

# MSCI Inc. Investor Presentation

August 7, 2020

# Forward-looking statements

- This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including without limitation, MSCI's full-year 2020 guidance. These forward-looking statements relate to future events or to future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these statements. In some cases, you can identify forward-looking statements by the use of words such as "may," "could," "expect," "intend," "plan," "seek," "anticipate," "believe," "estimate," "predict," "potential" or "continue," or the negative of these terms or other comparable terminology. You should not place undue reliance on forward-looking statements because they involve known and unknown risks, uncertainties and other factors that are, in some cases, beyond MSCI's control and that could materially affect actual results, levels of activity, performance or achievements.
- Other factors that could materially affect actual results, levels of activity, performance or achievements can be found in MSCI's Annual Report on Form 10-K for the fiscal year ended December 31, 2019 filed with the Securities and Exchange Commission ("SEC") on February 18, 2020 and in quarterly reports on Form 10-Q and current reports on Form 8-K filed or furnished with the SEC. If any of these risks or uncertainties materialize, or if MSCI's underlying assumptions prove to be incorrect, actual results may vary significantly from what MSCI projected. Any forward-looking statement in this earnings presentation reflects MSCI's current views with respect to future events and is subject to these and other risks, uncertainties and assumptions relating to MSCI's operations, results of operations, growth strategy and liquidity. MSCI assumes no obligation to publicly update or revise these forward-looking statements for any reason, whether as a result of new information, future events, or otherwise, except as required by law.

## Other information

- Percentage changes and totals in this earnings presentation may not sum due to rounding.
- Gross sales include both new recurring subscription and non-recurring sales as reported in Table 6: Sales and Retention Rate by Segment (unaudited) of the press release reporting MSCI's financial results for second quarter 2020.
- Foreign currency exchange rate fluctuations reflect the difference between the current period results as reported compared to the current period results recalculated using the foreign currency exchange rates in effect for the comparable prior period. While operating revenues adjusted for the impact of foreign currency fluctuations includes asset-based fees that have been adjusted for the impact of foreign currency fluctuations, the underlying assets under management ("AUM"), which is the primary component of asset-based fees, is not adjusted for foreign currency fluctuations. More than three-fifths of the AUM are invested in securities denominated in currencies other than the U.S. dollar, and accordingly, any such impact is excluded from the disclosed foreign currency adjusted variances.

# Table of contents

- 1 Company overview
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# Company overview

# MSCI at a glance

## WHO WE ARE

**7,800<sup>1</sup> blue-chip clients in 90+ countries as of 6/30/2020**

- Across investment and trading spectrum
- World's most sophisticated investors use our products and services

### Must-have products and services

- Across asset classes for performance and risk
- \$1.65B Run Rate as of June 30, 2020
- 10% YoY organic subscription Run Rate growth in 2Q20

### Strong performance and inclusive culture

- Global, multi-cultural workforce
- Driving innovation for industry-leading solutions<sup>2</sup>

**3,513 talented employees globally as of 6/30/2020**

- 35 MSCI locations in 22 countries
- 64% and 36% of employees located in emerging market and developed market centers respectively
- Extensive knowledge of the investment process

## WHAT WE DO

Provide products and services that global investors can use to build **better portfolios** for a better world

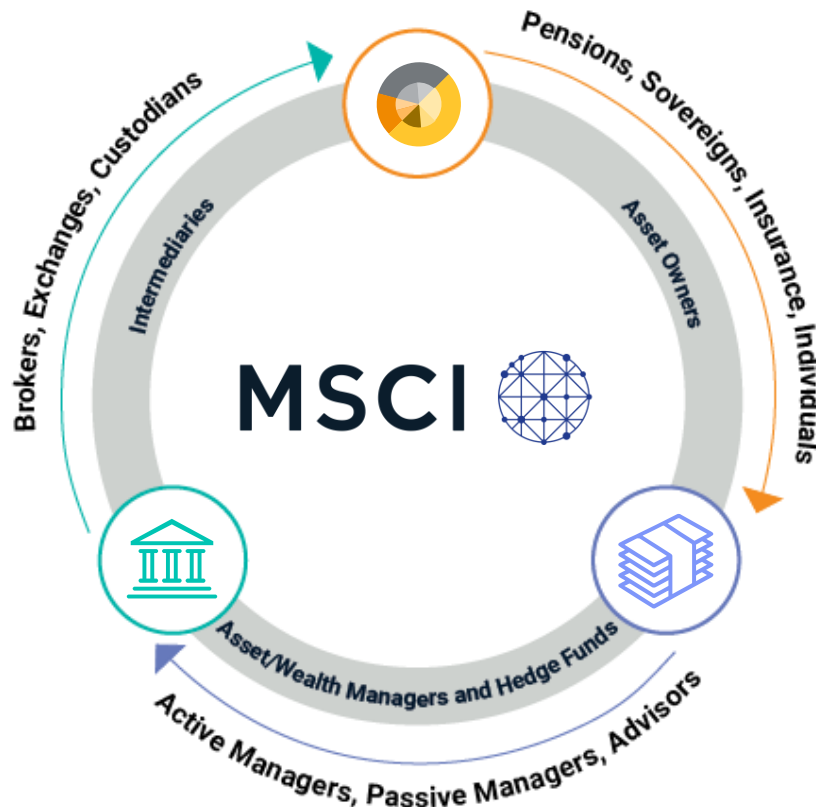
# Clients turn to MSCI's tools to support their investment needs

## Client investment process



### MSCI tools to support:

- Defining investable universes
- Allocating assets sustainably
- Creating investment programs/products
- Benchmarking performance
- Understanding and managing risk and performance
- Reporting to constituents
- Complying with regulations
- Measuring climate related risks and opportunities



Solutions for the most critical investment activities

# ▶ Continued progress on our strategic initiatives



## Product, Content and Research

- Enhanced coverage of areas in fixed income and private assets
- New products and content across ESG, climate change, factors, risk models, thematic, futures & options



## Expanding Client Segments

- Wealth managers
- Corporates
- Insurance companies



## Technology

- Ongoing technology transformation
- Strategic alliance with Microsoft



# ▶ Ongoing investments to change the business

\$140 million in “Change the Business” investments in 2020



**Client  
Coverage**

▶ *Key hires to  
our leadership  
team globally*



**Product  
Offerings**

▶ *Index,  
Analytics,  
ESG and  
Climate,  
Real Estate*



**Technology**

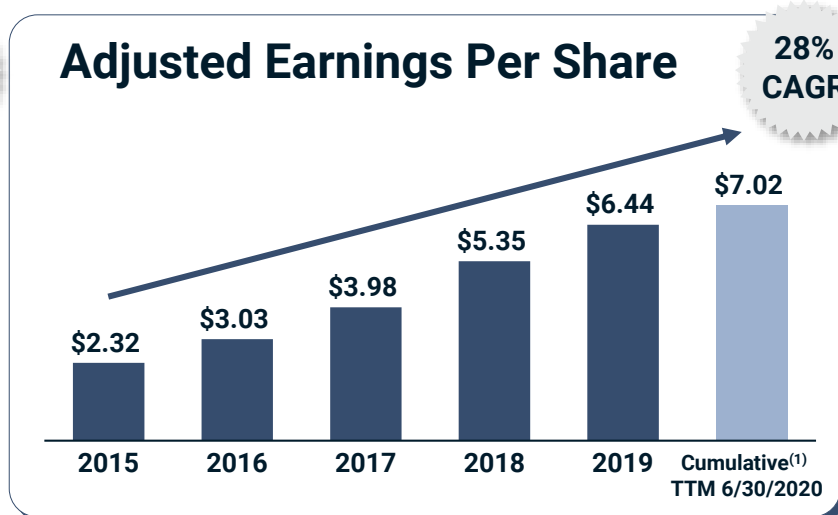
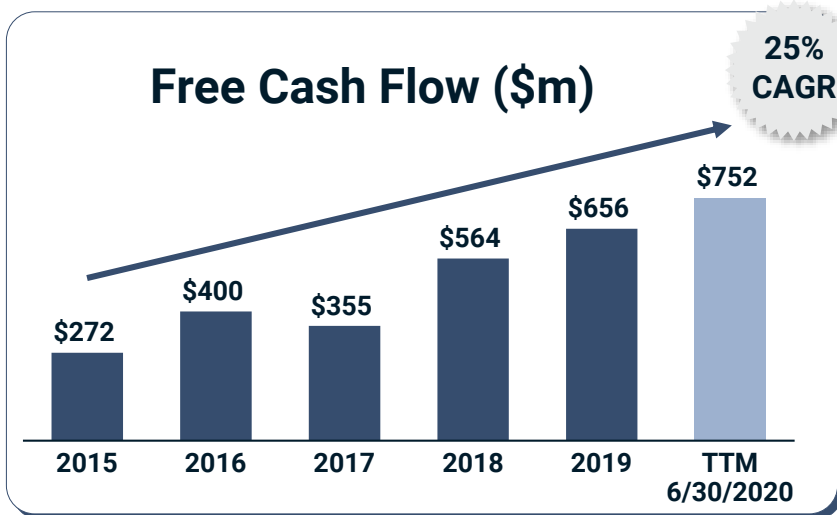
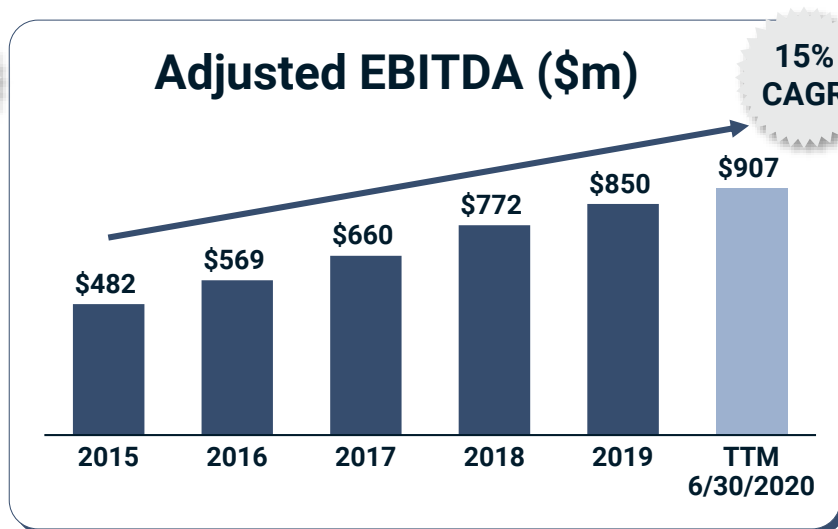
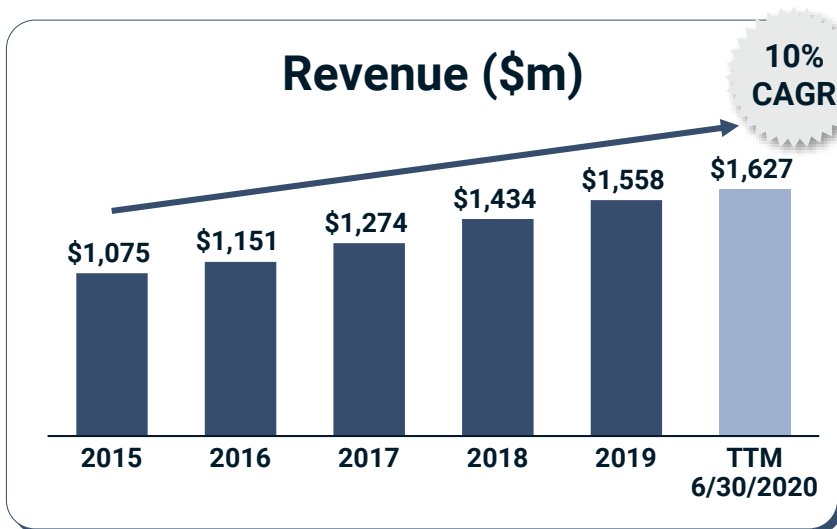
▶ *Cloud;  
enhanced  
infrastructure and  
functionality  
and platform  
improvements*

