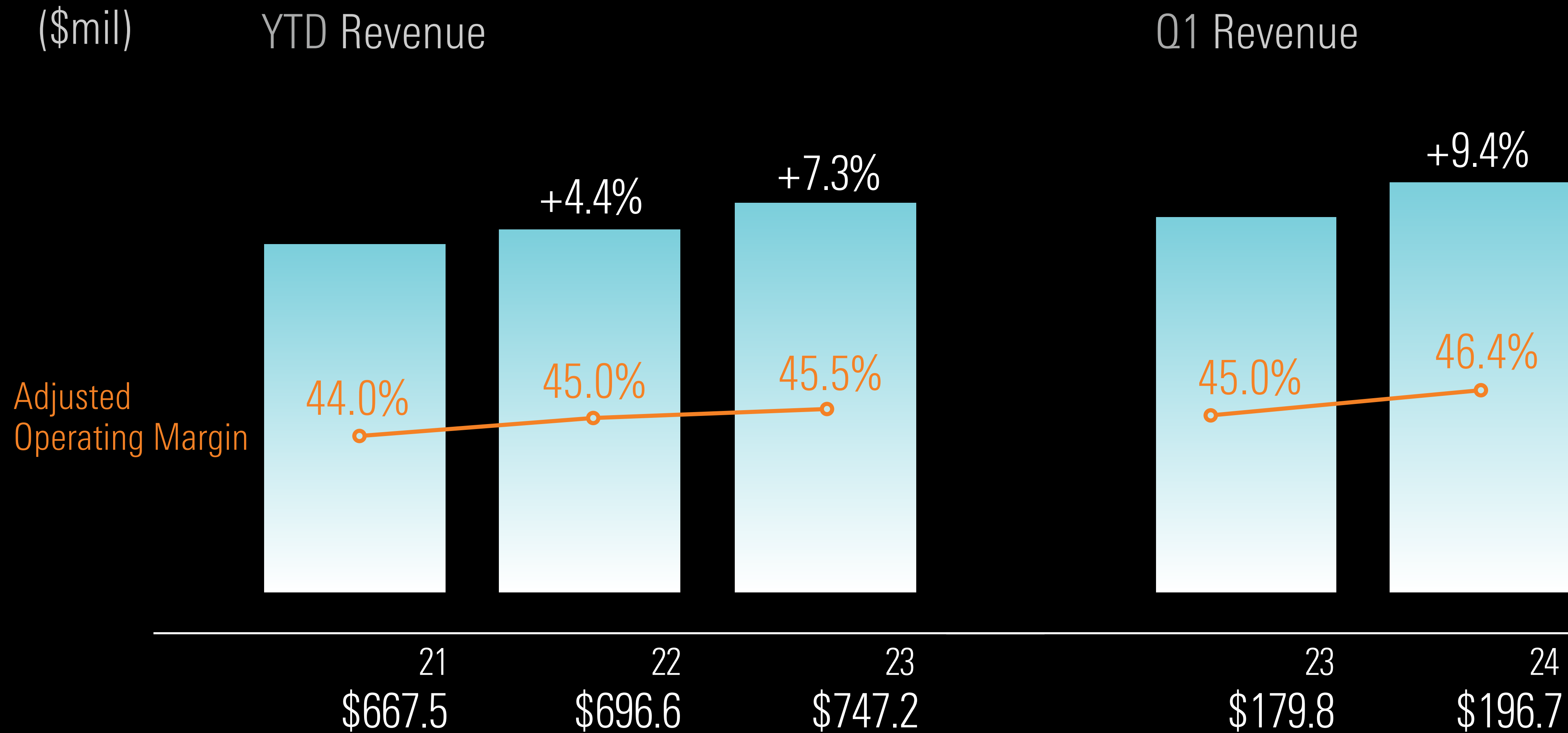
Organic Revenue Growth



Morningstar Data \$281.2 +10.3%	Morningstar Data and Analytics – Other \$164.1 +1.8%
Morningstar Direct \$201.9 +9.2%	Morningstar Advisor Workstation \$100.0 +5.2%

The size of the rectangles represents 2023 reported revenue. The color of the rectangles represents 2023 organic revenue growth compared to 2022. Organic revenue is a non-GAAP measure. See reconciliation tables in the appendix of this presentation.

Morningstar Data + Analytics Revenue and Adjusted Operating Margin



Adjusted operating margin is a non-GAAP measure. See reconciliation table in the appendix of this presentation.

Building a Connected Platform



Morningstar Direct

- ▶ Performance Reporting
- ▶ Advanced Screening
- ▶ Distribution



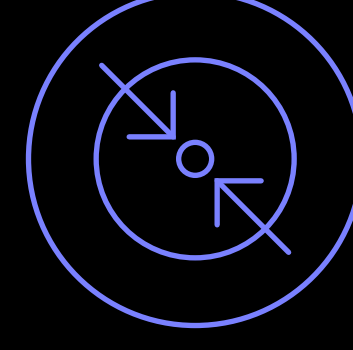
Direct Lens

- ▶ Portfolio Construction
- ▶ Analytics
- ▶ Risk Model
- ▶ Scenario Analysis
- ▶ Attribution Analysis



