



2022 Annual Report



MSCI 

About MSCI Inc.

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 50 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading research-enhanced solutions that clients use to gain insight into and improve transparency across the investment process.

To learn more, please visit [**www.msci.com**](http://www.msci.com).



Financial highlights

IN THOUSANDS, EXCEPT PER SHARE DATA	YEAR ENDED				
	2022	2021	2020	2019	2018
Operating revenues	\$2,248,598	\$2,043,544	\$1,695,390	\$1,557,796	\$1,433,984
Operating expenses	\$1,040,958	\$970,819	\$810,626	\$802,095	\$747,086
Operating income	\$1,207,640	\$1,072,725	\$884,764	\$755,701	\$686,898
Net income	\$870,573	\$725,983	\$601,822	\$563,648	\$507,885
Earnings per share:					
Earnings per basic common share	\$10.78	\$8.80	\$7.19	\$6.66	\$5.83
Earnings per diluted common share	\$10.72	\$8.70	\$7.12	\$6.59	\$5.66
Cash and cash equivalents	\$993,564	\$1,421,449	\$1,300,521	\$1,506,567	\$904,176
Current maturities of long-term debt, net of deferred fees and discounts	\$8,713	—	—	—	—
Long-term debt, net of current maturities, deferred fees and discounts	\$4,503,233	\$4,161,422	\$3,366,777	\$3,071,926	\$2,575,502
Total shareholders' equity (deficit)	\$(1,007,925)	\$(163,467)	\$(443,234)	\$(76,714)	\$(166,494)

Selected quarterly financial data (unaudited)

IN THOUSANDS, EXCEPT PER SHARE DATA AND HEADCOUNT	Q1	Q2	Q3	Q4	Fiscal year
Operating revenues					
FY2022	\$559,945	\$551,806	\$560,639	\$576,208	\$2,248,598
FY2021	\$478,423	\$498,180	\$517,099	\$549,842	\$2,043,544
Operating expenses					
FY2022	\$270,967	\$251,425	\$251,108	\$267,458	\$1,040,958
FY2021	\$224,048	\$240,647	\$236,869	\$269,255	\$970,819
Operating income					
FY2022	\$288,978	\$300,381	\$309,531	\$308,750	\$1,207,640
FY2021	\$254,375	\$257,533	\$280,230	\$280,587	\$1,072,725
Net income					
FY2022	\$228,423	\$210,587	\$216,592	\$214,971	\$870,573
FY2021	\$196,819	\$165,423	\$169,876	\$193,865	\$725,983
Earnings per basic common share					
FY2022	\$2.80	\$2.60	\$2.69	\$2.69	\$10.78
FY2021	\$2.38	\$2.01	\$2.06	\$2.35	\$8.80
Earnings per diluted common share					
FY2022	\$2.78	\$2.59	\$2.68	\$2.67	\$10.72
FY2021	\$2.36	\$1.99	\$2.03	\$2.32	\$8.70
Headcount (ex ISS)					
FY2022					4,759
FY2021					4,303
FY2020					3,633

Adjusted EBITDA

YEAR ENDED

IN THOUSANDS	Dec. 31 2022	Dec. 31 2021	Dec. 31 2020	Dec. 31 2019	Dec. 31 2018
CONSOLIDATED					
Operating revenues	\$2,248,598	\$2,043,544	\$1,695,390	\$1,557,796	\$1,433,984
Adjusted EBITDA expenses	\$918,927	\$846,754	\$723,880	\$707,297	\$661,551
Adjusted EBITDA	\$1,329,671	\$1,196,790	\$971,510	\$850,499	\$772,433
Operating margin %	53.7%	52.5%	52.2%	48.5%	47.9%
Adjusted EBITDA margin %	59.1%	58.6%	57.3%	54.6%	53.9%
INDEX					
Operating revenues					
Recurring subscriptions	\$729,710	\$650,629	\$580,393	\$530,968	\$477,612
Asset-based fees	\$528,127	\$553,991	\$399,771	\$361,927	\$336,565
Non-recurring	\$45,372	\$47,144	\$36,331	\$28,042	\$21,298
Operating revenues total	\$1,303,209	\$1,251,764	\$1,016,495	\$920,937	\$835,475
Adjusted EBITDA expenses	\$317,802	\$300,452	\$250,002	\$250,749	\$227,622
Adjusted EBITDA	\$985,407	\$951,312	\$766,493	\$670,188	\$607,853
Adjusted EBITDA margin %	75.6%	76.0%	75.4%	72.8%	72.8%
ANALYTICS					
Operating revenues:					
Recurring subscriptions	\$567,004	\$533,178	\$506,301	\$486,282	\$474,334
Non-recurring	\$9,103	\$11,121	\$7,507	\$10,643	\$5,605
Operating revenues total	\$576,107	\$544,299	\$513,808	\$496,925	\$479,939
Adjusted EBITDA expenses	\$328,212	\$345,500	\$340,884	\$344,812	\$336,294
Adjusted EBITDA	\$247,895	\$198,799	\$172,924	\$152,113	\$143,645
Adjusted EBITDA margin %	43.0%	36.5%	33.7%	30.6%	29.9%
ESG AND CLIMATE					
Operating revenues:					
Recurring subscriptions	\$223,160	\$162,609	\$109,945	\$89,563	\$70,291
Non-recurring	\$5,151	\$3,583	\$1,419	\$1,096	\$1,075
Operating revenues total	\$228,311	\$166,192	\$111,364	\$90,659	\$71,366
Adjusted EBITDA expenses	\$167,217	\$136,444	\$88,513	\$68,846	\$55,347
Adjusted EBITDA	\$61,094	\$29,748	\$22,851	\$21,813	\$16,019
Adjusted EBITDA margin %	26.8%	17.9%	20.5%	24.1%	22.4%
ALL OTHER - PRIVATE ASSETS					
Operating revenues:					
Recurring subscriptions	\$139,649	\$79,624	\$51,536	\$47,227	\$44,299
Non-recurring	\$1,322	\$1,665	\$2,187	\$2,048	\$2,905
Operating revenues total	\$140,971	\$81,289	\$53,723	\$49,275	\$47,204
Adjusted EBITDA expenses	\$105,696	\$64,358	\$44,481	\$42,890	\$42,288
Adjusted EBITDA	\$35,275	\$16,931	\$9,242	\$6,385	\$4,916
Adjusted EBITDA margin %	25.0%	20.8%	17.2%	13.0%	10.4%



Henry A. Fernandez

Chairman and Chief Executive Officer

MSCI has always tried to capture the next evolution of global investing. Today, we see enormous growth opportunities across product lines, asset classes and client segments.

Dear fellow shareholders,

As I write this letter in early March, we have just passed the one-year anniversary of Russia's unprovoked and unjustified war in Ukraine, an event that has caused massive human suffering and significant disruptions around the world. We may eventually look back on the war as a hinge moment of history that permanently changed the global order. For now, it has forced leaders of all stripes to reimagine the future.

At MSCI, reimagining the future is part of our ethos. We constantly prepare for the unexpected while positioning ourselves to thrive in any environment. The past 15 months have offered a reminder that external challenges can quickly metastasize.

Indeed, it is hard to remember another time in the modern era when the global economy and financial markets faced so many different headwinds simultaneously: from war and geopolitical tensions, to high inflation and rising interest rates, to energy and food crises. These are the short-term realities that everyone must navigate.