**\$140 million in investments already captured in Full-Year 2020 Guidance<sup>(1)</sup>**

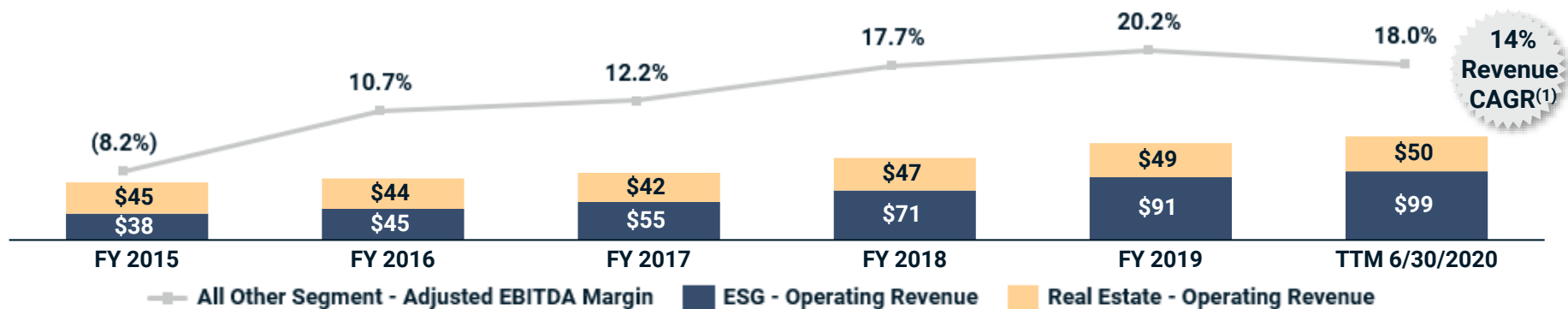
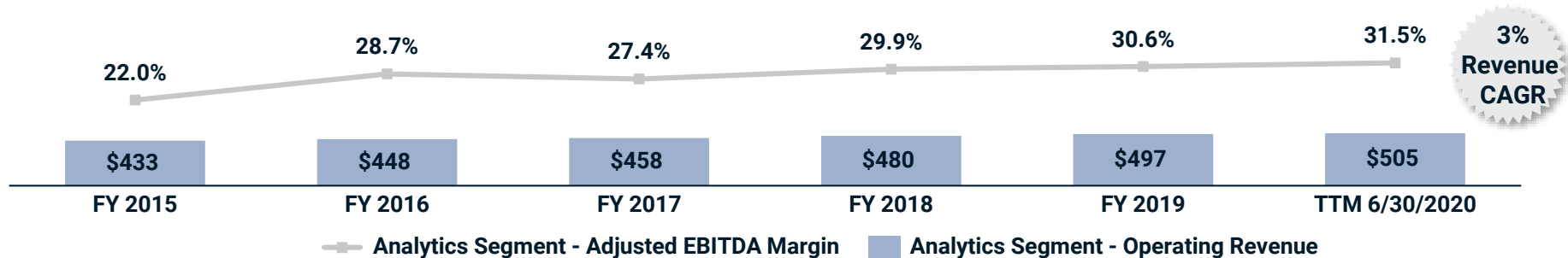
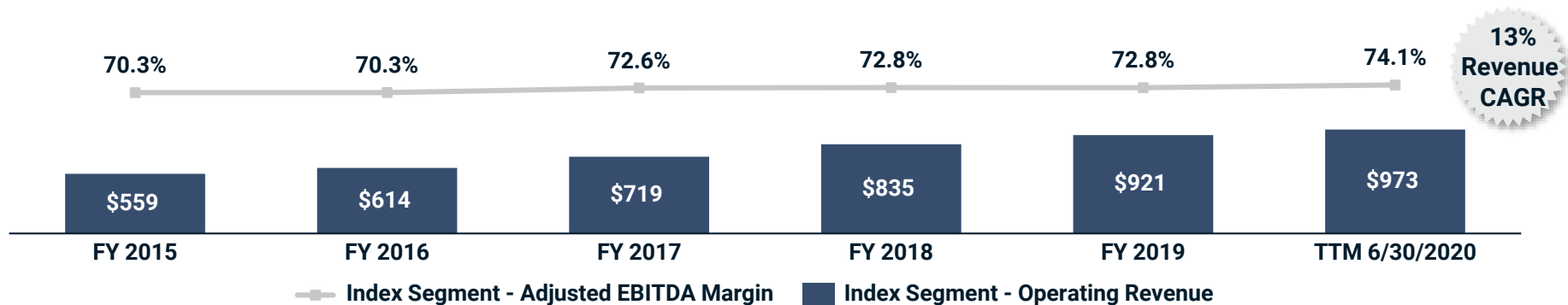
# Financial review

# Delivering growth across key metrics

Financial discipline and rigor underpinned by culture of performance and accountability



# Reflecting continued business growth

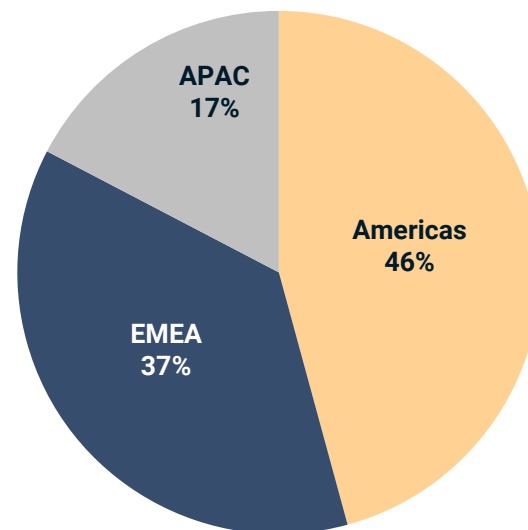
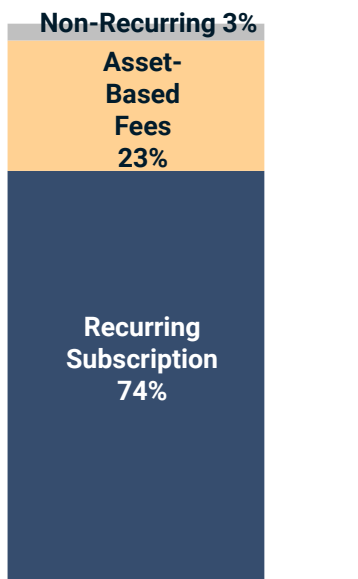
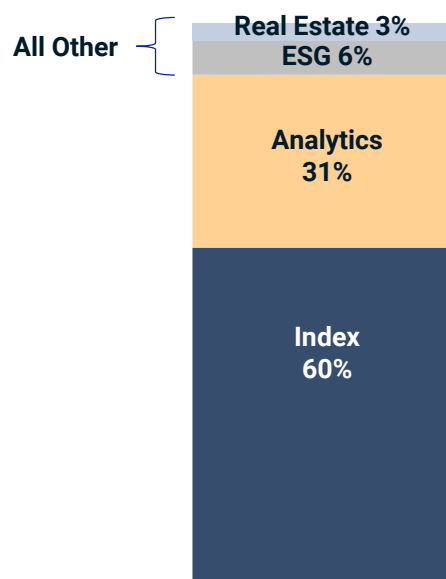


# Significant recurring revenue model with global client base

TTM 6/30/2020  
Total Revenue by Segment

TTM 6/30/2020  
Total Revenue by Type

Firmwide Subscription Run Rate  
as of 6/30/2020  
by Geography



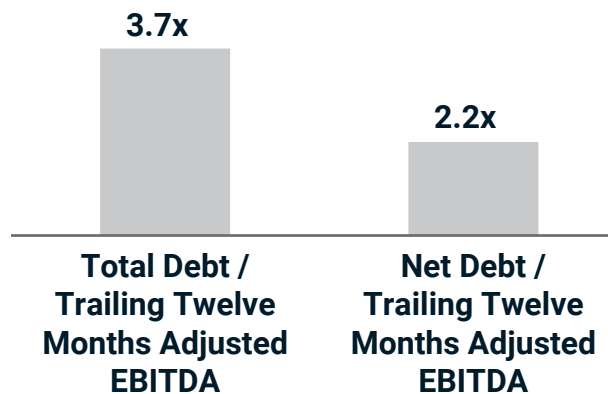
**74% of total revenue from recurring subscriptions**

# Strong balance sheet provides optionality

(US\$ in millions, unless otherwise noted)

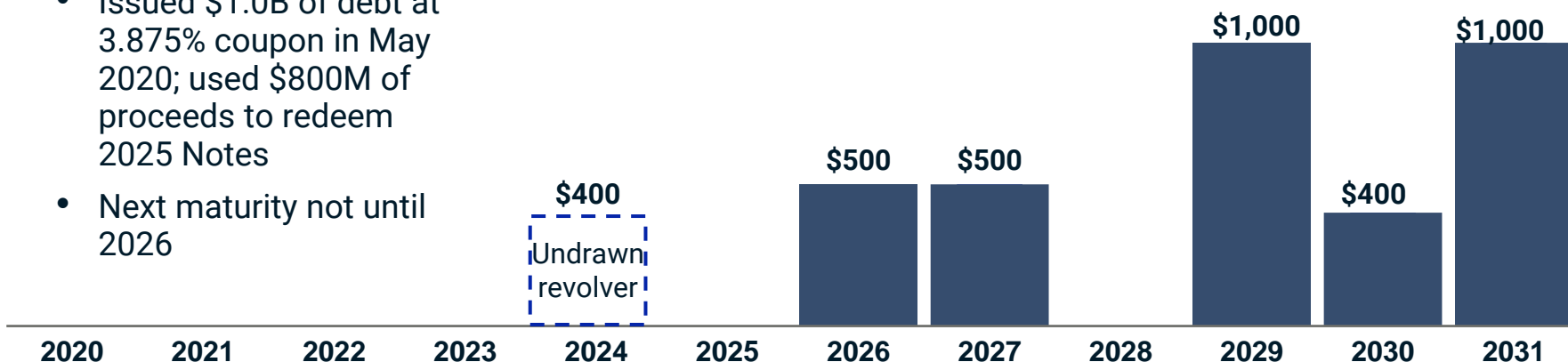
## Total Cash<sup>1</sup> and Debt<sup>2</sup> as of June 30, 2020:

- Total Cash of \$1,385
- Total Debt of \$3,365
- Total Net Debt of \$1,980

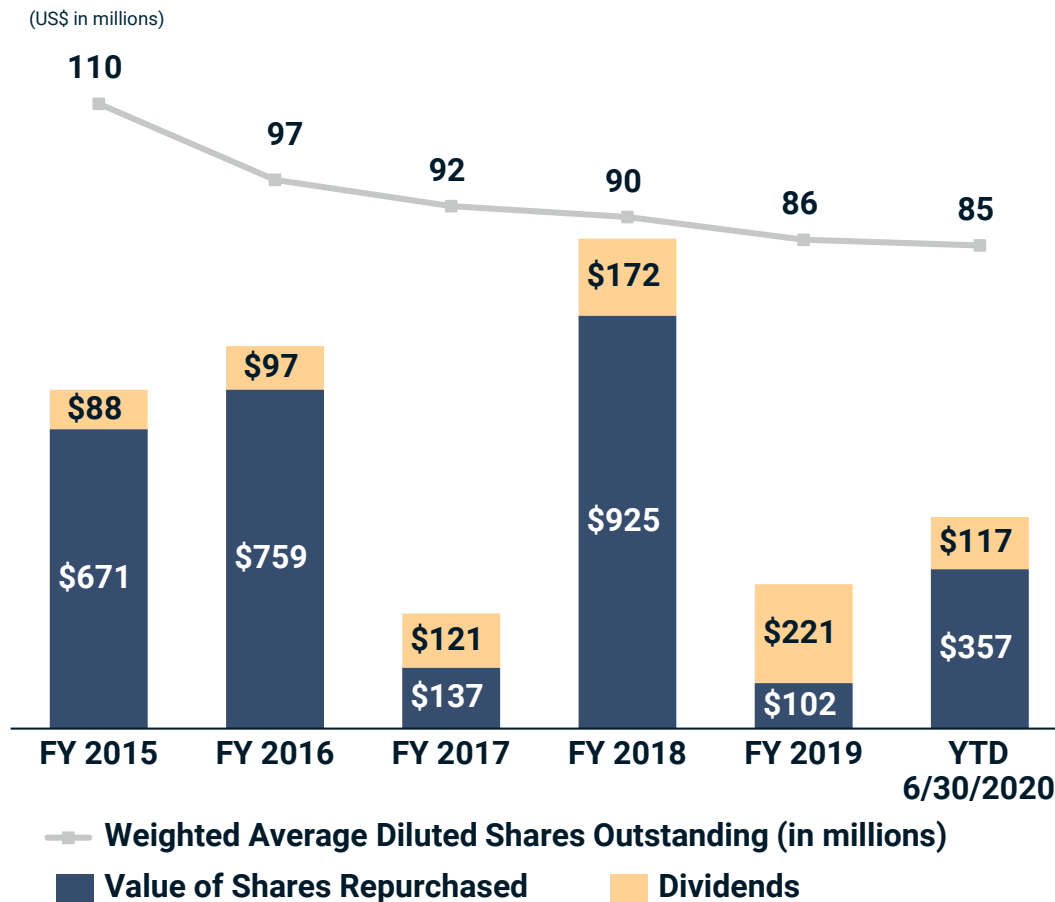


## Unsecured Debt Maturity Profile as of June 30, 2020

- Issued \$1.0B of debt at 3.875% coupon in May 2020; used \$800M of proceeds to redeem 2025 Notes
- Next maturity not until 2026



# Disciplined approach to capital deployment for shareholders



- \$3.8B of capital returned since 2015
- Opportunistic share repurchase driven by availability of cash, market volatility
- 29% CAGR in dividend per share from 4Q14 through 3Q20:
  - Payout target of 40%-50% of Adjusted EPS
  - In July 2020, quarterly dividend increased 15% to \$0.78 per share, payable in 3Q20
- Triple-Crown framework to evaluate internal opportunities and Mergers, Partnerships & Acquisitions (MP&A)

# Full-year 2020 guidance as of July 28, 2020

(US\$ in millions)

Guidance Item	Guidance for Full-Year 2020
Operating Expense	In the range of \$790 to 840 million
Adjusted EBITDA Expense	In the range of \$700 to 750 million
Interest Expense (including amortization of financing fees)	Approximately \$158 million; interest income will continue to be impacted by the lower rates available on cash balances
Depreciation & Amortization Expense	Approximately \$90 million
Effective Tax Rate	In the range of 16 to 19% <b>(revised)</b>
Capital Expenditures	In the range of \$50 to \$60 million
Net Cash Provided by Operating Activities	In the range of \$600 to \$650 million, now toward the upper end of the range
Free Cash Flow	In the range of \$540 to \$600 million, now toward the upper end of the range





# ► Robust and compelling financial model



## **Recurring, visible revenue model**

~97% recurring revenues<sup>1</sup> as percent of total revenue annually in 2015-2019, and in 2Q20



## **Operating efficiency strength**

15% CAGR in Adjusted EBITDA from 2015 – TTM 6/30/20, with Adjusted EBITDA margin and operating margin of 57.8% and 52.5%, respectively, in 2Q20



## **Attractive cash generation profile**

25% CAGR in Free Cash Flow from 2015 – TTM 6/30/20, with Free Cash Flow and operating cash flow of \$251m and \$263m, respectively, in 2Q20



## **Strong balance sheet and liquidity**

As of June 30, 2020, total cash and equivalents of \$1.4B and net debt of \$1.98B, with next maturity not until 2026