Analytics Lab

- ▶ Data Science
- ▶ Model Development
- ▶ Python Wrapper



Data and APIs

- ▶ Data Feeds
- ▶ Direct Web Services



Reporting Solutions

- ▶ Fact Sheet Creation
- ▶ Collateral Production



Direct Compass

- ▶ News
- ▶ Quotes
- ▶ Charts
- ▶ Screening
- ▶ Research Content



Advisor Workstation

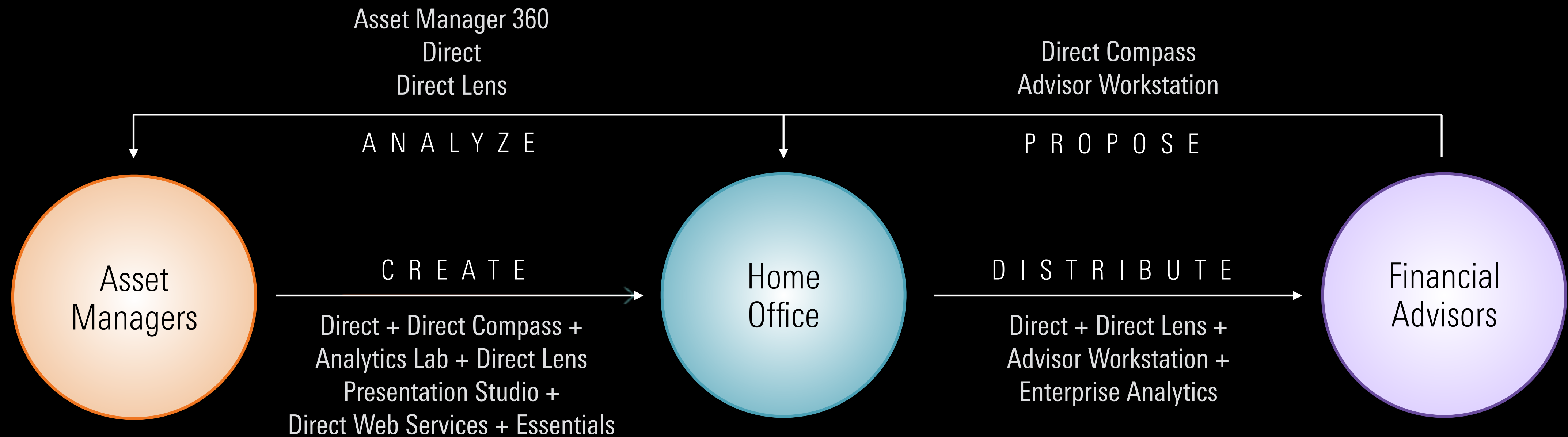
- ▶ Investment Planning
- ▶ Research
- ▶ Proposal Gen
- ▶ Portfolio Analytics

○ Reported as part of Morningstar Direct revenue.

Essential to the Investing Workflow

Individual Investor

Morningstar data, calculations, and methodologies fuel the entire system



It All Starts With the Portfolio Manager



Portfolio
Manager

Performance
Analyst

Data
Scientist

Research
Analyst

Get Started

Create a Portfolio

Import a Portfolio

Analyze a Portfolio

Recently Modified

Name (0/10 Selected)	Primary Benchmark	Rebalancing Frequency	Rebalancing Based On	Currency	Last Modified Date	Owner	Type	Portfolio ID	Created On
Target Risk MF Moderate	Target Risk Moderate Benchmark	Monthly	Calendar Period End	USD	5/1/2024	MIM Master Account	Portfolios	MG-TD-PFPC	2/12/2010
Walden Equity Value Model	S&P 500 TR USD	Monthly	Calendar Period End	USD	5/1/2024	Glenn Laatsch	Portfolios	—	4/25/2024
Walden Equity Model W Crypto	S&P 500 TR USD	Monthly	Calendar Period End	USD	4/26/2024	Glenn Laatsch	Portfolios	—	4/25/2024
Walden Equity Model W Alts	S&P 500 TR USD	Monthly	Calendar Period End	USD	4/25/2024	Glenn Laatsch	Portfolios	—	4/25/2024
Walden Equity Factor Tilt Model	S&P 500 TR USD	Monthly	Calendar Period End	USD	4/25/2024	Glenn Laatsch	Portfolios	—	4/25/2024
Walden Equity Growth Model	S&P 500 TR USD	Monthly	Calendar Period End	USD	4/25/2024	Glenn Laatsch	Portfolios	—	4/25/2024
Walden Core Intl Equity Model	S&P 500 TR USD	Monthly	Calendar Period End	USD	4/25/2024	Glenn Laatsch	Portfolios	—	4/25/2024
Walden Core US Equity Model	S&P 500 TR USD	Monthly	Calendar Period End	USD	4/25/2024	Glenn Laatsch	Portfolios	—	4/25/2024
Walden Core US Model	S&P 500 TR USD	Monthly	Calendar Period End	USD	4/25/2024	Glenn Laatsch	Portfolios	—	8/2/2023
Target Risk ETF Moderate (M)	Target Risk Moderate Benchmark	Buy and hold	Calendar Period End	USD	4/10/2024	MIM Master Account	Portfolios	DP-GoldenCopy-ETF...	8/8/2016

What's New

7/7/2023
Welcome to Direct Lens
 Learn more about Direct's new user-friendly portfolio management tool designed to allow you to seamlessly import, edit and analyze portfolios.

Watch Video

3/21/2024
New Returns-based Editor in Direct Lens
 Edit, view, and filter returns-based portfolios in one window.

Find Out More

3/19/2024
New Morningstar Data Set Editor
 Streamlined, simplified ways to search, navigate, and browse data points in Direct Lens

Find Out More

2/12/2024
Generate Portfolio Reports in Direct Lens
 Run Presentation Studio reports without leaving Lens.