They have intersected with longer-term, structural trends that are reshaping the investment landscape, such as the expansion of index investing, the shift to outcome-oriented investment strategies, and the increased focus on climate change and its impact on portfolios.

MSCI has always tried to capture the next evolution of global investing. This mindset helps us produce mission-critical data, models, analytics and technology. Today, we see enormous growth opportunities across product lines, asset classes and client segments.

In 2022, these opportunities helped us achieve strong results despite significant market volatility. Among other highlights, MSCI delivered overall revenue growth of 10% – including recurring subscription-revenue growth of 16% – diluted earnings-per-share (EPS) growth of 23%, adjusted EPS growth of 15%, a record full-year retention rate of 95.2%, and share repurchases of nearly \$1.3 billion. While the market unrest created headwinds and more variability for asset-linked fees, our index recurring subscriptions and transaction-volume businesses performed well through difficult operating conditions.

We have once again demonstrated the balance, adaptability and resilience of our all-weather franchise, which has enabled us to continue making crucial investments in long-term secular growth areas. These investments are helping us enhance our capabilities to meet the needs of a diverse client base.

To understand MSCI's performance and potential, it is important to understand some of the key dynamics transforming our industry.

The Expansion of Index Investing

As recently as the 1990s, there was still tremendous skepticism about indexing among investors, analysts and journalists. Many people believed that index funds meant "guaranteed mediocrity." Others thought indexing held great promise.



The optimists turned out to be right: Index investing is now increasingly popular across regions, asset classes and investor types. As of June 2022, we estimate that there were \$13.5 trillion in assets under management benchmarked to MSCI indexes, of which roughly \$4.5 trillion were passively managed.

I often compare index investing to automation. With passive funds, our clients use indexes to make elements of the investment process more efficient. Passive investing allows investors to focus more heavily on asset allocation.

So far, market-cap equity indexes have accounted for the vast majority of the index revolution. Moving forward, three of the biggest possible growth areas for indexing are non-market-cap indexing, direct indexing and fixed-income indexing.

During periods of financial turmoil, the unique strengths of MSCI's Index business become even more salient. We offer indexes spanning different asset classes, exposures, styles and investment themes. This is now helping us meet investor demand for more specialized portfolio-construction tools.

Last year, for example, we launched Institutional Client-Designed Indexes, which will make it easier for asset owners and asset managers to build customized indexes that reflect their investment strategy. We also established a new partnership that will allow MSCI's fixed-income indexes and portfolio analytics to integrate the advanced pricing models developed by MarketAxess Holdings, including their tradability and liquidity scores.

As our 2022 results confirm, MSCI has maintained strong momentum in the index space. For the full year, our Index segment posted a record retention rate, a record level of non-recurring sales, and a record level of revenue from futures-and-options licenses. We also completed our 36th consecutive quarter of double-digit Index subscription run-rate growth.

The Shift to Outcome-Oriented Investing

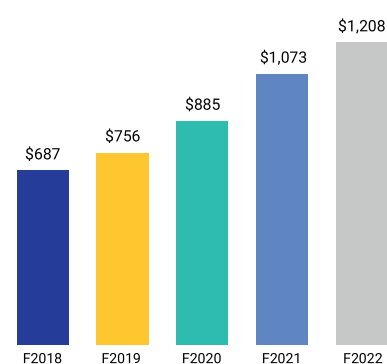
The expansion of indexing highlights a broader trend: More and more investors favor outcome-oriented investment strategies. This explains the growth of indexes that support particular investment objectives.

Factor indexes, for example, might target stocks that have demonstrated high growth, value, yield or momentum, or low volatility. Whereas thematic indexes target stocks associated with certain economic, technological and geopolitical megatrends that are transforming the way people live and work, such as digital innovation, robotics, renewable energy, biotechnology and cybersecurity.

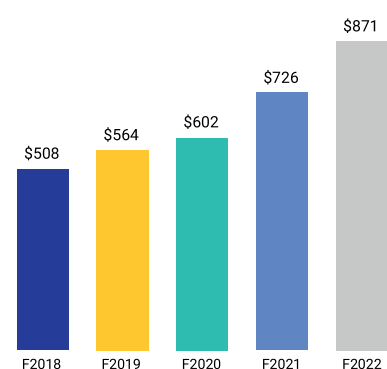
Any discussion of outcome-oriented strategies must include environmental, social and governance (ESG) investing. For all the debate over ESG, it remains widely misunderstood.

Markets have always adapted to meet the changing needs and expectations of investors. Incorporating ESG criteria into the investment process helps investors address previously neglected risks and opportunities, and thus make more informed decisions.

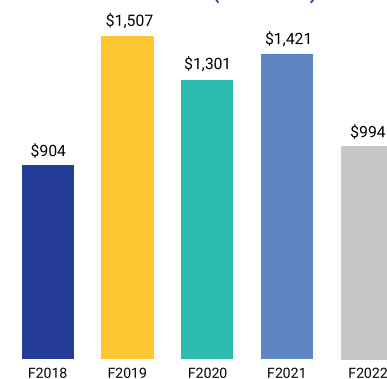
Operating Income (in millions)



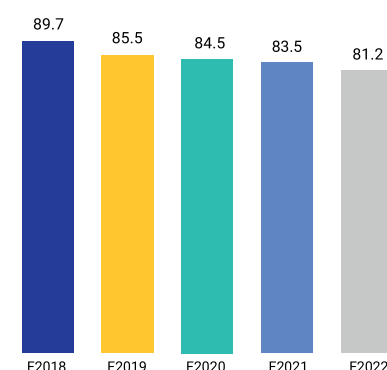
Net Income (in millions)



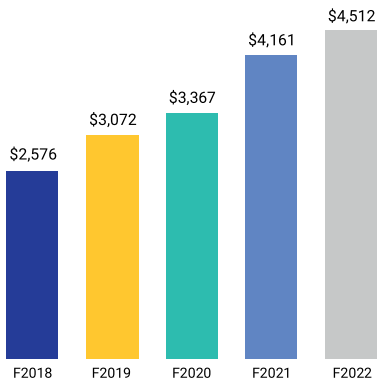
Cash and Cash Equivalents and Short-term Investments (in millions)



Diluted Shares (in millions)



Debt (in millions)

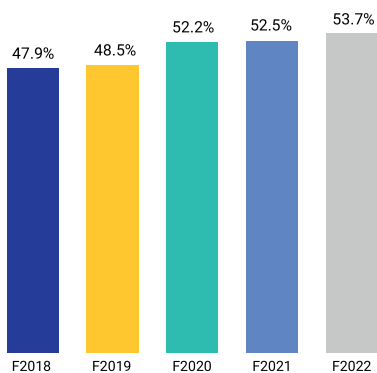


In other words, ESG is not about politics or ideology. It is about building better portfolios. That is why investors continue to make ESG integration a priority.

A 2022 PwC report found that more than 80% of institutional investors in the U.S. and Europe “plan to increase their allocations to ESG products over the next two years.” Similarly, when the Index Industry Association surveyed investment-fund companies across the U.S., U.K., Germany and France, an “overwhelming majority” said that ESG had become more important to their investment strategy between 2021 and 2022.

These findings are reinforced by client demand for MSCI’s ESG solutions, which has stayed relatively strong. In 2022, we delivered particularly impressive ESG growth with banks, wealth managers and corporates.