# Segment highlights

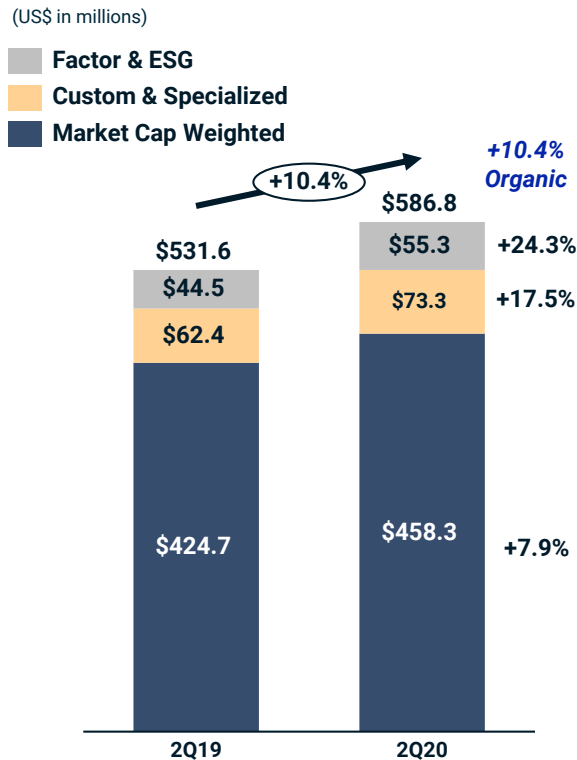
# Index segment run rate fundamentals

	Subscription Run Rate (\$587M as of 2Q20)	Asset-Based Fee Run Rate (\$362M as of 2Q20)
Products/ Content	<ul style="list-style-type: none"> <li>Market Cap Weighted</li> <li>Factor &amp; ESG</li> <li>Custom &amp; Specialized</li> </ul>	<ul style="list-style-type: none"> <li>ETFs</li> <li>Non-ETFs</li> <li>Futures &amp; Options</li> </ul>
Pricing Model	<ul style="list-style-type: none"> <li>License fees</li> </ul>	<ul style="list-style-type: none"> <li>ETFs – basis point fees on AUM</li> <li>Non-ETFs – basis point fees on AUM</li> <li>Futures &amp; Options – fees on contract volumes traded</li> </ul>
Volume Trend	<ul style="list-style-type: none"> <li>~2/3 of subscription run rate growth has come from new clients and upsells to existing clients</li> </ul>	<ul style="list-style-type: none"> <li>Increased adoption over time given ongoing trend towards Index-enabled investing and product launches</li> <li>Subject to market fluctuations</li> </ul>
Retention	<ul style="list-style-type: none"> <li>94.7% in 2Q20</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
Overall	Solid Base of Recurring Revenue	

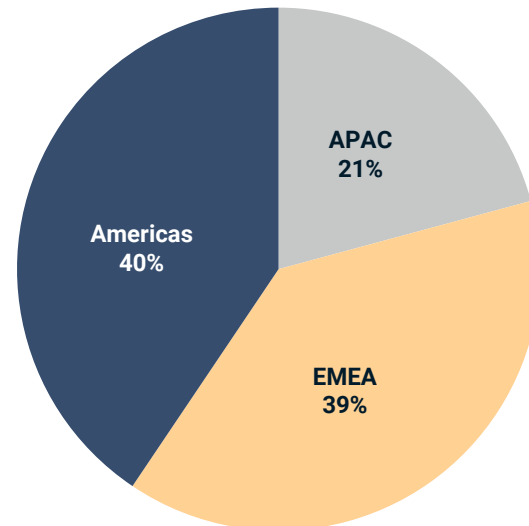
# Index subscription at a glance

Asset managers, asset owners, broker-dealers and wealth managers globally use our solutions for portfolio construction, performance and risk management

Index Subscription Run Rate  
ex. ABF

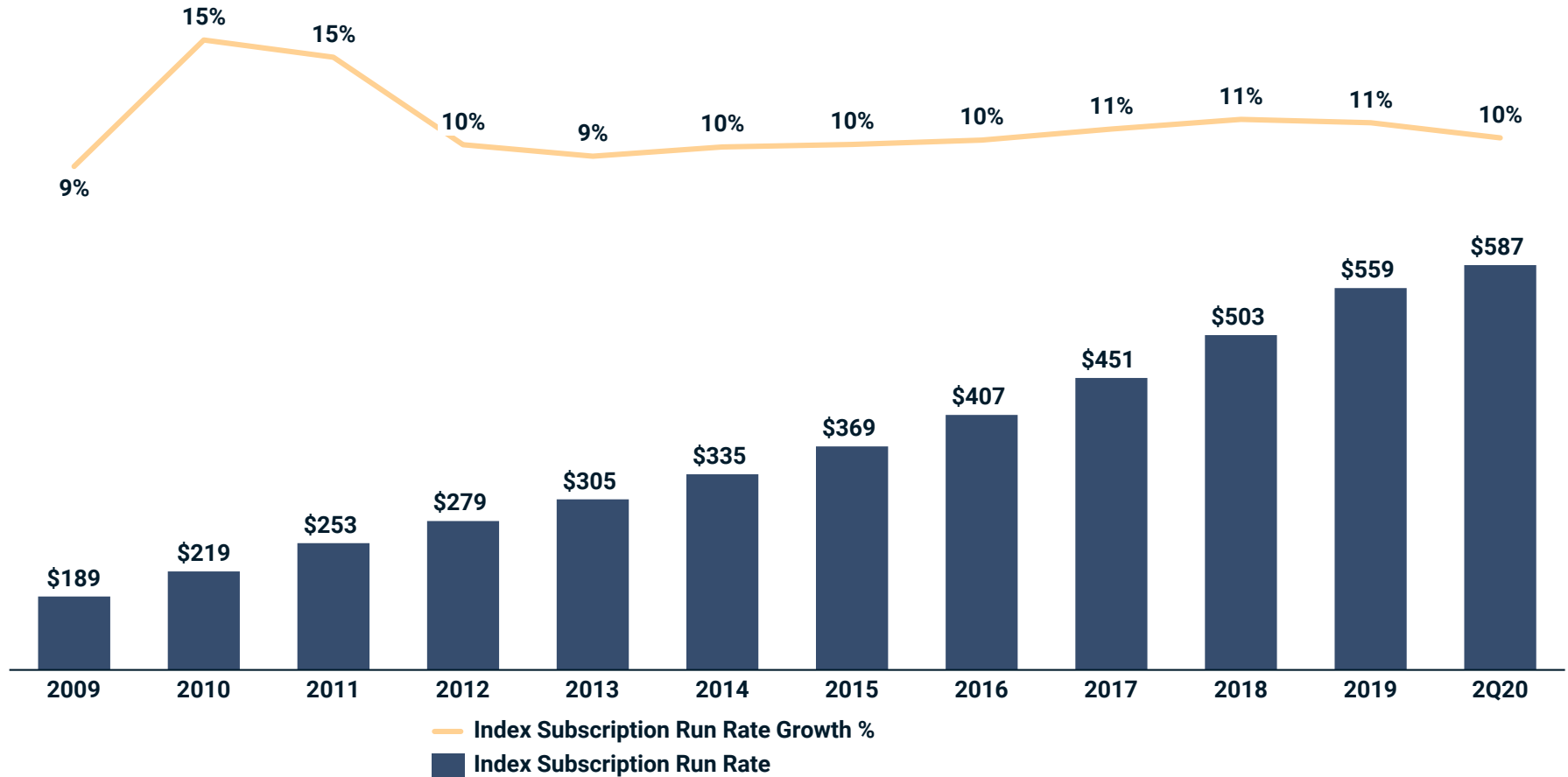


Index Subscription Run Rate ex. ABF  
as of 6/30/2020  
by Geography



# Resilient Index subscription franchise

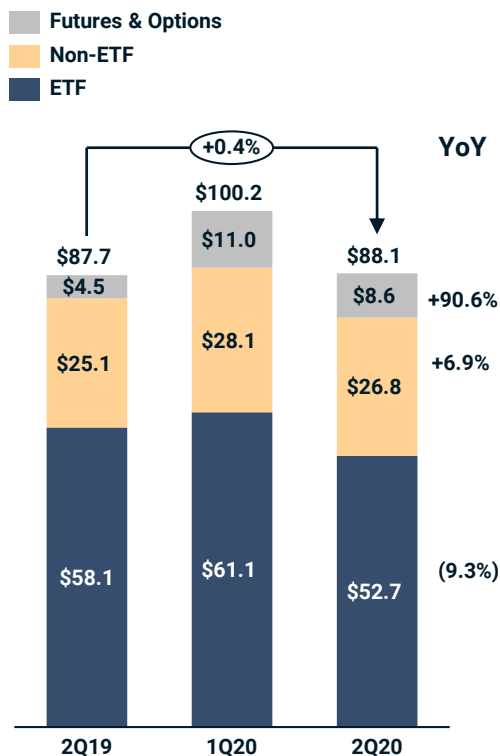
Subscription Run Rate (\$m) and YoY Growth



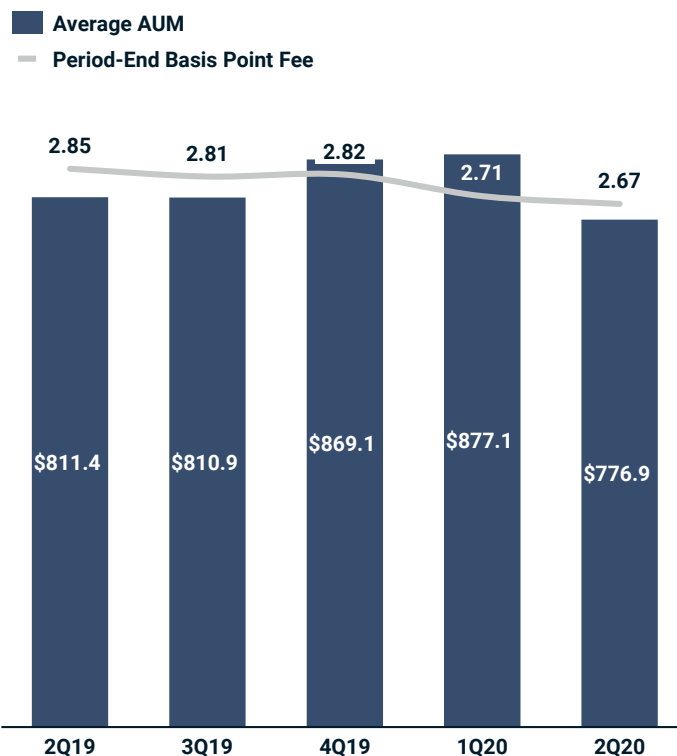
# Index segment: asset-based fees details

(US\$ in millions, except AUM in billions)