Find Out More

11/27/2023
View Mapping Preferences on
 Streamlined process provides better

Find Out More

The Performance Team Looks for Trends and Opportunities



Portfolio
Manager

Performance
Analyst

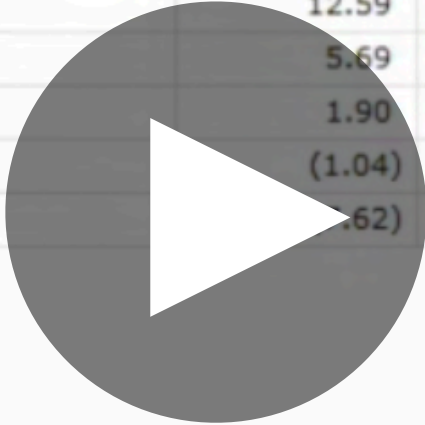
Data
Scientist

Research
Analyst

Home | All Reports | Walden Models Performance Report

Action Save Calculate Edit Undo Locate Tools Export Create Feed View Default

	Name	30/2024 - Last	4/1/2024 - 4/30/2024 (Last Month End - Last Market Close)	4/1/2024 - 4/30/2024 (Last Quarter End - Last Market Close)	1/1/2024 - 4/30/2024 (Last Year End - Last Market Close)	4/1/2024 - 4/30/2024 (1 month ago - Last Market Close)	2/1/2024 - 4/30/2024 (3 months ago - Last Market Close)	5/1/2023 - 4/30/2024 (1 year ago - Last Market Close)	5/1/2021 - 4/30/2024 (3 years ago - Last Market Close)	5/1/2019 - 4/30/2024 (5 years ago - Last Market Close)								
	Report Currency: Base Currency	Peer group rank	Return (Cumulative)	Peer group rank	Return (Cumulative)	Peer group rank	Return (Cumulative)	Peer group rank	Return (Annualized)	Peer group rank	Return (Annualized)	Peer group rank	Return (Annualized)	Peer group rank				
<input type="checkbox"/>	Walden Models																	
<input type="checkbox"/>	Walden Core Intl Equity Model	3	(2.94)	9	(2.94)	9	2.41	23	(2.94)	9	2.64	24	9.07	31	2.30	22	6.33	33
<input type="checkbox"/>	Walden Core US Equity Model	4	(4.59)	26	(4.59)	26	3.93	18	(4.59)	26	3.55	22	19.94	17	6.40	13	12.25	18
<input type="checkbox"/>	Walden Equity Factor Tilt Model	4	(4.77)	27	(4.77)	27	2.95	21	(4.77)	27	3.24	24	16.31	21	5.57	13	10.99	23
<input type="checkbox"/>	Walden Equity Growth Model	4	(4.83)	27	(4.83)	27	3.59	20	(4.83)	27	3.23	24	19.14	18	5.75	13	11.67	22
<input type="checkbox"/>	Walden Equity Model W Alts	5	(6.20)	38	(6.20)	38	6.36	11	(6.20)	38	6.61	7	24.44	13	5.77	13	11.69	22
<input type="checkbox"/>	Walden Equity Model W Crypto	4	(4.92)	27	(4.92)	27	2.82	21	(4.92)	27	3.10	24	17.63	20	5.49	13	11.51	22
<input type="checkbox"/>	Walden Equity Value Model	4	(4.77)	27	(4.77)	27	2.95	21	(4.77)	27	3.24	24	16.31	21	5.57	13	10.99	23
<input type="checkbox"/>	Benchmark 1: Morningstar Global 20/80 NR ...		(2.68)		(2.68)		(2.84)		(2.68)		(1.87)		0.85		(4.61)		0.10	
<input type="checkbox"/>	Benchmark 2: MSCI EAFE PR USD		(2.93)		(2.93)		1.98		(2.93)		1.44		6.36		0.18		3.48	
<input type="checkbox"/>	Peer Group: Performance Data Ready = Yes																	
<input type="checkbox"/>	Number of investments ranked	48		48		48		48		48		48		48		48		44
<input type="checkbox"/>	Peer Group Summary Statistics																	
<input type="checkbox"/>	5th Percentile		(1.41)		(1.41)		12.59		(1.41)		8.02		47.23		13.16		17.80	
<input type="checkbox"/>	25th Percentile		(3.29)		(3.29)		5.69		(3.29)		5.31		23.89		6.09		13.82	
<input type="checkbox"/>	50th Percentile		(4.05)		(4.05)		1.90		(4.05)		2.49		12.25		1.27		11.38	
<input type="checkbox"/>	75th Percentile		(5.87)		(5.87)		(1.04)		(5.87)		(0.08)		6.99		(1.49)		6.29	
<input type="checkbox"/>	95th Percentile		(8.78)		(8.78)		(6.2)		(8.78)		(4.28)		(0.23)		(12.24)		(0.15)	



- Asset Allocation
- Portfolio Management
- Portfolio Analysis
- Markets
- Asset Flows
- Presentation Studio
- Risk Model
- Workspace
- Research + Analytics

The Data Science Team Analyzes the Portfolio for Outliers

Portfolio
Manager

Performance
Analyst

Data
Scientist

Research
Analyst



Analytics Lab

Drive efficiencies, mitigate risk, and uncover new insights by building scalable, custom analytics with Morningstar data.

Basic Notebook

Starting out fresh? Use this blank notebook with the Morningstar data integration established for you.

[Open Notebook](#)

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 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 your Morningstar data via the Morningstar Data python package.

[Go to Documentation](#)

Morningstar Notebooks

Firm Diversity	Investment Product Launches	Manager History	Security Ownership Analysis	Time Series Regression Tools
----------------	-----------------------------	-----------------	-----------------------------	------------------------------

Tutorials

Accessing Historical Holdings	Accessing Morningstar Data	Accessing Portfolio Data	Getting Started in Analytics Lab	Quantum Computing - Direct Indexing
-------------------------------	----------------------------	--------------------------	----------------------------------	-------------------------------------

Hi, I'm Mo, a beta version Analytics Lab AI chatbot built on the Morningstar Intelligence Engine. Currently, I can answer questions about Analytics Lab capabilities. If you would like to chat with me, please type your first question-please no personal data-and we can get started!

Examples

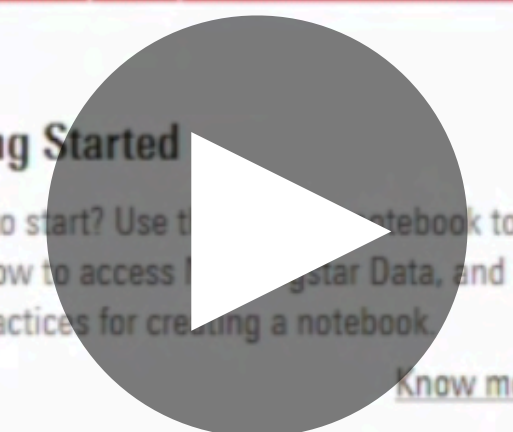
- How do I change the kernel for my notebook? >>
- Is the Morningstar Data package available outside of Analytics Lab? >>
- How long is the authorization token valid? >>

[More tips for chatting with Mo](#)

How do I write my analysis from Analytics Lab back

50/300 [?](#) [↺](#) [Submit](#)

Mo cannot give investment advice. Like other AI, Mo sometimes get facts wrong. Always check the facts yourself before acting on them.