Operating Margin



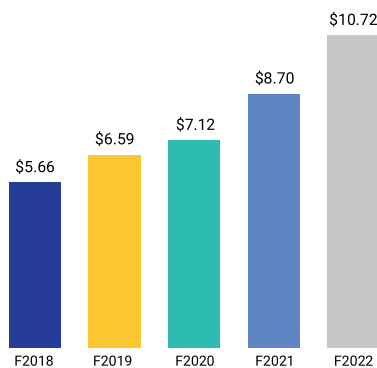
To expand our ESG offerings, we introduced the Bloomberg MSCI China ESG Index Suite, which consists of nine separate ESG indexes. Collectively, they represent the first-ever Bloomberg MSCI index suite to track both the RMB-denominated bond market and the U.S.-dollar-denominated Chinese bond market.

We also launched MSCI Corporate Sustainability Insights, a solution that allows companies to measure and compare their ESG and climate data against their peers.

The Increased Focus on Climate Change

Of all sustainability factors, climate risks have received the most public attention. It is easy to see why: The destructive consequences of rising global temperatures have become more visible than ever before.

Diluted EPS

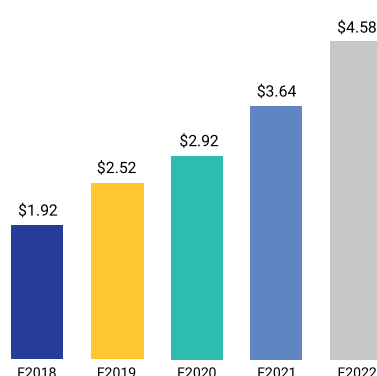


In 2022 alone, we witnessed record heat waves, record drought conditions, and record flooding across the planet. The United Nations Environment Program has projected that the current mix of global climate policies will lead to a temperature increase of 2.8 degrees Celsius by the end of this century. That is far above the 1.5-degree limit scientists believe is necessary to avoid the worst climate impacts.

What is true of sustainability risks in general is true of climate risks in particular: They can be material investment risks. In a recent Deutsche Bank investor survey, more than three-quarters of respondents said that climate change “either is already having a severe negative impact on the global economy, or will have it in the next 10 years if left unchallenged.”

As a result of these concerns, companies from all industries face growing pressure to reduce their carbon emissions, including their supply-chain emissions. For perspective, clean-energy investments must increase to more than \$4 trillion per year by 2030 to achieve net-zero emissions by 2050, according to the International Energy Agency. This will require nothing less than a global economic transformation – which means it will also require a huge increase in both the quantity and the quality of climate-related data, models and analytics.

Dividends per Share



At MSCI, we are developing the high-quality solutions investors need to accelerate the decarbonization of their portfolios. In 2022, we introduced several new products that can help clarify climate-related risks and opportunities.

For example, our Total Portfolio Footprinting (TPF) tool provides carbon-emissions data on more than 4 million financial securities. TPF has already played an essential role in helping us close strategic deals with asset managers, asset owners, banks, insurance companies and others.

Another new MSCI solution can help financial firms align with the European Banking Authority's ESG Pillar 3 prudential framework, which requires them to disclose climate risks. Meanwhile, MSCI Climate Action Indexes pinpoint companies across industries that are taking concrete steps to reduce their emissions and reimagine their operations for a net-zero world.

Powered by such wide-ranging solutions, Climate remains our fastest-growing segment. For the full year, we delivered 80% Climate run-rate growth across our product lines, including 94% growth in the Americas, while posting a 97.8% Climate retention rate.

Climate-focused investors depend on analytics to identify key drivers of risk and return. So it is not surprising that climate products have become an important source of growth for MSCI's Analytics segment. In 2022, both our climate and reporting sales in Analytics hit new full-year highs. We also achieved record levels of full-year recurring sales and recurring net-new sales in equity portfolio analytics.

Looking Ahead: Opportunities and Enablers

We see considerable opportunities in many other areas, such as private assets. Investors have been steadily increasing allocations to private equity, private credit, real estate and infrastructure, and MSCI is well positioned to meet their needs. A State Street survey conducted in late 2022 found that "68 percent of investors will continue to grow private markets allocations in line with current targets, despite rate rises reducing the attractiveness of leveraged strategies."

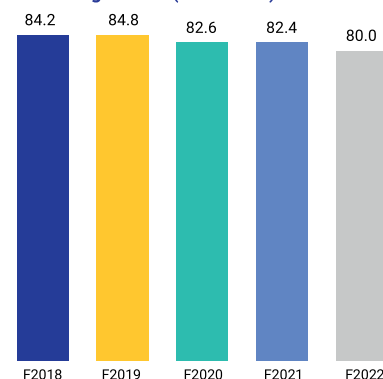
MSCI aims to become the leading facilitator of transparent markets for private assets, which have historically been somewhat opaque. That is what motivated our 2021 acquisition of Real Capital Analytics. Last year, we officially brought together our real-estate and infrastructure product lines under a combined segment known as MSCI Real Assets. As of June 2022, it provided fund and property data for more than \$31 trillion worth of assets around the world.

We have also developed innovative climate tools for private assets through our collaboration with Burgiss. As of early 2022, one of these tools offered climate data on around 50,000 private companies and more than 6,000 private-equity and private-debt funds.

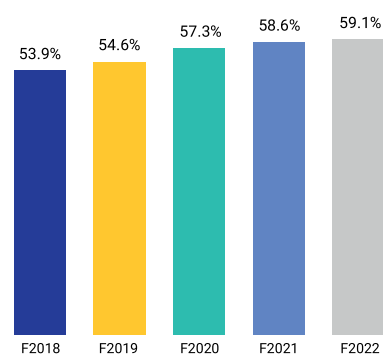
Our most vital enablers remain data and technology. With that in mind, MSCI is undergoing a tech-driven data transformation to help improve our products and services.

In December 2022, we expanded our strategic partnership with Microsoft to support our new MSCI ONE technology platform, which is built on Microsoft Azure. A month later, we announced another strategic partnership, with Google Cloud, to build an investment data-acquisition and data-development platform. The new platform will make it easier for our clients to translate raw data into actionable insights.

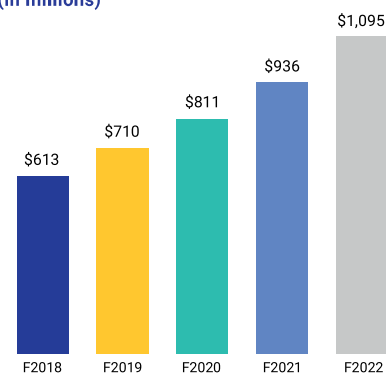
Outstanding Shares (in millions)



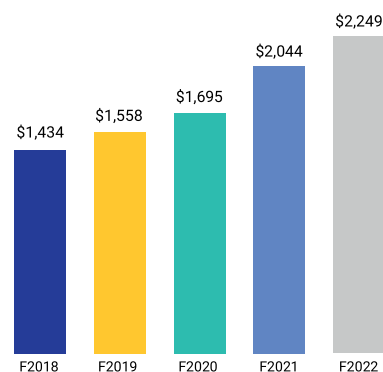
Adjusted EBITDA Margin

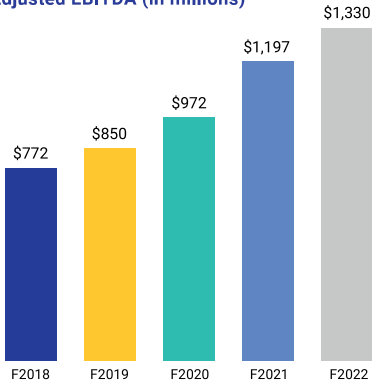


Net Cash Provided by Operating Activities (in millions)



Operating Revenues (in millions)

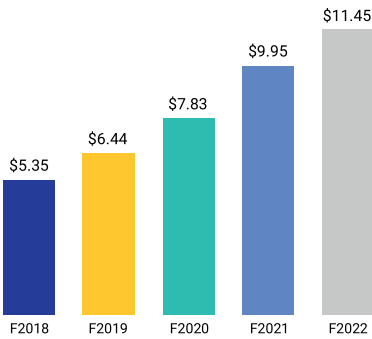


Adjusted EBITDA (in millions)

Of course, the foundation of MSCI's success has always been our culture — the values and behaviors that define who we are and how we work together while serving our clients. We have instilled a culture of diversity, inclusion, empowerment, collaboration, trust and accountability across our operations. These principles and character traits are inseparable from our performance as a company.