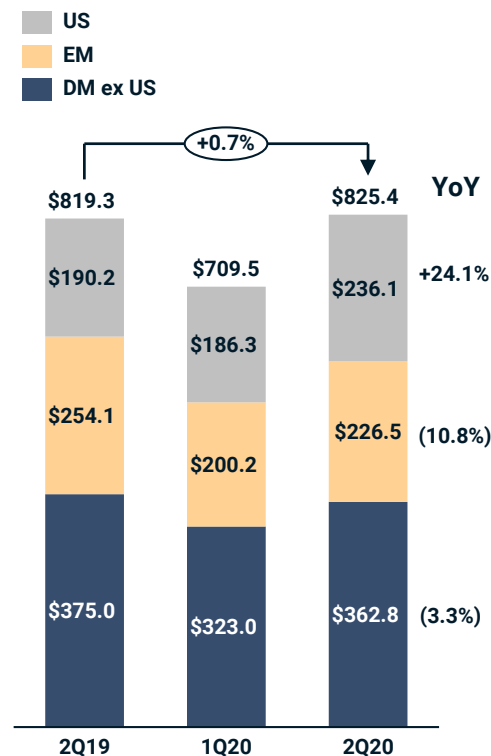
## Asset-based fees (ABF) Revenue



## Quarterly Average AUM and Period-End Basis Point Fee<sup>1</sup> of Equity ETFs linked to MSCI Indexes



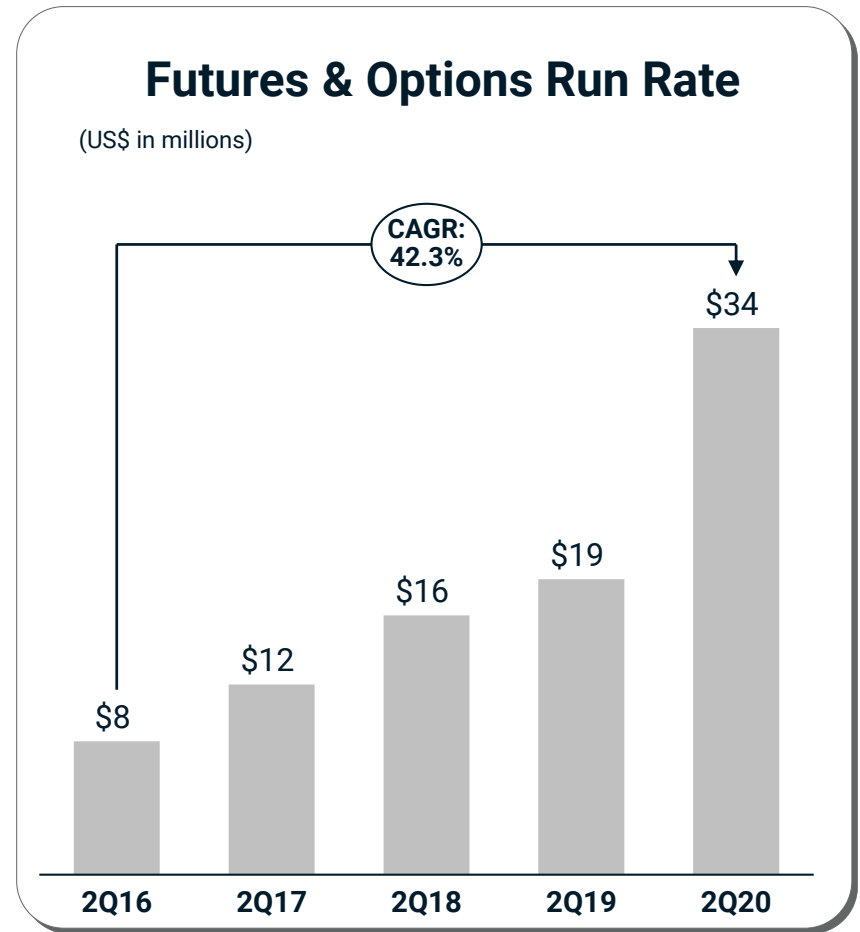
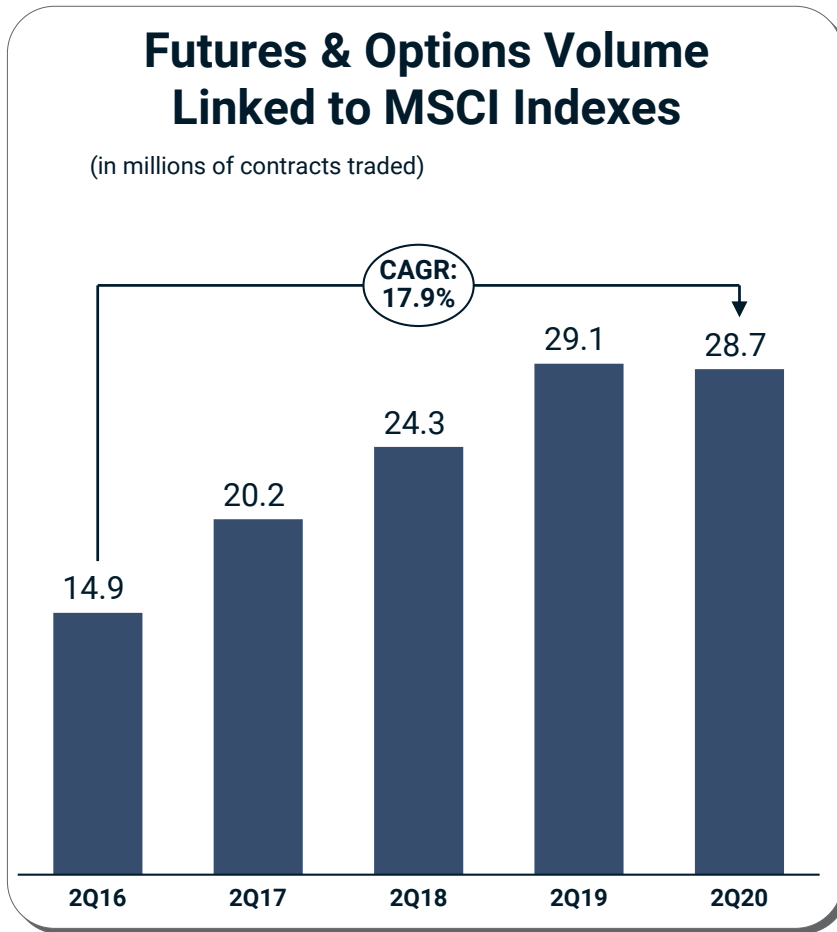
## Quarter-End AUM by Market Exposure<sup>2</sup> of Equity ETFs linked to MSCI Indexes



<sup>1</sup>Based on period-end Run Rate for equity ETFs linked to MSCI indexes using period-end AUM. Please refer to Table 7: AUM in Equity ETFs Linked to MSCI Indexes (unaudited) of the press release reporting MSCI's financial results for second quarter 2020.

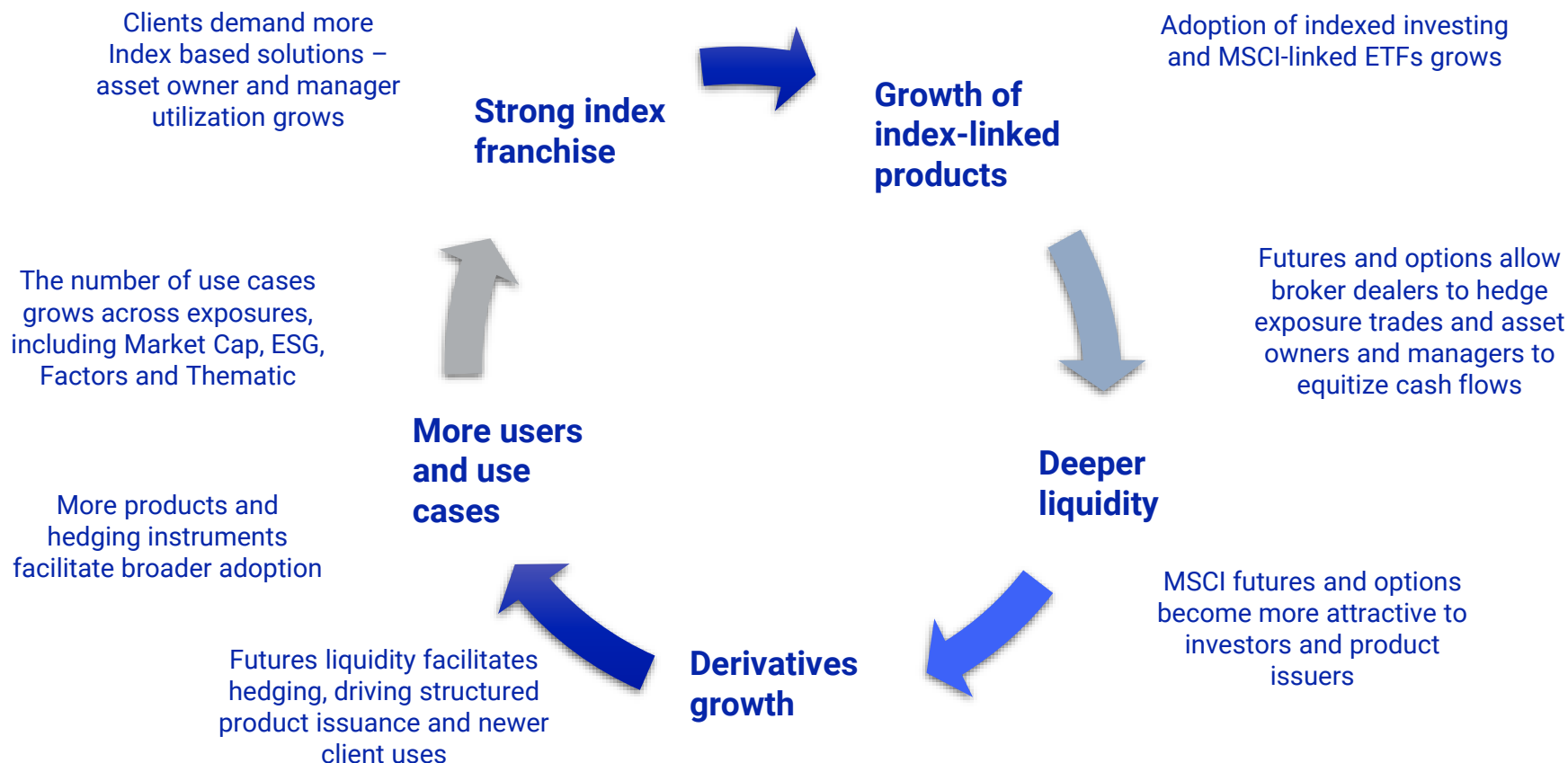
<sup>2</sup>US = Equity ETFs linked to MSCI indexes, the majority of whose weight is comprised of securities in MSCI Developed Market (DM) countries, primarily or exclusively in the US; DM ex US = Equity ETFs linked to MSCI indexes, the majority of whose weight is comprised of securities in MSCI DM countries other than the US; EM = Equity ETFs linked to MSCI indexes, the majority of whose weight is comprised of securities that are not in MSCI DM countries. Prior periods have been reclassified to conform to the current period classification. Note: The AUM in equity ETFs also includes AUM in Exchange Traded Notes, the value of which is less than 1.0% of the AUM amounts presented.

# Index segment: Futures & Options progress



# ► Growing the MSCI-linked product ecosystem

**Deeper liquidity drives a virtuous circle of enhanced and new uses across products and clients, benefiting the investment community**

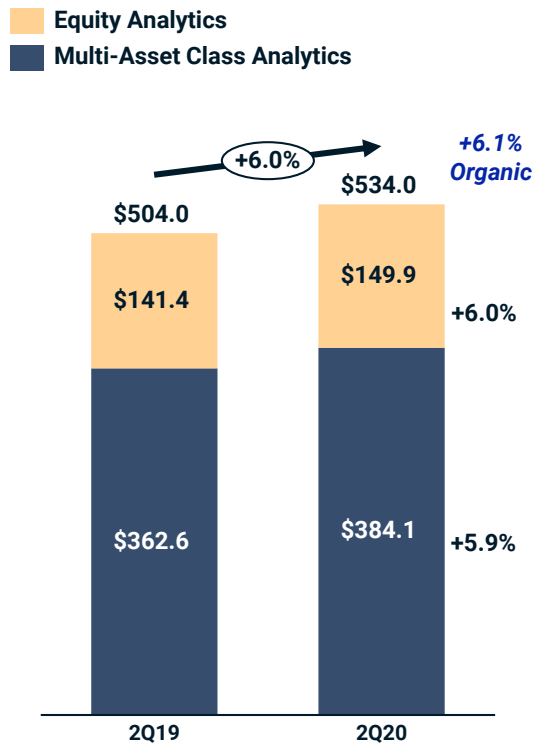




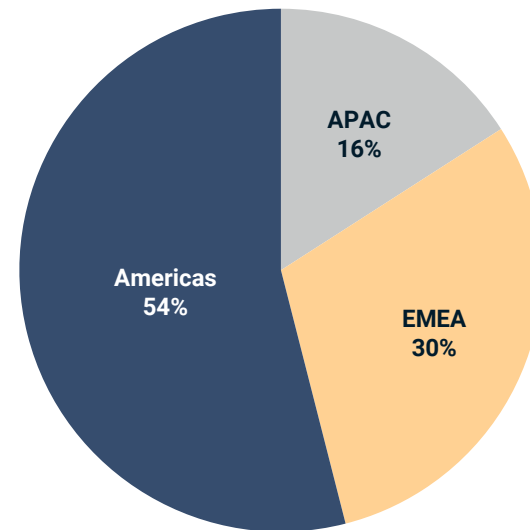
# Analytics segment at a glance

Extensively used by asset owners, asset managers and intermediaries globally to solve a broad range of investment problems

Analytics Segment Run Rate



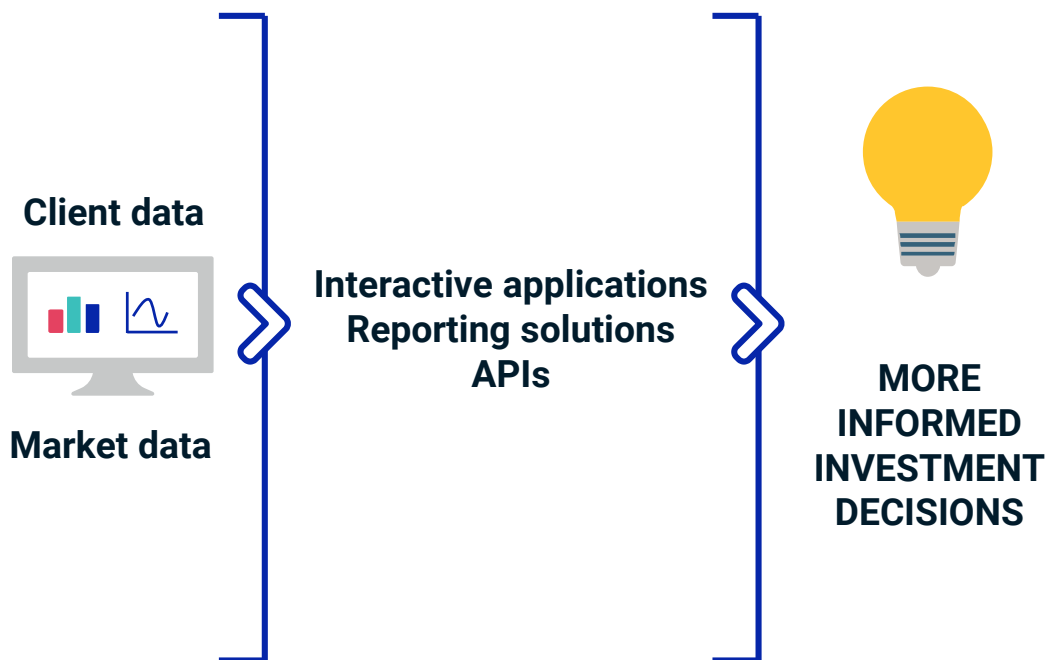
Analytics Segment Run Rate as of 6/30/2020 by Geography



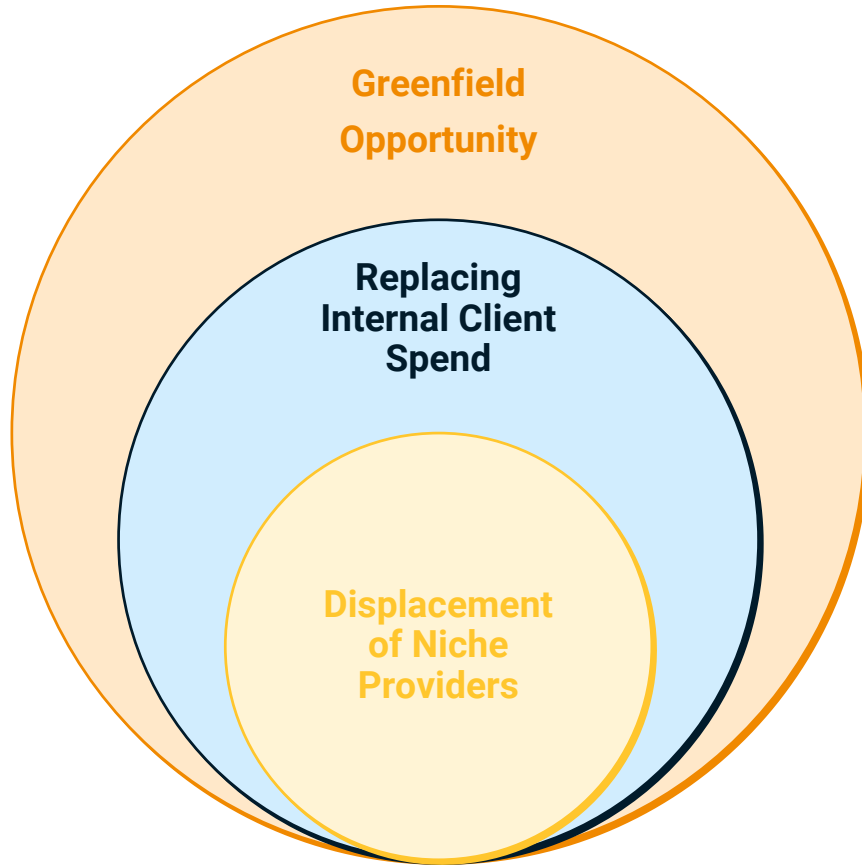
# Analytics product overview

Serving the portfolio construction, performance and risk management needs of investors\* to help them build better portfolios