Research Analysts Conduct Due Diligence



Portfolio
Manager

Performance
Analyst

Data
Scientist

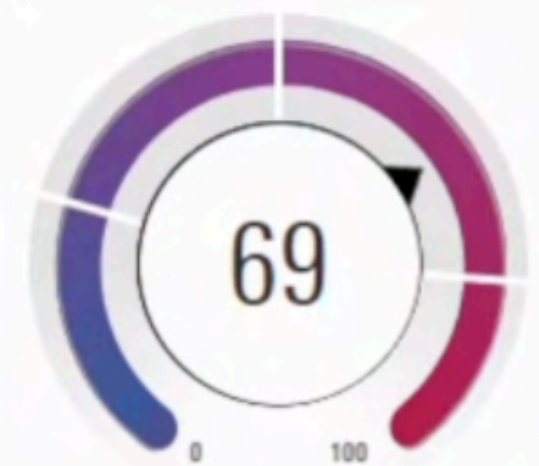
Research
Analyst

Vanguard Dividend Appreciation Index Fund ETF Shares VIG ★★★ Gold

Quote Analysis Performance Sustainability Risk Price Portfolio People Strategy Parent

Risk 3-Yr 5-Yr 10-Yr

Portfolio Risk Score



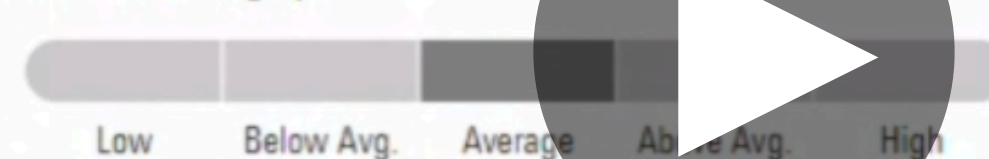
Risk Score	Risk Level
0-23	Conservative
24-47	Moderate
48-78	Aggressive
79-99	Very Aggressive
100+	Extreme

Morningstar Risk & Return

Risk vs. Category



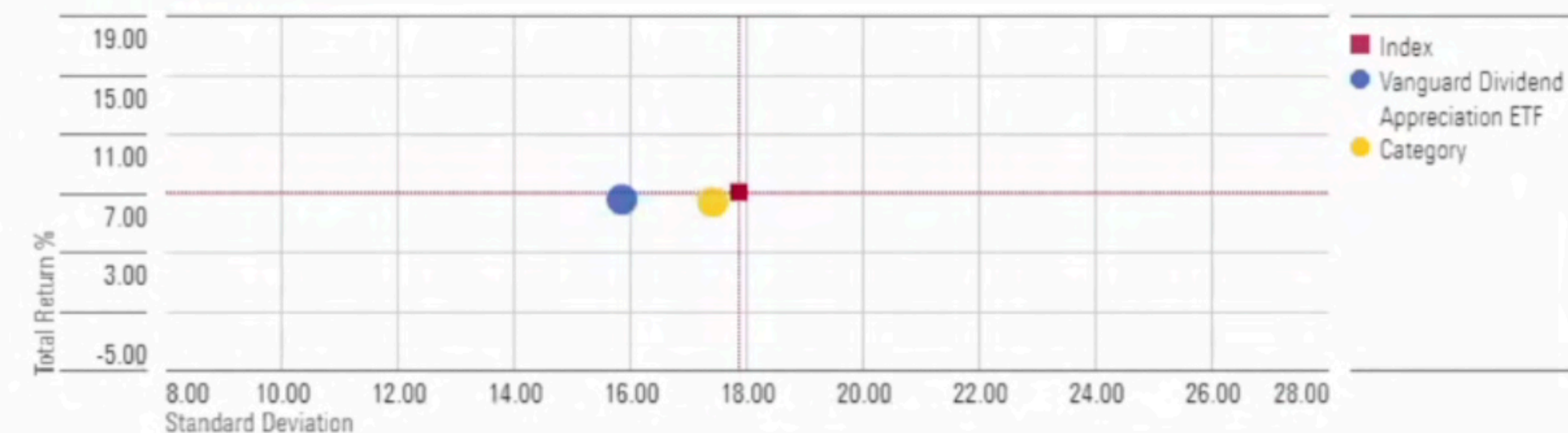
Return vs. Category



Risk & Volatility Measures

Capture Ratios	Investment	Category	Index
Alpha	-0.75	-1.26	-0.88
Beta	0.86	0.96	1.01
R ²	91.10	93.97	99.79
Sharpe Ratio	0.29	0.27	0.30
Standard Deviation	15.84	17.40	17.85

Risk/Return Analysis



Market Volatility Measures

Capture Ratios	Investment	Category	Index
Upside	85	94	99
Downside	86	98	102

Drawdown	Investment %	Category %	Index %
Maximum	-20.20	-23.30	-24.91

Drawdown Dates	Peak	Valley	Max Duration
	01/01/2022	09/30/2022	9 Months

Price

Ongoing Fee Level

Cost Illustration (10k; 5% Return; USD)