Peter Drucker famously said that culture eats strategy for breakfast. At MSCI, we recognize that culture makes strategy possible. Our own culture has helped us attract, develop and retain exceptional talent, which in turn has helped us identify and capitalize on new opportunities for growth. Even as our strategy evolves, our culture will continue to underpin everything we do.

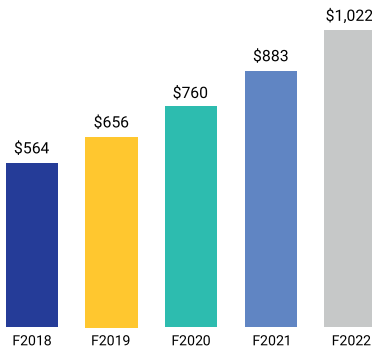
Looking ahead, we cannot know when inflation will subside, how high interest rates will rise, when the war in Ukraine will end, or whether the world economy will fall into recession. But we do believe that MSCI's unique competitive advantages will continue to set us apart.

Adjusted EPS

Sincerely yours,

Henry A. Fernandez

Chairman, Chief Executive Officer and Shareholder

Free Cash Flow (in millions)



Reconciliation of Net Income to Adjusted EBITDA (unaudited)

YEAR ENDED

IN THOUSANDS	Dec. 31 2022	Dec. 31 2021	Dec. 31 2020	Dec. 31 2019	Dec. 31 2018
Net income	\$870,573	\$725,983	\$601,822	\$563,648	\$507,885
Provision for income taxes	\$173,268	\$132,153	\$84,403	\$39,670	\$122,011
Other expense (income), net	\$163,799	\$214,589	\$198,539	\$152,383	\$57,002
Operating income	\$1,207,640	\$1,072,725	\$884,764	\$755,701	\$686,898
Amortization of intangible assets	\$91,079	\$80,592	\$56,941	\$49,410	\$54,189
Depreciation and amortization of property, equipment and leasehold improvements	\$26,893	\$28,901	\$29,805	\$29,999	\$31,346
Multi-year PSU payroll tax expense	—	—	—	\$15,389	—
Impairment related to sublease of leased property	—	\$7,702	—	—	—
Acquisition-related integration and transaction costs (1)	\$4,059	\$6,870	—	—	—
Consolidated adjusted EBITDA	\$1,329,671	\$1,196,790	\$971,510	\$850,499	\$772,433
Index adjusted EBITDA	\$985,407	\$951,312	\$766,493	\$670,188	\$607,853
Analytics adjusted EBITDA	\$247,895	\$198,799	\$172,924	\$152,113	\$143,645
ESG and Climate adjusted EBITDA	\$61,094	\$29,748	\$22,851	\$21,813	\$16,019
All Other - Private Assets adjusted EBITDA	\$35,275	\$16,931	\$9,242	\$6,385	\$4,916
Consolidated adjusted EBITDA	\$1,329,671	\$1,196,790	\$971,510	\$850,499	\$772,433
Operating margin %	53.7%	52.5%	52.2%	48.5%	47.9%
Adjusted EBITDA margin %	59.1%	58.6%	57.3%	54.6%	53.9%

(1) Incremental and non-recurring costs attributable to acquisitions directly related to the execution of the transaction and integration of the acquired business that have occurred no later than 12 months after the close of the transaction.

Reconciliation of Net Income and Diluted EPS to Adjusted Net Income and Adjusted EPS (unaudited)

YEAR ENDED

IN THOUSANDS, EXCEPT PER SHARE DATA	Dec. 31 2022	Dec. 31 2021	Dec. 31 2020	Dec. 31 2019	Dec. 31 2018
Net income	\$870,573	\$725,983	\$601,822	\$563,648	\$507,885
Plus: Amortization of acquired intangible assets and equity method investment basis difference	\$67,373	\$47,001	\$37,413	\$34,773	\$43,981
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 2024, 2025, 2026 and 2027 senior notes redemptions	—	\$59,104	\$44,930	\$16,794	—
Plus: Write-off of internally developed capitalized software	—	\$16,013	—	—	—
Plus: Impairment related to sublease of leased property	—	\$ 8,702	—	—	—
Plus: Acquisition-related integration and transaction costs (1)(2)	\$ 4,220	\$7,041	—	—	—
Less: Gain from changes in ownership interest of equity method investee	—	(\$6,972)	—	—	—
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	—	—	(\$6,256)	—	(\$8,272)
Less: Income tax effect (3)	(\$ 11,883)	(\$26,462)	(\$16,490)	(\$13,226)	\$1,678
Adjusted Net income	\$930,283	\$830,410	\$661,419	\$550,797	\$480,273
Diluted EPS	\$10.72	\$8.70	\$7.12	\$6.59	\$5.66
Plus: Amortization of acquired intangible assets and equity method investment basis difference	\$0.83	\$0.56	\$0.44	\$0.41	\$0.49
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 2024, 2025, 2026 and 2027 senior notes redemptions	—	\$0.71	\$0.53	\$0.20	—
Plus: Write-off of internally developed capitalized software	—	\$0.19	—	—	—
Plus: Impairment related to sublease of leased property	—	\$0.10	—	—	—
Plus: Acquisition-related integration and transaction costs (1)(2)	\$0.05	\$0.08	—	—	—
Less: Gain from changes in ownership interest of equity method investee	—	(\$0.08)	—	—	—
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)
Less: Tax Reform adjustments	—	—	(\$0.07)	—	(\$0.09)
Less: Income tax effect (3)	(\$0.15)	(\$0.31)	(\$0.19)	(\$0.16)	\$0.02
Adjusted EPS	\$11.45	\$9.95	\$7.83	\$6.44	\$5.35
Diluted weighted average common shares outstanding	81,215	83,479	84,517	85,536	89,701

(1) Acquisition-related integration and transaction costs of \$4.1 million are presented within "General and administrative" expenses and \$0.2 million are presented within "Depreciation and amortization of property, equipment and leasehold improvements" expenses for the year ended Dec. 31, 2022.

(2) Incremental and non-recurring costs attributable to acquisitions directly related to the execution of the transaction and integration of the acquired business that have occurred no later than 12 months after the close of the transaction.

(3) Adjustments relate to the tax effect of non-GAAP adjustments, which were determined based on the nature of the underlying non-GAAP adjustments and their relevant jurisdictional tax rates.