- Equity, fixed income, multi-asset-class (MAC) and private asset models
- Calculation engines for pricing, risk, performance and optimization
- Enterprise risk management
- Performance attribution
- Portfolio construction
- Asset allocation
- Stress tests
- Data and analytics



# Analytics strongly positioned to capitalize on a large opportunity \$20B+ in TAM<sup>1</sup> globally



## Greenfield Opportunities

- Investment innovation (e.g., factor investing, ESG)
- Regulation (e.g., liquidity)
- Increasing adoption of best practices and technology (e.g., asset owners becoming more sophisticated)

## Replacing Internal Client Spend

- Internal software developments
- Outsourcing through managed services

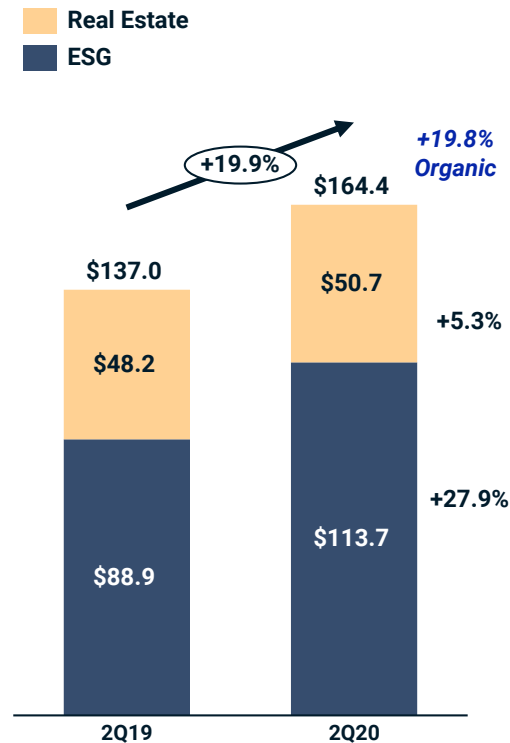
## Displacement of Niche Providers

- Offerings across single asset classes (e.g., equity only)
- Narrow products to specific problems (e.g., performance attribution only)

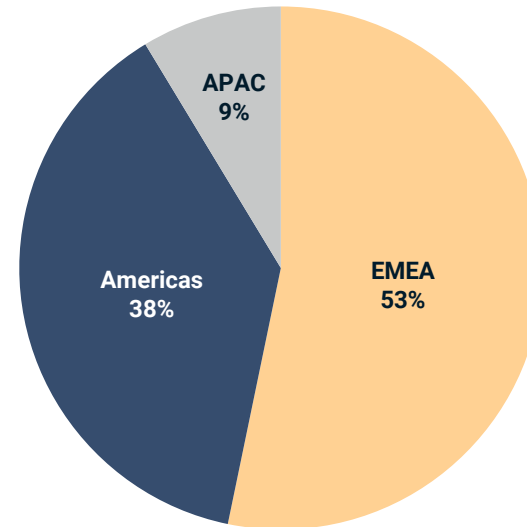
**Winners Will Provide Flexible and Integrated Solutions Across Asset Classes**

# ► All Other segment (ESG & Real Estate) at a glance

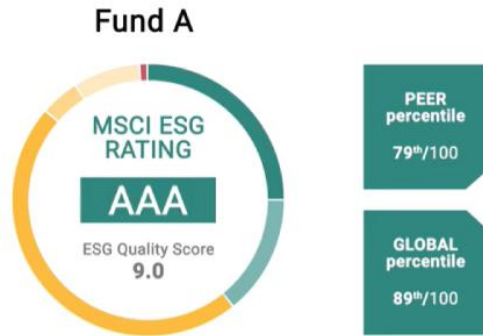
All Other Segment Run Rate  
(ESG and Real Estate)



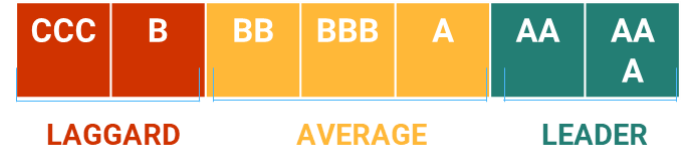
All Other Segment Run Rate as  
of 6/30/2020  
by Geography



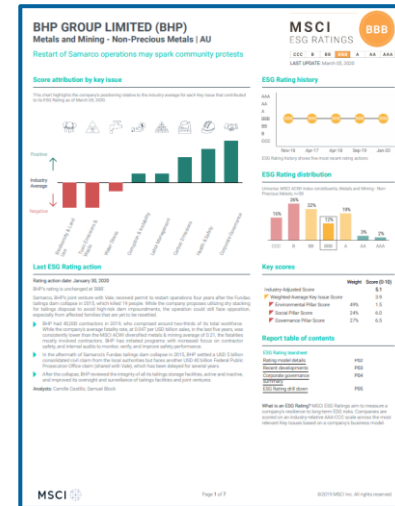
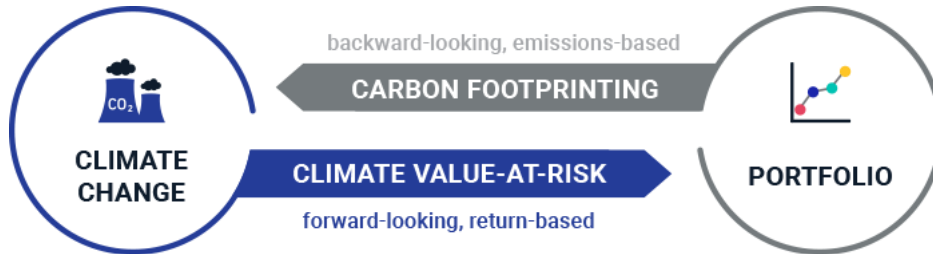
# ESG Research overview



## ESG Ratings and Research



## Climate Value-at-Risk



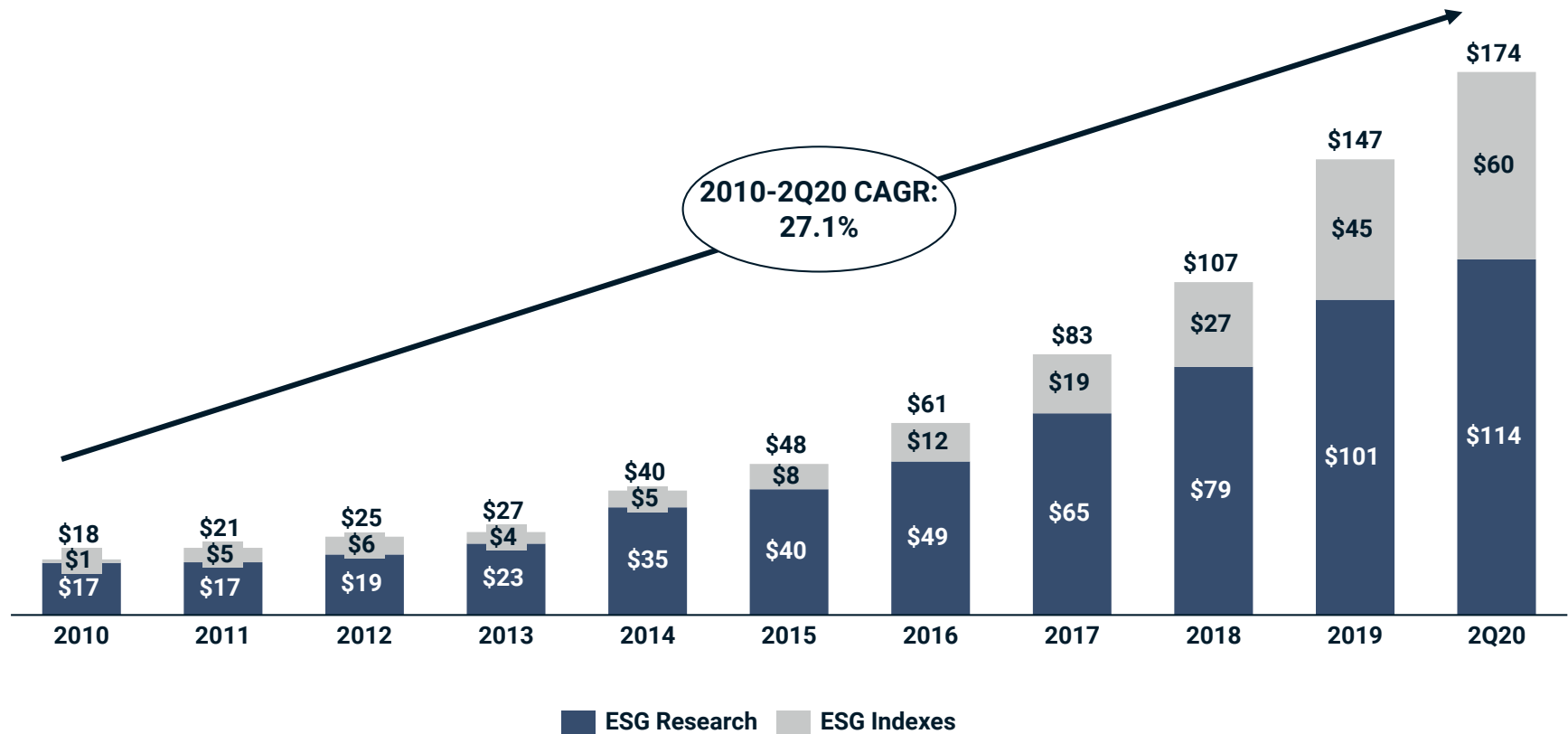
## Key catalysts and tailwinds for ESG integration into the investment process:

<p><b>Investors have become less tolerant of corporate ESG incidents</b> <i>(Vale 2019; Equifax 2017; Valeant 2015; Volkswagen 2015)</i></p>	<p><b>Asset owner and consumer-driven demand for sustainable investing</b></p>	<p><b>Investor belief in potential financial benefit of integrating ESG strategies</b></p>	<p><b>Regulatory landscape and ongoing enhancement of reporting frameworks</b></p>
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# Continued growth across firmwide ESG franchise

## Firmwide ESG Run Rate (ESG Indexes and ESG Research)<sup>1</sup>

(US\$ in millions)



# ESG: increasing adoption and growing addressable market

- ✓ **Nearly 30% CAGR** in MSCI ESG Run Rate firmwide<sup>1</sup> from 2010 – 2Q20
- ✓ **<20%** penetration of ~3,000 (and growing number of) asset owner, investment manager and other signatories of the UN Principles for Responsible Investment (“UN PRI”)
  - ✓ New logo capture opportunities
  - ✓ Upselling existing clients

## Current ESG Client Penetration Among UN PRI Signatories



- ✓ **Growing addressable market** via new use cases and product innovation including:
  - ✓ Climate VaR including Real Estate
  - ✓ Fixed income
  - ✓ Ongoing new/deepened data, content and ratings coverage

## Increasing Use Cases for ESG Integration:



# Real Estate product overview

Providing real estate investment support tools and critical business intelligence at both asset and fund levels to institutional investors and real estate owners, managers and brokers worldwide



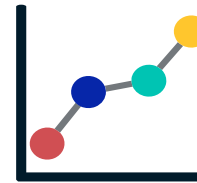
**MSCI Real Estate  
Global Intel**

- One of the most extensive private real estate databases in the world
- Data contributed by clients



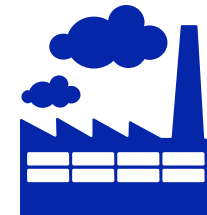
**MSCI Real Estate  
Enterprise Analytics**

- Single integrated market information, analytics and risk platform



**Global market indexes  
and benchmarks**

- Single, global framework
- Asset or fund level
- Customizable benchmarks



**Real Estate  
Climate VaR**

- Tools to measure climate-related exposures and risks
- Forward-looking and return-based valuation assessment

*Tools for real estate investors to build better portfolios*



# Appendix

# Powering better investment decisions

## Client Portfolio Needs



## MSCI Solutions



# Business tailwinds from secular market trends



Increasing mandate for sustainable returns and **ESG integration**



Long-term shift from **home country bias to global**



Ongoing shift from active management to **index-enabled investing**



Increasing demands on institutional investors to be more **efficient and differentiated**



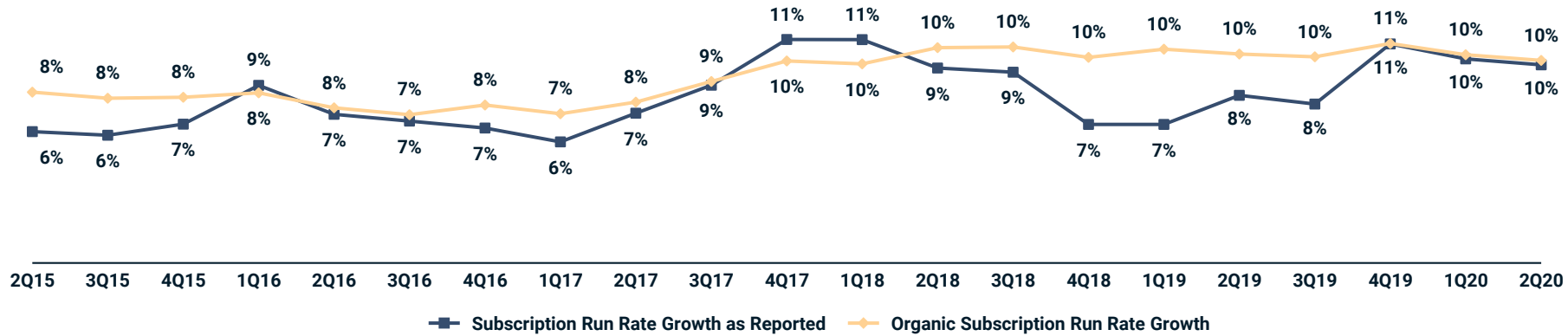
From manager selection to **internal management**