Back to the Portfolio Manager to Make Changes and Generate Reports



Portfolio
Manager

Performance
Analyst

Data
Scientist

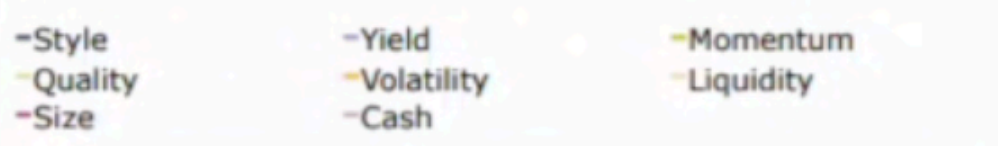
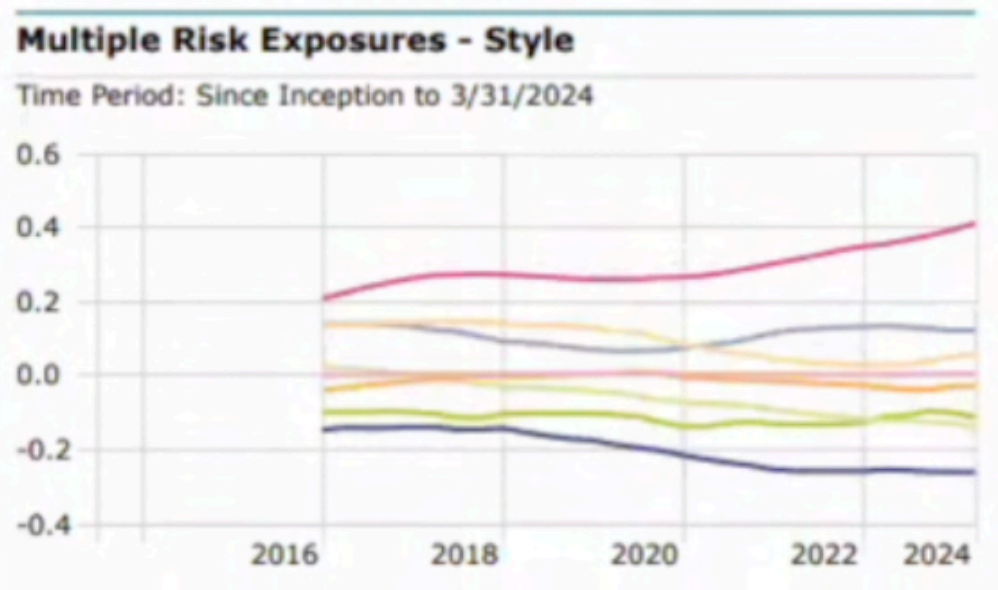
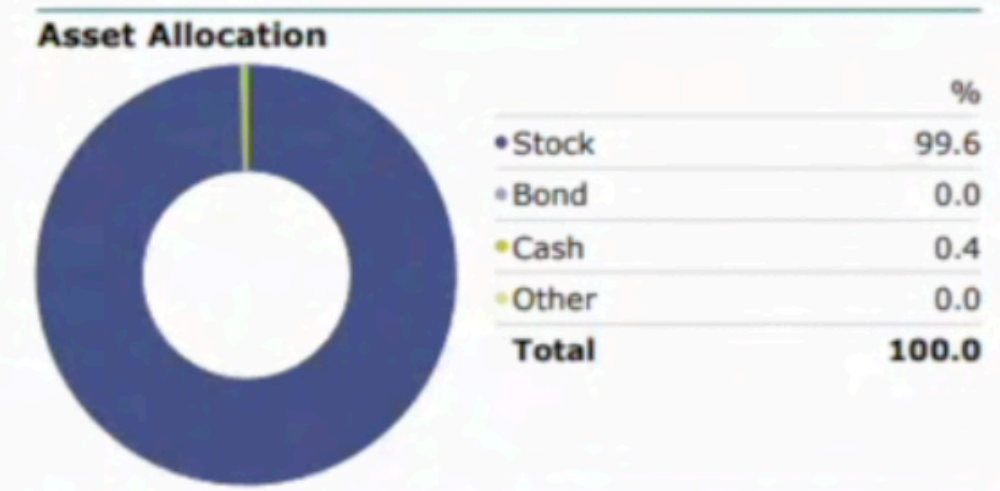
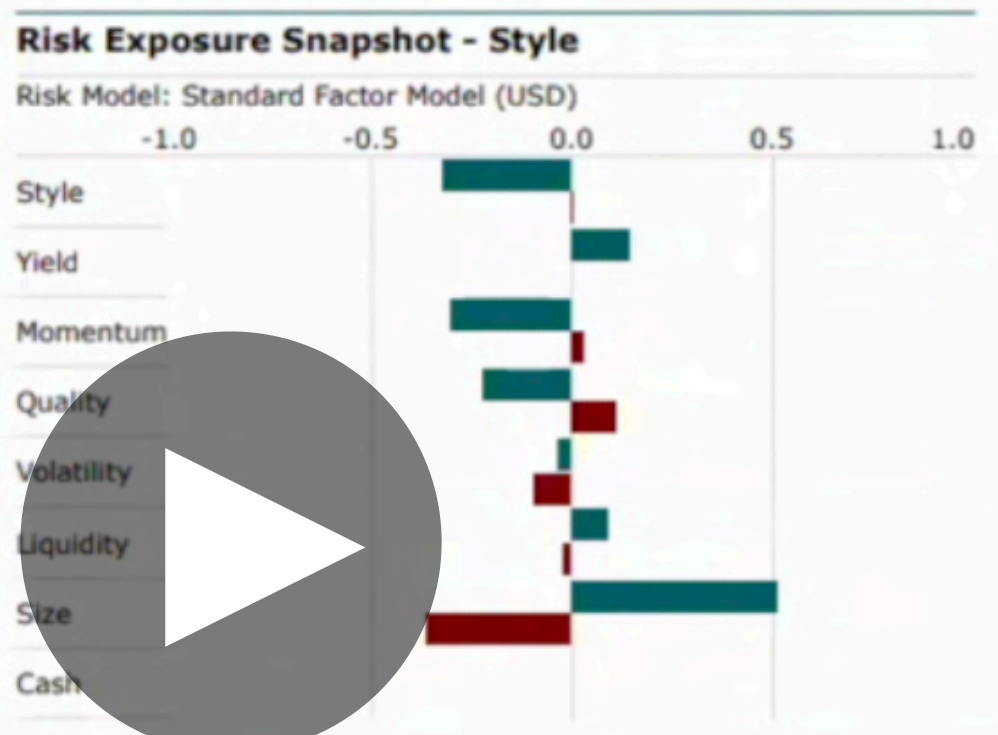
Research
Analyst

Portfolio Analysis

As of 4/30/2024

Snapshot

Portfolio Date	4/30/2024
Total Ret Inception (Mo-End)	10.78
# of Holdings	5



Sizable Market Opportunity



Advisors

- ▷ Advisors at Independent RIAs, Family Offices, or wealth firms.
- ▷ Workflow starts with market research and ends with proposal generation.