Reconciliation of Operating Expenses to Adjusted EBITDA Expenses (unaudited)

YEAR ENDED

IN THOUSANDS	Dec. 31 2022	Dec. 31 2021	Dec. 31 2020	Dec. 31 2019	Dec. 31 2018
Total operating expenses	\$1,040,958	\$970,819	\$810,626	\$802,095	\$747,086
Amortization of intangible assets	\$91,079	\$80,592	\$56,941	\$49,410	\$54,189
Depreciation and amortization of property, equipment and leasehold improvements	\$26,893	\$28,901	\$29,805	\$29,999	\$31,346
Multi-Year PSU payroll tax expense	—	—	—	\$15,389	—
Impairment related to sublease of leased property	—	\$7,702	—	—	—
Acquisition-related integration and transaction costs(1)	\$4,059	\$6,870	—	—	—
Consolidated adjusted EBITDA expenses	\$918,927	\$846,754	\$723,880	\$707,297	\$661,551
Index adjusted EBITDA expenses	\$317,802	\$300,452	\$250,002	\$250,749	\$227,622
Analytics adjusted EBITDA expenses	\$328,212	\$345,500	\$340,884	\$344,812	\$336,294
ESG and Climate adjusted EBITDA expenses	\$167,217	\$136,444	\$88,513	\$68,846	\$55,347
All Other - Private Assets adjusted EBITDA expenses	\$105,696	\$64,358	\$44,481	\$42,890	\$42,288
Consolidated adjusted EBITDA expenses	\$918,927	\$846,754	\$723,880	\$707,297	\$661,551

(1) Incremental and non-recurring costs attributable to acquisitions directly related to the execution of the transaction and integration of the acquired business that have occurred no later than 12 months after the close of the transaction.

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

YEAR ENDED

IN THOUSANDS	Dec. 31 2022	Dec. 31 2021	Dec. 31 2020	Dec. 31 2019	Dec. 31 2018
Net cash provided by operating activities	\$1,095,369	\$936,069	\$811,109	\$709,523	\$612,762
Capital expenditures	(\$13,617)	(\$13,509)	(\$21,826)	(\$29,116)	(\$30,257)
Capitalized software development costs	(\$59,278)	(\$39,285)	(\$29,149)	(\$24,654)	(\$18,704)
Capex	(\$72,895)	(\$52,794)	(\$50,975)	(\$53,770)	(\$48,961)
Free cash flow	\$1,022,474	\$883,275	\$760,134	\$655,753	\$563,801
Net Income	\$870,573	\$725,983	\$601,822	\$563,648	\$507,885

Notes Regarding the Use of Non-GAAP Financial Measures

The non-GAAP financial measures presented herein should not be considered as alternative measures for the most directly comparable GAAP financial measures. The non-GAAP financial measures presented herein 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, when applicable, the impact related to the vesting of multi-year restricted stock units granted in 2016 ("Multi-Year PSUs"), impairment related to sublease of leased property and certain non-recurring acquisition-related integration and transaction costs.

"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, when applicable, the impact related to the vesting of the Multi-Year PSUs, impairment related to sublease of leased property and certain non-recurring acquisition-related integration and transaction costs.

"Adjusted EBITDA margin" is defined as adjusted EBITDA divided by operating revenues.

"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 and, at times, certain other transactions or adjustments, including, when applicable, the impact related to the vesting of the Multi-Year PSUs, the impact related to costs associated with debt extinguishment, the impact from the write-off of internally developed capitalized software, the impact from impairment related to sublease of leased property, the impact related to certain non-recurring acquisition-related integration and transaction costs, the impact related to gain from changes in ownership interest of equity method investee, the impact of divestitures of Financial Engineering Associates, Inc. ("FEA") and Investor Force Holdings, Inc. ("InvestorForce") and the impact of Tax Reform adjustments.

"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.

We believe adjusted EBITDA, adjusted EBITDA margin 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 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 that the non-GAAP financial measures presented herein facilitate meaningful period-to-period comparisons and provide a baseline for the evaluation of future results.

Adjusted EBITDA expenses, adjusted EBITDA, adjusted EBITDA margin, adjusted net income, adjusted EPS, Capex and free cash flow 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.



Corporate Information

BOARD OF DIRECTORS

Henry A. Fernandez

Chairman and CEO, MSCI Inc.

Robert G. Ashe^{(1),(4),(5)}

Former General Manager,
Business Analytics, IBM Corp
(Formerly CEO of Cognos Inc.)

Wayne Edmunds^{(1),(2)}

Former Interim Group CEO, BBA Aviation,
and Former CEO, Invensys plc

Catherine R. Kinney⁽³⁾

Former President,
New York Stock Exchange

Robin Matlock⁽³⁾

Former Senior Vice President and
Chief Marketing Officer, VMware, Inc.

Jacques P. Perold^{(3),(4)}

Former President, Fidelity Management
and Research Company

C.D. Baer Pettit

President and COO, MSCI Inc.

Sandy C. Rattray^{(1),(4)}

Former Chief Investment Officer, Man Group

Linda H. Riefler^{(1),(2)}

Former Chairman of Global Research and
Chief Talent Officer, Morgan Stanley

Marcus L. Smith^{(2),(4)}

Former Chief Investment Officer,
Canada Equity and Portfolio Manager,
International Equities,
MFS Investment Management

Rajat Taneja⁽¹⁾

President of Technology, Visa Inc.

Paula Volent^{(3),(4)}

Vice President and Chief Investment Officer,
The Rockefeller University

⁽¹⁾ Member of the Audit and Risk
Committee

⁽²⁾ Member of the Compensation, Talent
and Culture Committee

⁽³⁾ Member of the Governance and
Corporate Responsibility Committee

⁽⁴⁾ Member of the Strategy and Finance
Committee

⁽⁵⁾ Lead Director

EXECUTIVE COMMITTEE

Henry A. Fernandez^(a)

Chairman and CEO

C.D. Baer Pettit^(a)

President and Chief Operating Officer

Andrew C. Wiechmann^(a)

Chief Financial Officer

Jeremy Baskin

Head of Buy Side Client Segments

Christine Berg

Head of Client Coverage, Americas

Cristina Bondolowski

Chief Marketing Officer

Remy Briand

Chief Product Officer and Head of Index

Scott Colville

Head of Analytics Engineering

Scott A. Crum^(a)

Chief Human Resources Officer

Robert J. Gutowski^(a)

General Counsel

Axel Kilian

Head of Client Coverage-EMEA

Linda-Eling Lee

Head of ESG and Climate Research

Jorge Mina

Head of Analytics

Eric Moen

Head of ESG and Climate

Alvise Munari

Chief Client Officer

Kazuya Nagasawa

Head of APAC Client Coverage and
Head of APAC Analytics

Jean-Yves Pelletier

Head of Data and Content Services

Peter Shepard

Head of Analytics Research and
Product Development

Charissa Smith

Head of Private Markets Planning

Jigar Thakkar

Chief Technology Officer and Head of
Engineering

René Veerman

Head of Real Assets

^(a) Designated an Executive Officer for
SEC reporting purposes

ANNUAL MEETING

The annual meeting of the shareholders
of MSCI Inc. will be held virtually via the
internet at:

www.virtualshareholdermeeting.com/MSCI2023

on April 25, 2023 at 2:30 PM (EDT)

REGISTRAR AND TRANSFER AGENT

Broadridge Corporate Issuer Solutions
MSCI Inc.

c/o Broadridge Corporate
Issuer Solutions
P.O. Box 1342
Brentwood, NY 11717

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(inside the U.S. & Canada)

T: +1 720 378 5591
(outside the U.S. & Canada)

W: www.shareholder.broadridge.com
E: shareholder@broadridge.com

INDEPENDENT AUDITOR

PricewaterhouseCoopers LLP
New York, NY

STOCK SYMBOL

MSCI Inc.'s common stock is traded on
the New York Stock Exchange under the
symbol "MSCI."