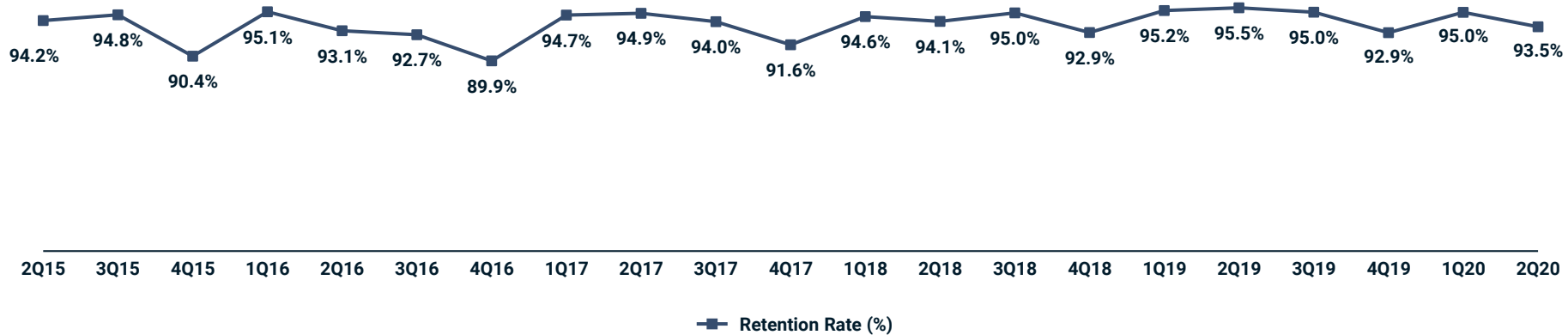
Continued allocation to **private asset classes**

# Robust subscription run rate growth and retention across MSCI

## YoY Subscription Run Rate Growth (as Reported and Organic)



## Retention Rate Trends

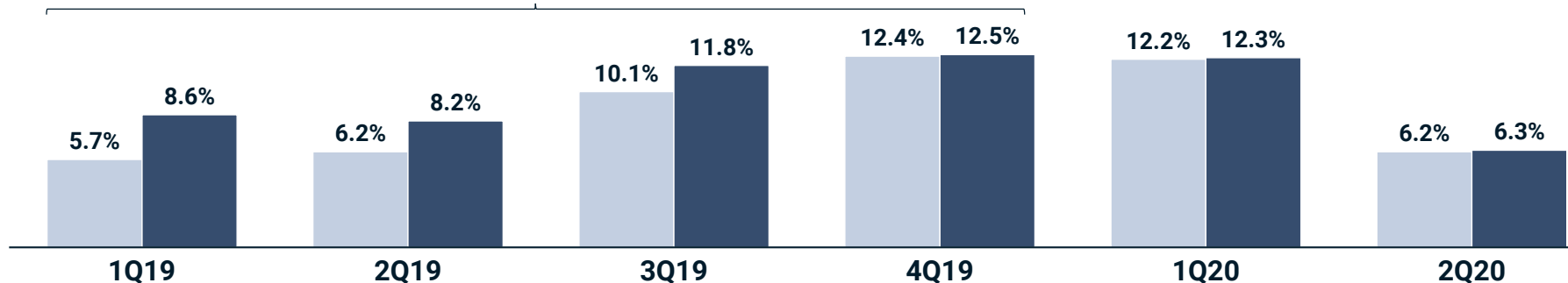


# Revenue and profitability trends

## YoY Growth – Operating Revenue

**FY2019 Operating Revenue Growth:**  
8.6% as reported / 10.3% organic

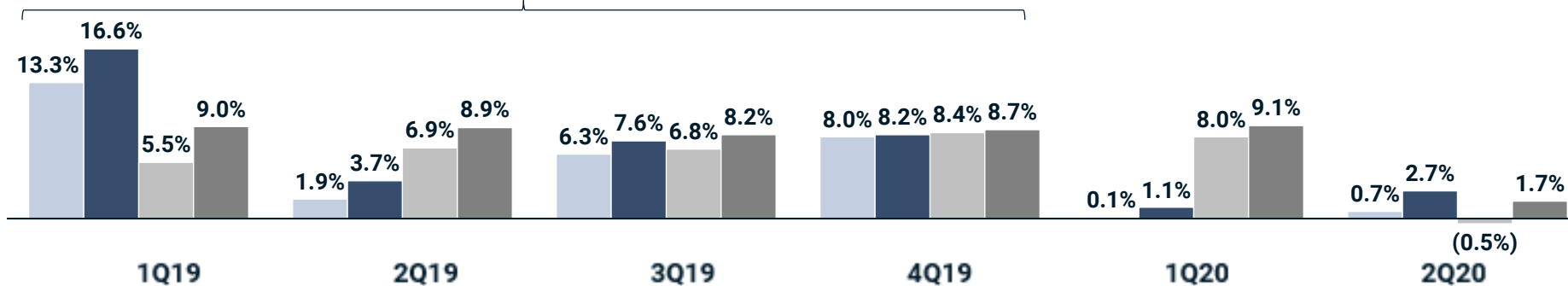
Operating Revenue growth – as reported (%)  
Organic Operating Revenue Growth - ex. acquisitions/divestitures and FX fluctuations (%)



## YoY Growth – Operating Expenses and Adjusted EBITDA Expenses

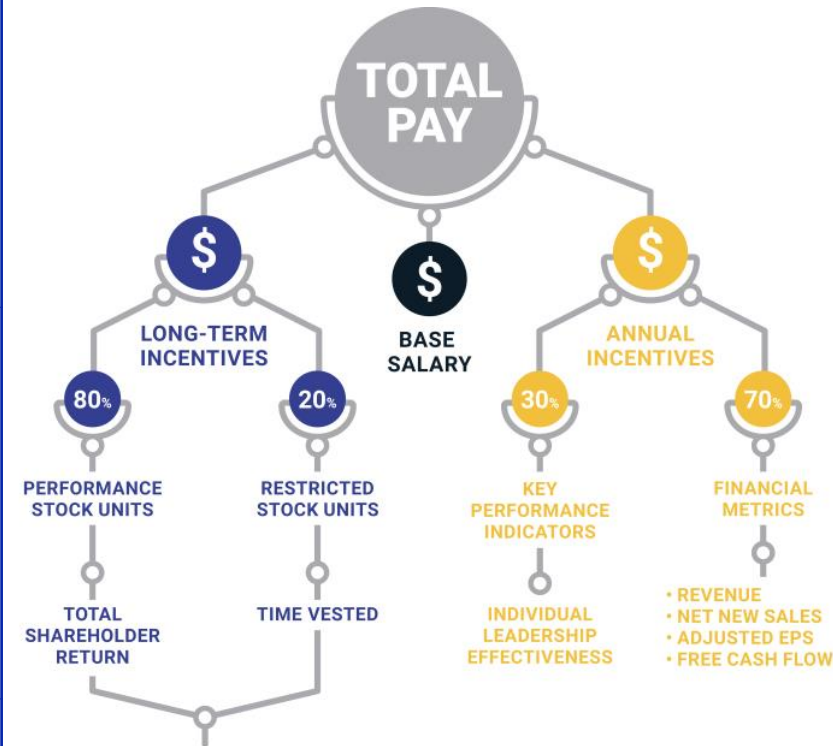
**FY2019 Operating Expense Growth:** 7.4% as reported / 9.0% ex. FX  
**FY2019 Adjusted EBITDA Expense Growth:** 6.9% as reported / 8.7% ex. FX

Operating Expense Growth - as reported (%)  
Operating Expense Growth - ex. FX fluctuations (%)  
Adjusted EBITDA Expense Growth - as reported (%)  
Adjusted EBITDA Expense Growth - ex. FX fluctuations (%)



# Pay for performance culture at MSCI

	Component	Objective	Pay In
Fixed Compensation	Annual Base Pay	<ul style="list-style-type: none"> <li>The only fixed component of our executive compensation program</li> <li>Provides certainty and predictability to meet ongoing living and financial commitments</li> </ul>	Cash
	Annual Incentive Plan (AIP)	<ul style="list-style-type: none"> <li>Alignment of management's interests with shareholders' interests</li> <li>Introduced to drive one year performance results</li> <li>Specific financial criteria and key performance indicators</li> </ul>	Cash
Variable Compensation	Long-Term Incentive Plan (LTIP)	<ul style="list-style-type: none"> <li>Align interests of management with the execution of Company's long-term strategy and shareholder value</li> <li>Promotes retention</li> </ul>	Performance Stock Units Restricted Stock Units <sup>(1)</sup>



Reflects weightings for the President, COO and the heads of each product segment in 2016. CEO was weighted 100% PSUs in 2016. Our CEO and NEOs were not eligible to receive PSUs in 2017 and 2018.

Other Executive Committee members were weighted 40% RSUs and 60% PSUs in 2017 and 2018.

**Executive compensation program aligned with shareholder interests**

# Index products overview

- We harness first class content from across our firm to develop MSCI Indexes
- Clients use our solutions across three core investment functions



**Tools** to empower portfolio construction, performance and risk management

## Our strengths

- Market leading quality
- Track record of innovation
- Global framework
- Strong brand
- Proven execution

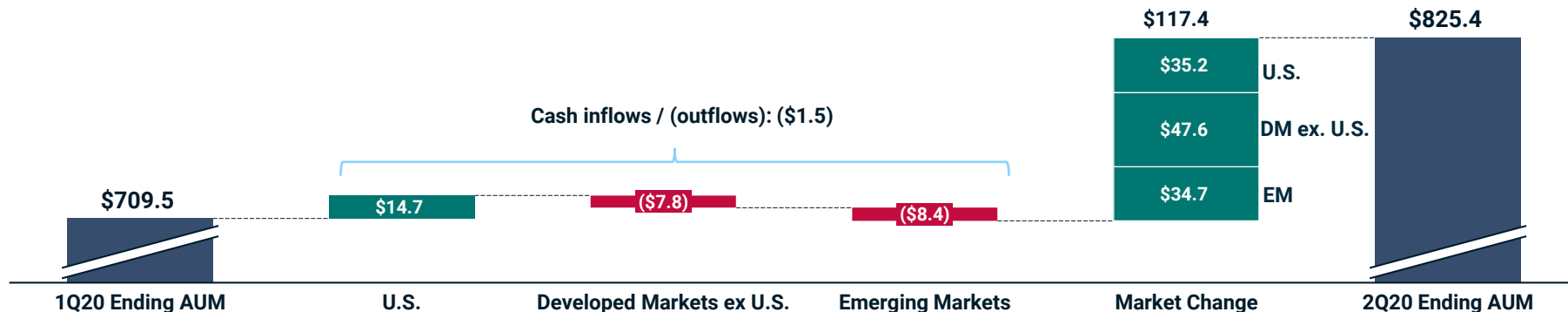
## Well positioned for growth

- Global investing
- Multi-currency index derivatives
- ESG and Factor adoption
- New client segments

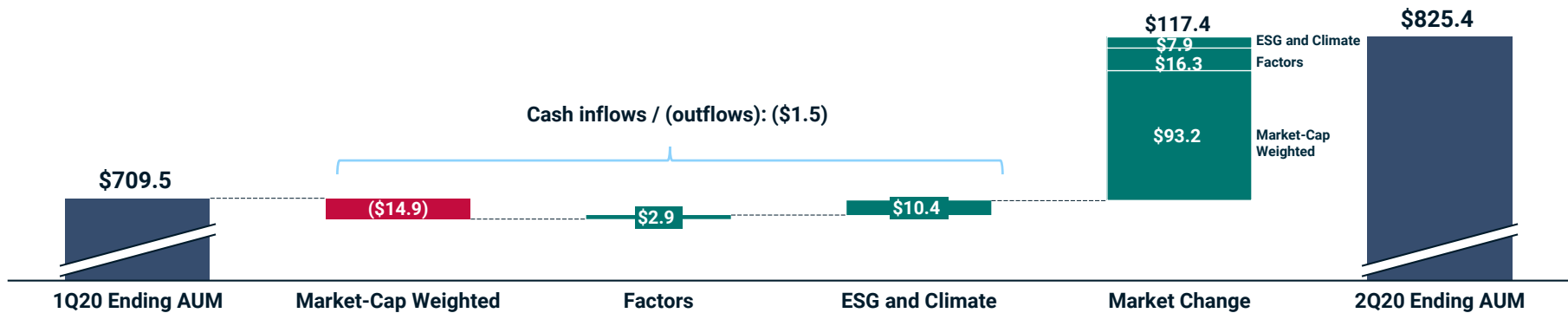
# Index segment: 2Q20 QoQ AUM drivers: MSCI-linked equity ETFs

(US\$ in billions)

## By Geographic Exposure



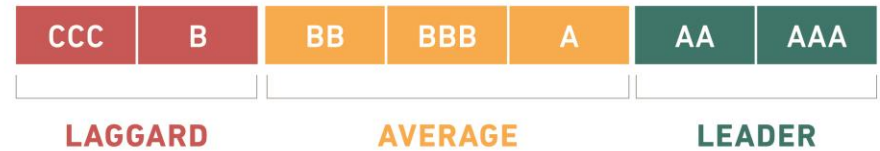
## By Product





# MSCI's approach to ESG Ratings

MSCI ESG Ratings assess the extent to which companies are positioned to manage the risks and take advantage of the opportunities emerging from a rapidly changing world



**Forward-looking financial materiality:** We monitor emerging risks & opportunities and focus on the issues that are most relevant to a company's core business model.



**Alternative data & models:** Alternative data helps minimize reliance on voluntary disclosure to deliver key insights.  
  
Robust models transform unstructured data into meaningful signals.