Products:

Morningstar Data
Direct Compass
Advisor Workstation

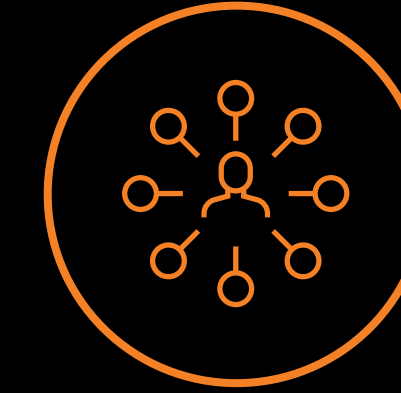


Portfolio Managers

- ▷ Asset Managers with less than \$30B.
- ▷ Workflow starts with portfolio review and ends with implementing portfolio optimizations.

Products:

Morningstar Data
Morningstar Direct
Direct Lens
Analytics Lab



Client Portfolio Managers

- ▷ Serving ultra-high-net-worth and high-net-worth clients.
- ▷ Workflow starts with a client portfolio review and ends with implementing changes to that portfolio.

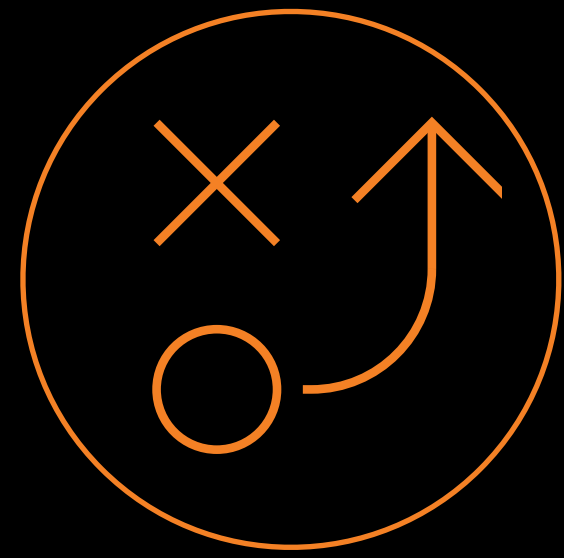
Products:

Morningstar Data
Morningstar Direct
Direct Lens

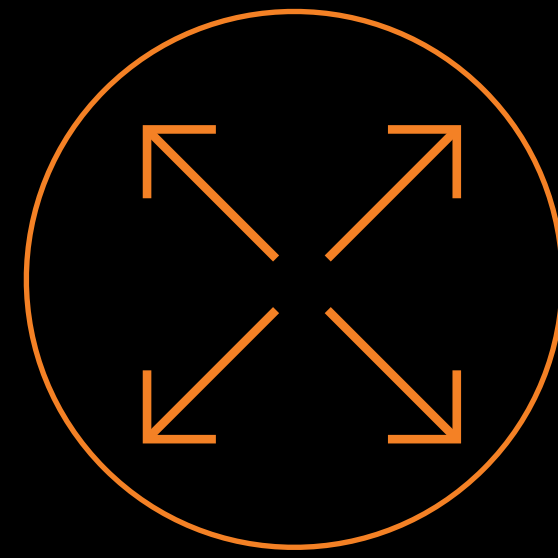
The Future Is Bright



Strong Adjusted
Operating Income



Strong Product
Strategy



Room to Run
in the Market



Healthy Long-Term
Growth

MORNINGSTAR



Reconciliation from Reported to Organic Revenue Change

(\$mil)	2019	2020	2021	2022	2023
Consolidated revenue change	15.6%	17.9%	22.3%	10.1%	9.0%
Less: M&A and adoption of accounting changes	8.4%	9.5%	2.8%	2.0%	1.7%
Less: Effect of foreign currency translation	(1.2%)	0.2%	1.9%	(2.7%)	(0.2%)
Organic revenue change	8.4%	8.2%	17.6%	10.8%	7.5%

Organic revenue is a non-GAAP measure.

Reconciliation from Reported to Organic Revenue Change

(\$mil)	2019	2020	2021	2022	2023
License-Based Revenue					
Consolidated revenue change	8.1%	15.0%	21.1%	17.7%	14.0%
Less: M&A, accounting changes, and currency	(2.9%)	4.6%	5.7%	(0.3%)	2.2%
Organic revenue change	11.0%	10.4%	15.4%	18.0%	11.8%
Asset-Based Revenue					
Consolidated revenue change	5.6%	5.8%	18.4%	1.7%	3.8%
Less: M&A, accounting changes, and currency	(0.9%)	0.0%	1.3%	0.2%	(1.8%)
Organic revenue change	6.5%	5.8%	17.1%	1.5%	5.6%
Transaction-Based Revenue					
Consolidated revenue change	127.8%	49.2%	31.2%	(11.0%)	(10.4%)
Less: M&A, accounting changes, and currency	127.9%	50.0%	4.3%	(2.7%)	1.1%
Organic revenue change	(0.1%)	(0.8%)	26.9%	(8.3%)	(11.5%)

Organic revenue is a non-GAAP measure. Starting with the quarter ended Mar. 31, 2023, the Company updated its revenue type classifications to account for product areas with more than one revenue type. Prior period classifications have not been restated.