FORM 10-K AND OTHER REPORTS

A copy of the MSCI Inc. Form 10-K, as
filed with the Securities and Exchange
Commission, is included with this Annual
Report and is also available without charge
to shareholders upon written request.
Requests should be directed to Investor
Relations at MSCI's corporate address or
by email.

This Annual Report, as well as Forms 10-K,
10-Q and 8-K and earnings and other news
releases, can be viewed and printed at
<http://ir.msci.com>.

CORPORATE ADDRESS

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**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 10-K

(Mark One)

- ☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2022
- ☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from _____ to _____
Commission file number 001-33812



MSCI INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

13-4038723
(I.R.S. Employer
Identification Number)

**7 World Trade Center
250 Greenwich Street, 49th Floor
New York, New York 10007
(Address of Principal Executive Offices, zip code)
(212) 804-3900
(Registrant's telephone number, including area code)
Securities registered pursuant to Section 12(b) of the Act:**

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, par value \$0.01 per share	MSCI	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller Reporting Company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of Common Stock held by non-affiliates of the registrant as of the last business day of the registrant's most recently completed second fiscal quarter (based on the closing price of these securities as reported by The New York Stock Exchange on June 30, 2022) was \$32,171,890,320. Shares of Common Stock held by executive officers and directors of the registrant are not included in the computation. However, the registrant has made no determination that such individuals are "affiliates" within the meaning of Rule 405 under the Securities Act of 1933.

As of February 3, 2023, there were 79,959,989 shares of the registrant's Common Stock, par value \$0.01 per share, outstanding.

Documents incorporated by reference: Portions of the registrant's proxy statement for its 2023 Annual Meeting of Stockholders, to be filed within 120 days of the end of the fiscal year ended December 31, 2022, are incorporated herein by reference into Part III of this Form 10-K.

MSCI INC.
FORM 10-K
FOR THE YEAR ENDED DECEMBER 31, 2022
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Except as the context otherwise indicates, the terms “MSCI,” the “Company,” “we,” “our” and “us” refer to MSCI Inc. together with its subsidiaries.

This Annual Report on Form 10-K contains trademarks, service marks and trade names owned by us, as well as those owned by others. MSCI, Barra, RiskMetrics, IPD, Real Capital Analytics, Datscha and other MSCI brands and product names are the trademarks, service marks or registered trademarks of MSCI, its subsidiaries or licensors in the United States and other jurisdictions.

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FORWARD-LOOKING STATEMENTS

We have included in this Annual Report on Form 10-K, and from time to time may make in our public filings, press releases or other public statements, certain statements that constitute forward-looking statements. In addition, our management may make forward-looking statements to analysts, investors, representatives of the media and others. These forward-looking statements are not historical facts and represent only MSCI's beliefs regarding future events, many of which, by their nature, are inherently uncertain and beyond our control. These forward-looking statements 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. Statements concerning our financial position, business strategy and plans or objectives for future operations are forward-looking statements. 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 our control and that could materially affect our actual results, levels of activity, performance or achievements. Such risks and uncertainties include those set forth under "Risk Factors" in Part I, Item 1A of this Annual Report on Form 10-K. 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 reflects our current views with respect to future events levels of activity, performance or achievements and is subject to these and other risks, uncertainties and assumptions relating to our operations, results of operations, growth strategy and liquidity. The forward-looking statements in this report speak only as of the time they are made and do not necessarily reflect our outlook at any other point in time. 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. Therefore, readers should carefully review the risk factors set forth in this Annual Report on Form 10-K and in other reports or documents we file from time to time with the Securities and Exchange Commission (the "SEC").

PART I

Item 1. Business

Overview

We are a leading provider of critical decision support tools and solutions for the global investment community. Our mission-critical offerings help investors address the challenges of a transforming investment landscape and power better investment decisions. Leveraging our knowledge of the global investment process and our expertise in research, data and technology, we enable our clients to understand and analyze key drivers of risk and return and confidently and efficiently build more effective portfolios.

Investors all over the world use our research-driven and technology-enabled tools and solutions to gain insights and improve transparency throughout their investment processes. Our tools and solutions help investors define their investment universe; inform and analyze their asset allocation and portfolio construction decisions; measure and manage portfolio performance and risk; implement sustainable, climate-focused and other investment strategies; conduct performance attribution; construct and manage exchange traded funds (“ETFs”) and other indexed financial products; and facilitate reporting to stakeholders.

Our products and services include indexes; portfolio construction and risk management tools; environmental, social and governance (“ESG”) and climate solutions; and real estate market and transaction data and analysis. We are increasingly focused on open and flexible technology, and our content and capabilities can be accessed by our clients through multiple channels and platforms.

We aim to anticipate the needs of the investment industry with our client-centric focus and our deep understanding of our clients’ workflows, challenges and goals. We are focused on product innovation and data collection to address the evolving needs of an increasingly complex industry. In order to most effectively serve our clients, we are committed to advancing an integrated approach to our offerings, achieving service excellence, enhancing our differentiated research and content, and delivering our solutions via flexible, cutting-edge technology.

Clients

Our clients comprise a wide spectrum of the global investment industry and include the following key client types:

- Asset owners (including pension funds, endowments, foundations, central banks, sovereign wealth funds, family offices and insurance companies)
- Asset managers (including managers of institutional funds and accounts, mutual funds, hedge funds, ETFs, insurance products, private banking products and real estate investment trusts)
- Financial intermediaries (including banks, broker-dealers, exchanges, custodians, trust companies, fund administrators and investment consultants)
- Wealth managers (including robo-advisors and self-directed brokerages)
- Real Estate Professionals (including real estate brokers, agents, developers, lenders and appraisers)
- Corporates (including public and private companies and their advisors)

As of December 31, 2022 we served over 6,600 clients¹ in more than 95 countries. For the year ended December 31, 2022, our largest client organization by revenue, BlackRock, accounted for 10.3% of our consolidated operating revenues, with 95.2% of the operating revenues from BlackRock coming from fees based on the assets in BlackRock’s ETFs that are based on our indexes.

Industry Trends and Competitive Advantages

We believe we are uniquely positioned to benefit from emerging trends and to help our clients adapt to a large and rapidly expanding and evolving investment industry. Investing has grown in complexity, with more choices across asset classes, security types and geographies, and more consideration of a wider array of risks and opportunities, including those related to ESG and climate. In addition, the construction and management of investment portfolios are becoming increasingly outcome-oriented, rules-based and technology-driven. As a result, the investment process is transforming, which is reflected in several trends we have observed, including:

- Changing client operating models and business strategies, driven in part by fee compression, changing demographics, the regulatory environment and shifting economic outlooks;

¹ For this purpose, affiliated companies under a common parent entity are aggregated and counted as a single client.