**Tech-enabled human insights:** We use technology and artificial intelligence (AI) to increase the timeliness and precision of data collection and analysis, and to check and validate data.

Our 200+ strong team of analysts vet, validate and transform the data into meaningful insights

# ESG Research: continuous data updates to capture the latest events and information

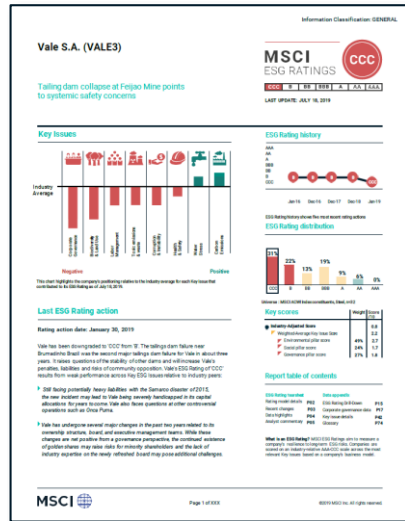
1. Initiate rating

2. Monitor on ongoing basis

3. Incorporate new information in scores and report on weekly basis

4. Significant score changes trigger rating action

5. Upgrade, downgrade or re-affirm rating



On average per week:

**180** companies are updated to account for **new controversies**

**425** companies are updated to reflect **new governance information**

All ratings **pro-actively reviewed in full** if no rating action has been triggered in last 12 months

**2.3M+** data values updated per month

# Use of non-GAAP financial measures

- MSCI has presented supplemental non-GAAP financial measures as part of this presentation. Reconciliations are provided in slides 45-52 that reconcile each non-GAAP financial measure with the most comparable GAAP measure. The non-GAAP financial measures presented in this earnings presentation should not be considered as alternative measures for the most directly comparable GAAP financial measures. The non-GAAP financial measures presented in this earnings presentation are used by management to monitor the financial performance of the business, inform business decision-making and forecast future results.
- “Adjusted EBITDA” is defined as net income before (1) provision for income taxes, (2) other expense (income), net, (3) depreciation and amortization of property, equipment and leasehold improvements, (4) amortization of intangible assets and, at times, (5) certain other transactions or adjustments, including the impact related to the vesting of the multi-year restricted stock units subject to performance payout adjustments granted in 2016 (the “Multi-Year PSUs”).
- “Adjusted EBITDA expenses” is defined as operating expenses less depreciation and amortization of property, equipment and leasehold improvements and amortization of intangible assets and, at times, certain other transactions or adjustments, including the impact related to the vesting of the Multi-Year PSUs.
- “Adjusted net income” and “adjusted EPS” are defined as net income and diluted EPS, respectively, before the after-tax impact of the amortization of acquired intangible assets, including the amortization of the basis difference between the cost of the equity method investment and MSCI’s share of the net assets of the investee at historical carrying value, the impact of divestitures, the impact of adjustments for the Tax Cuts and Jobs Act that was enacted on December 22, 2017 (“Tax Reform”), except for amounts associated with active tax planning implemented as a result of Tax Reform, and, at times, certain other transactions or adjustments, including the impact related to the vesting of the Multi-Year PSUs and costs associated with debt extinguishment.
- “Adjusted tax rate” is defined as the effective tax rate excluding the impact of Tax Reform adjustments (except for amounts associated with active tax planning implemented as a result of Tax Reform) and the impact related to the vesting of the Multi-Year PSUs.
- “Capex” is defined as capital expenditures plus capitalized software development costs.
- “Free cash flow” is defined as net cash provided by operating activities, less Capex.
- “Organic operating revenue growth” is defined as operating revenue growth compared to the prior year period excluding the impact of acquired businesses, divested businesses and foreign currency exchange rate fluctuations.
- Asset-based fees ex-FX does not adjust for the impact from foreign currency exchange rate fluctuations on the underlying AUM.
- We believe adjusted EBITDA and adjusted EBITDA expenses are meaningful measures of the operating performance of MSCI because they adjust for significant one-time, unusual or non-recurring items as well as eliminate the accounting effects of certain capital spending and acquisitions that do not directly affect what management considers to be our ongoing operating performance in the period.
- We believe adjusted net income and adjusted EPS are meaningful measures of the performance of MSCI because they adjust for the after-tax impact of significant one-time, unusual or non-recurring items as well as eliminate the impact of any transactions that do not directly affect what management considers to be our ongoing operating performance in the period. We also exclude the after-tax impact of the amortization of acquired intangible assets and amortization of the basis difference between the cost of the equity method investment and MSCI’s share of the net assets of the investee at historical carrying value, as these non-cash amounts are significantly impacted by the timing and size of each acquisition and therefore not meaningful to the ongoing operating performance in the period.
- We believe that adjusted tax rate is useful to investors because it increases the comparability of period-to-period results by adjusting for the estimated net impact of Tax Reform and the impact related to the vesting of the Multi-Year PSUs.
- We believe that free cash flow is useful to investors because it relates the operating cash flow of MSCI to the capital that is spent to continue and improve business operations, such as investment in MSCI’s existing products. Further, free cash flow indicates our ability to strengthen MSCI’s balance sheet, repay our debt obligations, pay cash dividends and repurchase shares of our common stock.
- We believe organic operating revenue growth is a meaningful measure of the operating performance of MSCI because it adjusts for the impact of foreign currency exchange rate fluctuations and excludes the impact of operating revenues attributable to acquired and divested businesses for the comparable prior year period, providing insight into our ongoing operating performance for the period(s) presented.
- We believe that the non-GAAP financial measures presented in this earnings presentation facilitate meaningful period-to-period comparisons and provide a baseline for the evaluation of future results.
- Adjusted EBITDA expenses, adjusted EBITDA, adjusted net income, adjusted EPS, adjusted tax rate, Capex, free cash flow and organic operating revenue growth are not defined in the same manner by all companies and may not be comparable to similarly-titled non-GAAP financial measures of other companies. These measures can differ significantly from company to company depending on, among other things, long-term strategic decisions regarding capital structure, the tax jurisdictions in which companies operate and capital investments. Accordingly, the Company’s computation of these measures may not be comparable to similarly titled measures computed by other companies.

# Use of operating metrics

- MSCI has presented supplemental key operating metrics as part of this presentation, including Retention Rate, Run Rate, subscription sales, subscription cancellations and non-recurring sales.
- Retention Rate is an important metric because subscription cancellations decrease our Run Rate and ultimately our operating revenues over time. The annual Retention Rate represents the retained subscription Run Rate (subscription Run Rate at the beginning of the fiscal year less actual cancels during the year) as a percentage of the subscription Run Rate at the beginning of the fiscal year. The Retention Rate for a non-annual period is calculated by annualizing the cancellations for which we have received a notice of termination or for which we believe there is an intention not to renew during the non-annual period, and we believe that such notice or intention evidences the client's final decision to terminate or not renew the applicable agreement, even though such notice is not effective until a later date. This annualized cancellation figure is then divided by the subscription Run Rate at the beginning of the fiscal year to calculate a cancellation rate. This cancellation rate is then subtracted from 100% to derive the annualized Retention Rate for the period. Retention Rate is computed by operating segment on a product/service-by-product/service basis. In general, if a client reduces the number of products or services to which it subscribes within a segment, or switches between products or services within a segment, we treat it as a cancellation for purposes of calculating our Retention Rate except in the case of a product or service switch that management considers to be a replacement product or service. In those replacement cases, only the net change to the client subscription, if a decrease, is reported as a cancel. In the Analytics and the ESG operating segments, substantially all product or service switches are treated as replacement products or services and netted in this manner, while in our Index and Real Estate operating segments, product or service switches that are treated as replacement products or services and receive netting treatment occur only in certain limited instances. In addition, we treat any reduction in fees resulting from a down-sale of the same product or service as a cancellation to the extent of the reduction. We do not calculate Retention Rate for that portion of our Run Rate attributable to assets in index-linked investment products or futures and options contracts, in each case, linked to our indexes.
- Run Rate estimates at a particular point in time the annualized value of the recurring revenues under our client license agreements ("Client Contracts") for the next 12 months, assuming all Client Contracts that come up for renewal are renewed and assuming then-current currency exchange rates, subject to the adjustments and exclusions described below. For any Client Contract where fees are linked to an investment product's assets or trading volume/fees, the Run Rate calculation reflects, for ETFs, the market value on the last trading day of the period, for futures and options, the most recent quarterly volumes and/or reported exchange fees, and for other non-ETF products, the most recent client-reported assets. Run Rate does not include fees associated with "one-time" and other non-recurring transactions. In addition, we add to Run Rate the annualized fee value of recurring new sales, whether to existing or new clients, when we execute Client Contracts, even though the license start date, and associated revenue recognition, may not be effective until a later date. We remove from Run Rate the annualized fee value associated with products or services under any Client Contract with respect to which we have received a notice of termination or non-renewal during the period and have determined that such notice evidences the client's final decision to terminate or not renew the applicable products or services, even though such notice is not effective until a later date.
- "Organic subscription Run Rate growth" is defined as the period over period Run Rate growth, excluding the impact of changes in foreign currency and the first year impact of any acquisitions. It is also adjusted for divestitures. Changes in foreign currency are calculated by applying the currency exchange rate from the comparable prior period to current period foreign currency denominated Run Rate.
- Sales represents the annualized value of products and services clients commit to purchase from MSCI and will result in additional operating revenues. Non-recurring sales represent the actual value of the customer agreements entered into during the period and are not a component of Run Rate. New recurring subscription sales represent additional selling activities, such as new customer agreements, additions to existing agreements or increases in price that occurred during the period and are additions to Run Rate. Subscription cancellations reflect client activities during the period, such as discontinuing products and services and/or reductions in price, resulting in reductions to Run Rate. Net new recurring subscription sales represent the amount of new recurring subscription sales net of subscription cancellations during the period, which reflects the net impact to Run Rate during the period.
- Total gross sales represent the sum of new recurring subscription sales and non-recurring sales. Total net sales represent the total gross sales net of the impact from subscription cancellations.

# Reconciliation of Adjusted EBITDA to Net Income

(UNAUDITED)

In thousands	Year Ended				
	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2015
Index adjusted EBITDA	\$ 670,188	\$ 607,853	\$ 522,241	\$ 431,478	\$ 392,987
Analytics adjusted EBITDA	152,113	143,645	125,624	128,507	95,468
All Other adjusted EBITDA	28,198	20,935	11,892	9,472	(6,758)
<b>Consolidated adjusted EBITDA</b>	<b>850,499</b>	<b>772,433</b>	<b>659,757</b>	<b>569,457</b>	<b>481,697</b>
Multi-Year PSU payroll tax expense	15,389	—	—	—	—
Amortization of intangible assets	49,410	54,189	44,547	47,033	46,910
Depreciation and amortization of property, equipment and leasehold improvements	29,999	31,346	35,440	34,320	30,889
<b>Operating income</b>	<b>755,701</b>	<b>686,898</b>	<b>579,770</b>	<b>488,104</b>	<b>403,898</b>
Other expense (income), net	152,383	57,002	112,871	102,166	54,344
Provision for income taxes	39,670	122,011	162,927	125,083	119,516
<b>Income from continuing operations</b>	<b>563,648</b>	<b>507,885</b>	<b>303,972</b>	<b>260,855</b>	<b>230,038</b>
Income (loss) from discontinued operations, net of income taxes	—	—	—	—	(6,390)
<b>Net income</b>	<b>\$ 563,648</b>	<b>\$ 507,885</b>	<b>\$ 303,972</b>	<b>\$ 260,855</b>	<b>\$ 223,648</b>

In thousands	Three Months Ended		Six Months Ended		Trailing Twelve Months Ended
	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019	June 30, 2020
	Index adjusted EBITDA	\$ 183,256	\$ 163,915	\$ 366,843	\$ 316,126
Analytics adjusted EBITDA	46,167	39,071	82,484	75,469	159,128
All Other adjusted EBITDA	7,277	8,810	16,600	17,908	26,890
<b>Consolidated adjusted EBITDA</b>	<b>236,700</b>	<b>211,796</b>	<b>465,927</b>	<b>409,503</b>	<b>906,923</b>
Multi-Year PSU payroll tax expense	—	—	—	15,389	—
Amortization of intangible assets	14,062	12,013	27,838	23,806	53,442
Depreciation and amortization of property, equipment and leasehold improvements	7,463	7,405	15,030	15,255	29,774
<b>Operating income</b>	<b>215,175</b>	<b>192,378</b>	<b>423,059</b>	<b>355,053</b>	<b>823,707</b>
Other expense (income), net	76,008	32,633	121,043	67,016	206,410
Provision for income taxes	24,044	34,055	38,768	(15,845)	94,283
<b>Net income</b>	<b>\$ 115,123</b>	<b>\$ 125,690</b>	<b>\$ 263,248</b>	<b>\$ 303,882</b>	<b>\$ 523,014</b>

# Reconciliation of Adjusted EBITDA Expenses to Operating Expenses (UNAUDITED)

In thousands	Three Months Ended				Year Ended
	Dec. 31, 2019	Sep. 30, 2019	June 30, 2019	Mar. 31, 2019	December 31, 2019
Index adjusted EBITDA expenses	\$ 66,805	\$ 59,747	\$ 61,635	\$ 62,562	\$ 250,749
Analytics adjusted EBITDA expenses	89,359	85,806	84,610	85,037	344,812
All Other adjusted EBITDA expenses	30,235	27,909	27,517	26,075	111,736
<b>Consolidated adjusted EBITDA expenses</b>	<b>186,399</b>	<b>173,462</b>	<b>173,762</b>	<b>173,674</b>	<b>707,297</b>
Multi-Year PSU payroll tax expense	–	–	–	15,389	15,389
Amortization of intangible assets	13,243	12,361	12,013	11,793	49,410
Depreciation and amortization of property, equipment and leasehold improvements	7,535	7,209	7,405	7,850	29,999
<b>Total operating expenses</b>	<b>\$ 207,177</b>	<b>\$ 193,032</b>	<b>\$ 193,180</b>	<b>\$ 208,706</b>	<b>\$ 802,095</b>