Reconciliation from Reported to Organic Revenue Change

	2022	2023
Morningstar Data and Analytics		
Reported revenue change	4.4%	7.3%
Less: M&A, accounting changes, and currency	(3.6%)	(0.1%)
Organic revenue change	8.0%	7.4%
PitchBook		
Reported revenue change	49.4%	22.5%
Less: M&A, accounting changes, and currency	10.3%	4.9%
Organic revenue change	39.1%	17.6%

Organic revenue is a non-GAAP measure.

Reconciliation from Reported to Organic Revenue Change

	2022	2023
Morningstar Wealth		
Reported revenue change	(4.0%)	0.4%
Less: M&A, accounting changes, and currency	(2.1%)	2.0%
Organic revenue change	(1.9%)	(1.6%)
Morningstar Credit		
Reported revenue change	(12.6%)	(9.1%)
Less: M&A, accounting changes, and currency	(2.6%)	(0.6%)
Organic revenue change	(10.0%)	(8.5%)

Organic revenue is a non-GAAP measure.

Reconciliation from Reported to Organic Revenue Change

	2022	2023
Morningstar Retirement		
Reported revenue change	(0.6%)	6.3%
Less: M&A, accounting changes, and currency	0.0%	0.0%
Organic revenue change	(0.6%)	6.3%

Organic revenue is a non-GAAP measure.

Reconciliation from Reported to Organic Revenue Change

	2022	2023
Morningstar Indexes		
Reported revenue change	35.7%	30.5%
Less: M&A, accounting changes, and currency	9.3%	5.8%
Organic revenue change	26.4%	24.7%
Morningstar Sustainalytics		
Reported revenue change	30.8%	14.4%
Less: M&A, accounting changes, and currency	(10.3%)	0.5%
Organic revenue change	41.1%	13.9%

Organic revenue is a non-GAAP measure.

Reconciliation from Reported to Organic Revenue Change

	2022	2023
Morningstar Data		
Reported revenue change	4.7%	10.3%
Less: M&A, accounting changes, and currency	(4.7%)	0.0%
Organic revenue change	9.4%	10.3%
Morningstar Direct		
Reported revenue change	6.7%	9.3%
Less: M&A, accounting changes, and currency	(4.0%)	0.1%
Organic revenue change	10.7%	9.2%

Organic revenue is a non-GAAP measure.

Reconciliation from Reported to Organic Revenue Change

	2022	2023
Morningstar Advisor Workstation		
Reported revenue change	3.8%	4.8%
Less: M&A, accounting changes, and currency	(0.3%)	(0.4%)
Organic revenue change	4.1%	5.2%
Morningstar Data and Analytics – Other		
Reported revenue change		1.6%
Less: M&A, accounting changes, and currency		(0.2%)
Organic revenue change		1.8%

Organic revenue is a non-GAAP measure.

Reconciliation from Total Operating Expenses to Adjusted Operating Expenses

	Q1 22	Q2 22	Q3 22	Q4 22	Q1 23	Q2 23	Q3 23	Q4 23	Q1 24
Operating expense	\$400.6	\$416.5	\$446.2	\$439.5	\$455.2	\$463.0	\$445.5	\$444.3	\$450.2
Less: intangible amortization, all M&A-related expenses (including M&A-related earn-outs), and items related to the significant reduction and shift in the Company's operations in China	26.1	19.5	54.6	30.9	27.3	28.0	22.0	18.6	18.2
Adjusted operating expense	\$374.5	\$397.0	\$391.6	\$408.6	\$427.9	\$435.0	\$423.5	\$425.7	\$432.0

Adjusted operating expense is a non-GAAP measure.

Reconciliation from Reported Operating Income to Adjusted Operating Income

(\$mil)	2019	2020	2021	2022	2023
GAAP operating income	\$189.6	\$215.2	\$257.0	\$167.8	\$230.6
Add: intangible amortization expense ¹	36.5	58.8	62.0	66.7	70.5
Add: M&A-related expenses ²	7.2	14.9	17.4	17.1	9.8
Add: M&A-related earn-outs ³	—	27.8	27.0	11.6	—
Add: Severance and personnel ⁴	—	—	—	27.5	5.5
Add: Transformation costs ⁴	—	—	—	8.2	7.0
Add: Asset impairment costs ⁴	—	—	—	—	3.1
Adjusted operating income	\$233.3	\$316.7	\$363.4	\$298.9	\$326.5

Adjusted operating income is a non-GAAP measure. (1) Excludes finance lease amortization expense. (2) Reflects non-recurring expenses related to M&A activity including pre-deal due diligence, transaction costs, and post-close integration costs. (3) Reflects the impact of M&A-related earn-outs included in operating expense. (4) Reflects costs associated with the significant reduction of the Company's operations in Shenzhen, China and the shift of work related to its global business functions to other Morningstar locations.

Reconciliation from Adjusted Operating Income by Segment to Consolidated Adjusted Operating Income

(\$mil)	2022	2023
Morningstar Data and Analytics	\$313.3	\$339.8
PitchBook	71.5	148.1
Morningstar Wealth	(14.3)	(40.4)
Morningstar Credit	59.1	21.7
Morningstar Retirement	51.4	54.1
Total Reportable Segments	\$481.0	\$523.3
Less: Corporate and All Other*	(182.1)	(196.8)
Adjusted operating income	\$298.9	\$326.5

Adjusted operating income is a non-GAAP measure. *Corporate and All Other includes unallocated corporate expenses as well as adjusted operating income/loss from Morningstar Sustainalytics and Morningstar Indexes. Unallocated corporate expenses include certain management-related costs that are not considered when segment performance is evaluated.