- Increasing use of global, multi-asset-class and other complex investment strategies, including strategies incorporating private asset investments and factor objectives, as investors seek specific and unique outcomes;
- The need for high-quality data, insightful models and timely research during times of extreme volatility and high uncertainty;
- Accelerating integration of ESG and climate considerations into investment processes, reporting and products, as sustainable investing becomes more prominent and investors increasingly focus on companies with strong sustainability practices as an indicator of long-term resilience;
- Continuing growth of indexed investing through indexed investment products such as ETFs, mutual/UCITS funds and annuities, as well as indexed derivatives such as futures, options, structured products and over-the-counter swaps, and other vehicles that seek to track an index, as investors increasingly seek lower-cost investment strategies or seek to incorporate increasingly complex investment strategies across geographies, sectors, factors, trends and other considerations;
- Increasing allocation of capital to real estate and other private assets and desire for greater transparency into the performance of private assets, with an increased focus on climate and income risk;
- Increasing demand for data and tools that clients can integrate to support customized portfolio construction and highly specialized preferences and objectives; and
- Growing use of advanced technologies to enhance investment analytics, evaluate data, streamline operations, create efficiencies and gain competitive advantages.

We believe the following competitive advantages position us well to meet client demands in light of these trends:

- *Differentiated research-enhanced content* provides our clients with insights to better understand and adapt to a complex and fast-changing marketplace. We are continually developing a wide range of differentiated content and have amassed an extensive database of historical global market data, proprietary equity index data, ESG and climate data, factor models, private asset benchmark data and risk algorithms, all of which can be critical components of our clients' investment processes. This content is grounded in our deep knowledge of the global investment process and fueled by experienced research and product development and data management teams.
- *Client-centricity* allows us to build strong client relationships globally and better understand and service our clients' needs in the markets in which they operate. Our client coverage team develops and maintains strong and trusted relationships with senior executives and investment professionals, and we regularly consult with clients and other market participants to discuss their needs, investment trends and implications for our research, product development and client servicing goals.
- *Strong product innovation, supported by flexible, scalable, cutting-edge technology* developed by our global team of sophisticated technology and data professionals, enables clients to use MSCI, third-party and their own content efficiently and cost-effectively. Our commitment to open and flexible technology allows us to more efficiently process data for distribution and deliver advanced platform flexibility for easy integration into our clients' workflows.

Strategy

We provide critical tools and solutions that enable investors to manage the transformations taking place in the investment industry, better understand performance and risk, and build portfolios more effectively and efficiently to achieve their investment objectives. We are focused on the following key initiatives to deliver actionable and integrated client solutions:

- *Extend leadership in research-enhanced content across asset classes.* We continue to develop and deliver innovative solutions that incorporate proprietary and highly differentiated content based on rich insights from our research and product development teams. In addition to enhancing our position as a leading provider of tools and solutions for equity investors globally, our strategic priorities also include enhancing our content relating to other asset classes and strategies, including ESG and climate, thematic, factors, fixed income, liquidity and private assets, all of which we believe represent significant growth opportunities.
- *Lead the enablement of ESG and climate investment integration* by delivering the data, information and applications necessary to identify, assess and incorporate material ESG and climate risks and opportunities. The global adoption of ESG and climate-focused investment considerations and the establishment of ESG and climate reporting frameworks are both rapidly accelerating. As demand from our clients for ESG and climate solutions increases,

MSCI's research, tools and solutions will aim to provide the transparency our clients need to better integrate ESG and climate risks and opportunities into their investment processes. Our ESG ratings and climate data and research are also utilized in our index, analytics and private asset tools and solutions – from ESG and climate indexes to incorporation of ESG and climate data in risk analysis to climate and emissions assessments specific to real estate assets and private equity portfolios. We are focused on being an influential thought leader on these climate-related considerations for the investment industry.

- *Enhance distribution and content-enabling technology.* We are deploying and developing advanced technology to drive integration and efficiencies, accelerate the pace of innovation and enhance distribution and the client experience. We increasingly utilize proprietary and third-party technologies, including artificial intelligence, machine learning and natural language processing tools, to enhance our ability to gather and analyze data, create content and automate and enhance the efficiency of many of our data processes. Our open-architecture, web-based Investment Solutions as a Service (“ISaaS”) offerings now include MSCI ONE, an integrated platform that provides access to investment content across a number of our products and solutions. These offerings help us deliver MSCI content and solutions to our clients at scale.
- *Expand solutions that empower client customization.* We aim to further enhance how we support our clients' investment objectives by embedding our highly differentiated research, data and methodologies into solutions that allow clients to incorporate their custom preferences. For example, we will leverage existing capabilities and applications to deliver solutions that will allow clients to reflect their unique risk and return, ESG and climate and thematic preferences, as well as tax optimization strategies in a scalable way. In addition, we aim to meet client demand for flexible tools and data needed to construct and manage portfolios.
- *Strengthen client relationships and grow into strategic partnerships with clients.* We aim to be a strategic partner to members of the investment community by anticipating their needs, promoting the full breadth of our tools, data and solutions, and building a seamless experience across our offerings. The depth of knowledge of our client coverage teams, including dedicated account managers, ensures that we are engaging with our clients in a holistic and integrated manner. In particular, we are leveraging our existing offerings to serve new and developing client use cases. Through innovation, we aim to enhance the effectiveness and ease of use of our products as we further demonstrate the value of our content, applications and services.
- *Execute strategic relationships and acquisitions with complementary content and technology companies.* We regularly evaluate and selectively pursue strategic relationships with, and acquisitions of, providers of unique and differentiated content, products and technologies that we believe have the potential to complement, enhance or expand our offerings and client base. In order to drive value, we target acquisitions and strategic relationships that can be efficiently integrated into our existing operational structure and global sales network. For example, through our 2021 acquisition of Real Capital Analytics, Inc. (“RCA”), we expanded MSCI's robust suite of real asset solutions, by allowing us to provide real estate industry professionals with more data, analytics and support tools to manage investments and understand performance and risk, including climate risks, within their portfolios.

Financial Model

We have an attractive financial model due to our recurring revenue and strong cash generation. Clients purchase our products and services primarily through recurring fixed and variable fee arrangements, a business model which has historically delivered stable revenue and predictable cash flows. Finally, our disciplined capital-allocation policy provides us with flexibility to balance internal resources and investment needs, acquisitions and shareholder returns through dividends and opportunistic share repurchases.

See Part II, Item 7. “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Overview” and Note 1, “Introduction and Basis of Presentation—Significant Accounting Policies—Revenue Recognition,” of the Notes to the Consolidated Financial Statements included herein for information on how we generate revenue and our revenue recognition policy.

Segments

For the year ended December 31, 2022, we had the following five operating segments: Index, Analytics, ESG and Climate, Real Assets and The Burgiss Group, LLC (“Burgiss”), which are presented as the following four reportable segments: Index, Analytics, ESG and Climate, and All Other – Private Assets. For reporting purposes, the Real Assets and Burgiss operating segments are combined and presented as All Other – Private Assets, as they did not meet the thresholds for separate presentation. During the year ended December 31, 2022, the Company renamed the Real Estate operating segment to Real Assets. The Burgiss operating segment represents the Company's equity method investment in Burgiss. Financial results related to MSCI's acquisition of RCA have

been included prospectively as a component of the Real Assets operating segment and presented as a component of the All Other – Private Assets reportable segment, commencing as of September 13, 2021 (the date we completed the acquisition).

Index

Clients use our indexes in many areas of the investment process, including for developing indexed financial products (e.g., ETFs, mutual funds, annuities, futures, options, structured products, over-the-counter derivatives), performance benchmarking, portfolio construction and rebalancing, and asset allocation. We currently calculate more than 278,000² end-of-day indexes daily and more than 16,000 indexes in real time. Clients access our index data directly from MSCI or from third-party vendors worldwide.