In thousands	Three Months Ended		Full-Year
	June 30, 2020	Mar. 31, 2020	2020 Outlook(1)
Index adjusted EBITDA expenses	\$ 59,652	\$ 65,669	
Analytics adjusted EBITDA expenses	81,396	89,191	
All Other adjusted EBITDA expenses	31,868	32,693	
<b>Consolidated adjusted EBITDA expenses</b>	<b>172,916</b>	<b>187,553</b>	<b>\$700,000 - \$750,000</b>
Multi-Year PSU payroll tax expense	–	–	
Amortization of intangible assets	14,062	13,776	
Depreciation and amortization of property, equipment and leasehold improvements	7,463	7,567	~\$90,000
<b>Total operating expenses</b>	<b>\$ 194,441</b>	<b>\$ 208,896</b>	<b>\$790,000 - \$840,000</b>

# Reconciliation of Net Income to Adjusted Net Income (UNAUDITED)

In thousands	Year Ended				
	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2015
Net income	\$ 563,648	\$ 507,885	\$ 303,972	\$ 260,855	\$ 223,648
Less: Income (loss) from discontinued operations, net of income taxes	—	—	—	—	(6,390)
Income from continuing operations	563,648	507,885	303,972	260,855	230,038
Plus: Amortization of acquired intangible assets	34,773	43,981	39,157	47,033	46,910
Plus: Multi-Year PSU payroll tax expense	15,389	—	—	—	—
Less: Discrete excess tax benefit related to Multi-Year PSU vesting	(66,581)	—	—	—	—
Plus: Debt extinguishment costs associated with the 2024 Senior Notes Redemption	16,794	—	—	—	—
Less: Gain on sale of Alacra (not-tax effected)	—	—	(771)	—	(6,300)
Less: Gain on sale of FEA (not-tax effected)	—	(10,646)	—	—	—
Less: Gain on sale of InvestorForce	—	(46,595)	—	—	—
Less: Valuation Allowance released related to InvestorForce disposition	—	(7,758)	—	—	—
Less: Tax Reform adjustments	—	(8,272)	34,500	—	—
Less: Income tax effect	(13,226)	1,678	(10,772)	(15,243)	(16,039)
<b>Adjusted net income</b>	<b>\$ 550,797</b>	<b>\$ 480,273</b>	<b>\$ 366,086</b>	<b>\$ 292,645</b>	<b>\$ 254,609</b>

In thousands	Three Months Ended				Trailing Twelve Months Ended
	Sep. 30, 2019	Dec. 31, 2019	Mar. 31, 2020	Jun. 30, 2020	Jun. 30, 2020
Net income	\$ 136,983	\$ 122,783	\$ 148,125	\$ 115,123	\$ 523,014
Plus: Amortization of acquired intangible assets and equity method investment basis difference (1)	8,616	8,778	8,778	9,592	35,764
Plus: Multi-Year PSU payroll tax expense	—	—	—	—	—
Less: Discrete excess tax benefit related to Multi-Year PSU vesting	—	—	—	—	—
Plus: Debt extinguishment costs associated with the 2024 and 2025 Senior Notes Redemptions	—	16,794	9,966	34,964	61,724
Less: Tax Reform adjustments	—	—	(759)	—	(759)
Less: Income tax effect	(1,702)	(5,752)	(3,396)	(10,555)	(21,405)
<b>Adjusted net income</b>	<b>\$ 143,897</b>	<b>\$ 142,603</b>	<b>\$ 162,714</b>	<b>\$ 149,124</b>	<b>\$ 598,338</b>

# Reconciliation of Diluted EPS to Adjusted EPS

(UNAUDITED)

	Year Ended				
	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2015
Diluted EPS	6.59	\$ 5.66	\$ 3.31	\$ 2.70	\$ 2.03
Less: Earnings per diluted common share from discontinued operations	—	—	—	—	(0.06)
Earnings per diluted common share from continuing operations	6.59	\$ 5.66	\$ 3.31	\$ 2.70	\$ 2.09
Plus: Amortization of acquired intangible assets	0.41	0.49	0.43	0.49	0.43
Plus: Multi-Year PSU payroll tax expense	0.18	—	—	—	—
Less: Discrete excess tax benefit related to Multi-Year PSU vesting	(0.78)	—	—	—	—
Plus: Debt extinguishment costs associated with the 2024 Senior Notes Redemption	0.20	—	—	—	—
Less: Gain on sale of Alacra (not-tax effected)	—	—	(0.01)	—	(0.06)
Less: Gain on sale of FEA (not-tax effected)	—	(0.12)	—	—	—
Less: Gain on sale of InvestorForce	—	(0.52)	—	—	—
Less: Valuation Allowance released related to InvestorForce disposition	—	(0.09)	—	—	—
Plus: Tax Reform adjustments	—	(0.09)	0.38	—	—
Less: Income tax effect	(0.16)	0.02	(0.13)	(0.16)	(0.14)
<b>Adjusted EPS</b>	<b>6.44</b>	<b>\$ 5.35</b>	<b>\$ 3.98</b>	<b>\$ 3.03</b>	<b>\$ 2.32</b>

	Three Months Ended				Trailing Twelve Months Ended
	Sep. 30, 2019	Dec. 31, 2019	Mar. 31, 2020	Jun. 30, 2020	Jun. 30, 2020
Diluted EPS	\$ 1.60	1.44	1.73	\$ 1.36	\$ 6.13
Plus: Amortization of acquired intangible assets and equity method investment basis difference (1)	0.10	0.10	0.10	0.11	0.41
Plus: Multi-Year PSU payroll tax expense	—	—	—	—	—
Less: Discrete excess tax benefit related to Multi-Year PSU vesting	—	—	—	—	—
Plus: Debt extinguishment costs associated with the 2024 and 2025 Senior Notes Redemptions	—	0.20	0.12	0.41	0.73
Less: Tax Reform adjustments	—	—	(0.01)	—	(0.01)
Less: Income tax effect	(0.02)	(0.07)	(0.04)	(0.11)	(0.24)
<b>Adjusted EPS</b>	<b>\$ 1.68</b>	<b>\$ 1.67</b>	<b>\$ 1.90</b>	<b>\$ 1.77</b>	<b>\$ 7.02</b>



# Reconciliation of Net Cash Provided by Operating Activities to Free Cash Flow (UNAUDITED)

In thousands	Year Ended				
	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2015
Net cash provided by operating activities	\$ 709,523	\$ 612,762	\$ 404,158	\$ 442,363	\$ 321,247
Capital expenditures	(29,116)	(30,257)	(33,177)	(32,284)	(40,652)
Capitalized software development costs	(24,654)	(18,704)	(15,640)	(10,344)	(8,500)
Capex	(53,770)	(48,961)	(48,817)	(42,628)	(49,152)
<b>Free cash flow</b>	<b>\$ 655,753</b>	<b>\$ 563,801</b>	<b>\$ 355,341</b>	<b>\$ 399,735</b>	<b>\$ 272,095</b>
<b>Net Income</b>	<b>\$ 563,648</b>	<b>\$ 507,885</b>	<b>\$ 303,972</b>	<b>\$ 260,855</b>	<b>\$ 223,648</b>

In thousands	Three Months Ended		Six Months Ended		Trailing Twelve Months Ended	Full-Year
	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019	June 30, 2020	2020 Outlook <sup>(1)</sup>
Net cash provided by operating activities	\$ 262,616	\$ 189,470	\$ 375,386	\$ 277,345	\$ 807,564	<b>\$600,000 - \$650,000</b>
Capital expenditures	(3,984)	(6,278)	(7,597)	(9,434)	(27,279)	
Capitalized software development costs	(7,558)	(6,113)	(14,761)	(11,103)	(28,312)	
Capex	(11,542)	(12,391)	(22,358)	(20,537)	(55,591)	(\$60,000 - \$50,000)
<b>Free cash flow</b>	<b>\$ 251,074</b>	<b>\$ 177,079</b>	<b>\$ 353,028</b>	<b>\$ 256,808</b>	<b>\$ 751,973</b>	<b>\$540,000 - \$600,000</b>
<b>Net Income</b>	<b>\$ 115,123</b>	<b>\$ 125,690</b>	<b>\$ 263,248</b>	<b>\$ 303,882</b>	<b>\$ 523,014</b>	

# Reconciliation of Effective Tax Rate to Adjusted Tax Rate *(UNAUDITED)*

	Year Ended				
	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2015
Effective tax rate	6.6%	19.4%	34.9%	32.4%	34.2%
Tax Reform impact on effective tax rate	—%	1.3%	(7.4%)	—%	—%
Multi-Year PSU impact on effective tax rate	11.0%	—%	—%	—%	—%
Adjusted tax rate	17.6%	20.7%	27.5%	32.4%	34.2%

	Six Months Ended	
	June 30, 2020	June 30, 2019
Effective tax rate	12.8%	(5.5%)
Tax Reform impact on effective tax rate	0.3%	—%
Multi-Year PSU impact on effective tax rate	—%	23.1%
Adjusted tax rate	13.1%	17.6%

# Reconciliation of Operating Revenue Growth to Organic Operating Revenue Growth *(UNAUDITED)*

Comparison of the Three Months Ended June 30, 2020 and 2019				
	<b>Total</b>	<b>Recurring Subscription</b>	<b>Asset-Based Fees</b>	<b>Non-Recurring Revenues</b>
<b>Index</b>	Change Percentage	Change Percentage	Change Percentage	Change Percentage
Operating revenue growth	7.7%	10.0%	0.4%	66.2%
Impact of acquisitions and divestitures	—%	—%	—%	—%
Impact of foreign currency exchange rate fluctuations	—%	—%	—%	—%
Organic operating revenue growth	7.7%	10.0%	0.4%	66.2%
	<b>Total</b>	<b>Recurring Subscription</b>	<b>Asset-Based Fees</b>	<b>Non-Recurring Revenues</b>
<b>Analytics</b>	Change Percentage	Change Percentage	Change Percentage	Change Percentage
Operating revenue growth	3.1%	3.7%	—%	(30.7%)
Impact of acquisitions and divestitures	—%	—%	—%	—%
Impact of foreign currency exchange rate fluctuations	(0.1%)	(0.1%)	—%	(0.4%)
Organic operating revenue growth	3.0%	3.6%	—%	(31.1%)
	<b>Total</b>	<b>Recurring Subscription</b>	<b>Asset-Based Fees</b>	<b>Non-Recurring Revenues</b>
<b>All Other</b>	Change Percentage	Change Percentage	Change Percentage	Change Percentage
Operating revenue growth	7.8%	8.5%	—%	(16.4%)
Impact of acquisitions and divestitures	(1.2%)	(1.0%)	—%	(8.4%)
Impact of foreign currency exchange rate fluctuations	2.6%	2.6%	—%	0.7%
Organic operating revenue growth	9.2%	10.1%	—%	(24.1%)
	<b>Total</b>	<b>Recurring Subscription</b>	<b>Asset-Based Fees</b>	<b>Non-Recurring Revenues</b>
<b>Consolidated</b>	Change Percentage	Change Percentage	Change Percentage	Change Percentage
Operating revenue growth	6.2%	7.2%	0.4%	34.4%
Impact of acquisitions and divestitures	(0.1%)	(0.1%)	—%	(1.0%)
Impact of foreign currency exchange rate fluctuations	0.2%	0.2%	—%	—%
Organic operating revenue growth	6.3%	7.3%	0.4%	33.4%

# Reconciliation of Operating Revenue Growth to Organic Operating Revenue Growth *(UNAUDITED)*

Comparison of the Six Months Ended June 30, 2020 and 2019				
	<u>Total</u>	<u>Recurring Subscription</u>	<u>Asset-Based Fees</u>	<u>Non-Recurring Revenues</u>
<b>Index</b>	Change Percentage	Change Percentage	Change Percentage	Change Percentage
Operating revenue growth	11.8%	9.8%	11.0%	70.1%
Impact of acquisitions and divestitures	—%	—%	—%	—%
Impact of foreign currency exchange rate fluctuations	—%	(0.1%)	0.1%	—%
Organic operating revenue growth	<u>11.8%</u>	<u>9.7%</u>	<u>11.1%</u>	<u>70.1%</u>
	<u>Total</u>	<u>Recurring Subscription</u>	<u>Asset-Based Fees</u>	<u>Non-Recurring Revenues</u>
<b>Analytics</b>	Change Percentage	Change Percentage	Change Percentage	Change Percentage
Operating revenue growth	3.2%	3.5%	—%	(14.8%)
Impact of acquisitions and divestitures	—%	—%	—%	—%
Impact of foreign currency exchange rate fluctuations	—%	(0.1%)	—%	(0.3%)
Organic operating revenue growth	<u>3.2%</u>	<u>3.4%</u>	<u>—%</u>	<u>(15.1%)</u>
	<u>Total</u>	<u>Recurring Subscription</u>	<u>Asset-Based Fees</u>	<u>Non-Recurring Revenues</u>
<b>All Other</b>	Change Percentage	Change Percentage	Change Percentage	Change Percentage
Operating revenue growth	13.5%	12.8%	—%	45.5%
Impact of acquisitions and divestitures	(0.9%)	(0.7%)	—%	(9.3%)
Impact of foreign currency exchange rate fluctuations	2.2%	2.2%	—%	1.0%
Organic operating revenue growth	<u>14.8%</u>	<u>14.3%</u>	<u>—%</u>	<u>37.2%</u>
	<u>Total</u>	<u>Recurring Subscription</u>	<u>Asset-Based Fees</u>	<u>Non-Recurring Revenues</u>
<b>Consolidated</b>	Change Percentage	Change Percentage	Change Percentage	Change Percentage
Operating revenue growth	9.2%	7.5%	11.0%	49.9%
Impact of acquisitions and divestitures	(0.1%)	(0.1%)	—%	(0.9%)
Impact of foreign currency exchange rate fluctuations	0.2%	0.2%	0.1%	—%
Organic operating revenue growth	<u>9.3%</u>	<u>7.6%</u>	<u>11.1%</u>	<u>49.0%</u>