Reconciliation from Operating Margin to Adjusted Operating Margin

	2019	2020	2021	2022	2023
Operating margin	16.1%	15.5%	15.1%	9.0%	11.3%
Add: intangible amortization expense, all M&A-related expenses and earn-outs, severance and personnel expenses, transformation costs, and asset impairment costs	3.7%	7.3%	6.2%	7.0%	4.7%
Adjusted operating margin	19.8%	22.8%	21.3%	16.0%	16.0%

Adjusted operating margin is a non-GAAP measure.

Reconciliation from Cash Provided by Operating Activities to Free Cash Flow

(\$mil)	2019	2020	2021	2022	2023
Cash provided by operating activities	\$334.4	\$384.3	\$449.9	\$297.8	\$316.4
Capital expenditures	(80.0)	(76.7)	(101.8)	(129.5)	(119.1)
Free cash flow*	\$254.4	\$307.6	\$348.1	\$168.3	\$197.3

* Free cash flow is a non-GAAP measure and is defined as cash provided by or used for operating activities less capital expenditures.

ROIC: Return on Invested Capital

(\$mil)	2019	2020	2021	2022	2023	TTM Q1 24
Adjusted Operating Income ¹	\$233.3	\$316.7	\$363.4	\$298.9	\$326.5	\$385.5
Tax Rate	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%
NOPAT	\$172.6	\$234.4	\$268.9	\$221.2	\$241.6	\$285.3
Total Debt	\$513.1	\$449.1	\$359.4	\$1,109.6	\$972.4	\$949.4
Shareholders' Equity	\$1,083.6	\$1,271.4	\$1,415.9	\$1,207.1	\$1,327.8	\$1,383.1
Invested Capital	\$1,596.7	\$1,720.5	\$1,775.3	\$2,316.7	\$2,300.2	\$2,332.5
Average Invested Capital ²	\$1,300.7	\$1,658.6	\$1,747.9	\$2,046.0	\$2,308.5	\$2,334.1
ROIC ³	13.3%	14.1%	15.4%	10.8%	10.5%	12.2%

(1) Adjusted operating income is a non-GAAP measure and excludes intangible amortization expense, other merger and acquisition (M&A) related expenses and earn-outs, and items related to the significant reduction and shift of the Company's operations in China in 2023. (2) All items included in invested capital reflect average of 12/31 balance for current and previous year. (3) We calculate this measure based on NOPAT divided by invested capital.

Reconciliation from Reported to Organic Revenue Change

	2H 23
Consolidated revenue change	11.8%
Less: M&A, accounting changes, and currency	0.8%
Organic revenue change	11.0%

Organic revenue is a non-GAAP measure.

Reconciliation from Operating Margin to Adjusted Operating Margin

(\$mil)	2H 23	2H 22
Consolidated operating income	15.6%	6.1%
Add: intangible amortization expense	3.3%	3.9%
Add: M&A-related expenses	0.2%	0.9%
Add: M&A-related earn-outs	0.0%	0.5%
Add: Severance and personnel	0.1%	2.9%
Add: Transformation costs	0.1%	0.9%
Add: Asset impairment costs	0.1%	0.0%
Adjusted operating income	19.4%	15.2%

Adjusted operating margin is a non-GAAP measure.

Reconciliation from Reported to Organic Revenue Change

	Q1 24	Q1 23
Consolidated revenue change	13.2%	5.0%
Less: M&A and adoption of accounting changes	0.0%	4.0%
Less: Effect of foreign currency translation	0.3%	(1.8%)
Organic revenue change	12.9%	2.8%

Organic revenue is a non-GAAP measure.

Reconciliation from Reported Operating Income to Adjusted Operating Income

(\$mil)	Q1 24	Q1 23
GAAP operating income	\$92.6	\$24.5
Add: intangible amortization expense ¹	17.7	17.5
Add: M&A-related expenses ²	0.5	4.2
Add: M&A-related earn-outs ³	—	—
Add: Severance and personnel ⁴	—	1.1
Add: Transformation costs ⁴	—	4.2
Add: Asset impairment costs ⁴	—	0.3
Adjusted operating income	\$110.8	\$51.8

Adjusted operating income is a non-GAAP measure. (1) Excludes finance lease amortization expense. (2) Reflects non-recurring expenses related to M&A activity including pre-deal due diligence, transaction costs, and post-close integration costs. (3) Reflects the impact of M&A-related earn-outs included in operating expense. (4) Reflects costs associated with the significant reduction of the Company's operations in Shenzhen, China and the shift of work related to its global business functions to other Morningstar locations.

Reconciliation from Adjusted Operating Income by Segment to Consolidated Adjusted Operating Income

(\$mil)	Q1 24	Q1 23
Morningstar Data and Analytics	\$91.2	\$80.9
PitchBook	40.0	30.4
Morningstar Wealth	(5.6)	(14.6)
Morningstar Credit	12.3	(4.0)
Morningstar Retirement	14.2	11.2
Total Reportable Segments	\$152.1	\$103.9
Less: Corporate and All Other*	(41.3)	(52.1)
Adjusted operating income	\$110.8	\$51.8

Adjusted operating income is a non-GAAP measure. *Corporate and All Other includes unallocated corporate expenses as well as adjusted operating income/loss from Morningstar Sustainalytics and Morningstar Indexes. Unallocated corporate expenses include certain management-related costs that are not considered when segment performance is evaluated.

Reconciliation from Operating Margin to Adjusted Operating Margin

	Q1 24	Q1 23
Operating margin	17.1%	5.1%
Add: intangible amortization expense, all M&A-related expenses and earn-outs, severance and personnel expenses, transformation costs, and asset impairment costs	3.3%	5.7%
Adjusted Operating Margin	20.4%	10.8%

Adjusted operating margin is a non-GAAP measure.

Reconciliation from Cash Provided by Operating Activities to Free Cash Flow

(\$mil)	Q1 24	Q1 23
Cash provided by operating activities	\$93.6	\$23.4
Capital expenditures	(34.1)	(29.5)
Free cash flow	\$59.5	(\$6.1)

Free cash flow is a non-GAAP measure and is defined as cash provided by or used for operating activities less capital expenditures.

MORNINGSTAR®