Our index product offerings include:

- *MSCI Global Equity Indexes.* MSCI Global Equity Indexes are designed to measure returns across a wide variety of equity markets, size segments, sectors and industries. As of December 31, 2022, we calculated indexes that covered more than 80 developed, emerging, frontier and standalone equity markets, as well as various regional indexes built from the component indexes.
- *ESG and Climate Indexes.* ESG and Climate Indexes are constructed from an underlying index by applying data from our ESG and Climate segment to additional screening or other criteria.
- *Factor Indexes.* Factor Indexes seek to reflect the performance characteristics of a range of investment styles and strategies, such as momentum or value. These indexes include stocks that demonstrate high exposure to the target factor. In addition to single factor indexes, we offer multiple-factor indexes for investors with diversified multi-factor strategies.
- *Thematic Indexes.* Thematic Indexes are designed to measure the performance of companies associated with shifts in macroeconomic, geopolitical and technological trends. These indexes can target areas of interest under megatrend categories such as the environment, healthcare and lifestyle. Examples of our Thematic Indexes include digital economy, efficient energy, genomic innovation and smart cities.
- *Custom Indexes.* Custom Indexes are calculated by applying additional criteria supplied by a client – such as stock exclusion lists, currency hedging rules, tax rates or special weighting – to an MSCI index. Investors with unique index requirements can build an index to meet their specific needs and better update index design over time to support their evolving investment strategies.
- *Fixed Income Indexes.* Fixed Income Indexes include both investment grade and high-yield securities across a number of currencies that reflect the performance of credit markets generally, or specific investment strategies, including climate-focused or factor strategies.
- *Real Estate Indexes.* Real Estate Indexes provide transparency and insight to private real estate investment strategies.

In 2022, we launched a number of new indexes, including the following:

- *MSCI Global Quarterly Property Index.* The MSCI Global Quarterly Property Index tracks the property-level performance of quarterly-valued assets across the world's major real estate markets. This index aims to help investors as they monitor and manage international real estate portfolios, particularly in the context of macroeconomic and geopolitical developments.
- *MSCI ACWI IMI Virology Index.* Part of MSCI's previously announced strategic collaboration with Royalty Pharma plc, the MSCI ACWI IMI Virology Index aims to measure the performance of a set of companies associated with biotech innovation and the treatment of infectious diseases.
- *MSCI Climate Action Indexes.* The MSCI Climate Action Indexes are a suite of equity indexes that are designed to support investors with a strategy focused on companies that are leaders in their sectors with respect to climate transition activities, including in emissions reduction commitments, climate risk management and revenue from greener businesses.
- *Bloomberg MSCI China ESG Index Suite.* This index suite includes nine ESG indexes and is the first Bloomberg MSCI index suite that tracks the performance of the RMB-denominated bond and USD-denominated Chinese bond markets, while incorporating ESG and socially responsible investment considerations.

Our Index segment also includes revenues from licenses of *GICS* and *GICS Direct*, the global industry classification standard jointly developed and maintained by MSCI and S&P Dow Jones Indices, a division of S&P Global Inc. This classification system was developed in response to investors' need for a comprehensive and consistent framework for classifying companies into industries.

² The number of indexes includes different return versions (e.g., price, net and gross returns) but does not include different currency versions.

GICS is widely accepted as an industry analysis framework for investment research, portfolio management and asset allocation. GICS Direct is a dataset comprised of active companies and securities classified by sector, industry group, industry and sub-industry in accordance with the proprietary GICS methodology. The *MSCI Sector Indexes* are comprised of GICS sector, industry group, and industry indexes across countries and regions in Developed, Emerging and select Frontier markets.

For the year ended December 31, 2022, 58.0% of our revenues were attributable to our Index segment. A majority of those revenues were attributable to annual, recurring subscriptions. A portion of our revenues comes from clients who use our indexes as the basis for indexed investment products. Such fees are primarily based on a client's assets under management ("AUM") or trading volumes and are referred to herein as asset-based fees. Since market movement and investment trends impact our asset-based fees, our revenues from asset-based fees are subject to volatility. For the year ended December 31, 2022, asset-based fees accounted for 40.5% of the total revenues for our Index segment.

Analytics

Our Analytics segment offers risk management, performance attribution and portfolio management content, applications and services that provide clients with an integrated view of risk and return and tools for analyzing market, credit, liquidity, counterparty and climate risk across all major asset classes, spanning short-, medium- and long-term time horizons. Our offerings also support clients' various regulatory reporting needs.

Our Analytics tools and capabilities include the following: models to support factor-based analytics (e.g., *Barra* equity models and fixed income and multi-asset class ("MAC") models), pricing models and single security analytics, time series-based analytics, stress testing, performance attribution, portfolio optimization and liquidity risk analytics, as well as underlying inputs such as interest rate and credit curves. We continue to develop new and improved tools and capabilities in response to the evolving needs of our clients. In addition, our analytics capabilities are helping to fuel growth in key areas across our business, such as our factor indexes and many of our climate risk and reporting offerings.

Our clients access our Analytics tools and content through our proprietary applications and application programming interfaces ("APIs"), third-party applications or directly through their own platforms. Our Analytics solutions provide clients with tools to construct and manage portfolios, including integrated market data from multiple third parties as well as content from MSCI's other segments, which significantly reduces the operational burden on clients to independently source this information and populate it in our Analytics products. Our key Analytics products include:

- *RiskMetrics RiskManager*. RiskMetrics RiskManager provides risk analytics across a broad range of publicly traded instruments and private assets. Clients use RiskManager for daily analysis, including: Value-at-Risk ("VaR") simulation; measuring and monitoring market and liquidity risk at position, fund and firm levels; sensitivity analysis and stress testing; interactive what-if analysis; counterparty credit exposure; and regulatory risk reporting.
- *BarraOne*. Powered by our MAC Barra factor model, BarraOne provides clients with MAC risk and performance analytics. BarraOne allows clients to build equity, fixed income, and MAC portfolios with specific risk, ESG and climate exposures.
- *Barra Portfolio Manager*. Barra Portfolio Manager is an integrated risk, performance and portfolio-construction interactive platform with a flexible user interface that enables our clients to design investment strategies and build portfolios, and to share analytics and reports across their organizations. It is used by equity fund managers and their teams to gain additional portfolio insight and manage their investment processes more systematically.
- *RiskMetrics WealthBench and RiskMetrics CreditManager*. RiskMetrics WealthBench is a web-based platform used by private banks, financial advisers, brokerages and trust companies to help wealth managers assess portfolio risk, construct asset allocation policies and create comprehensive client proposals. RiskMetrics CreditManager is a portfolio credit risk management system used primarily by banks to quantify portfolio credit risk by capturing market exposure, rating changes and default risk.
- *Climate Lab Enterprise*. Powered by MSCI's climate data integrated with MSCI's enterprise analytics infrastructure, Climate Lab Enterprise enables our clients to measure, manage and monitor net-zero commitments and climate exposure and risks. Climate Lab Enterprise is able to aggregate climate data across multiple portfolios and asset classes, providing clients the ability to understand alignment with their climate goals from the enterprise level down through portfolios to individual positions and issuers.
- *Risk Insights*. Our Risk Insights offering calculates, stores and delivers a broad range of risk measures to help investors identify trends and respond to rapid changes in markets. Risk Insights automates many tasks to allow investors to more quickly and effectively understand the overall level of risk in their portfolios, how that risk has changed, and what factors may have caused the changes.

Our Analytics segment also provides various managed services to help clients operate more efficiently, including consolidation of client portfolio data from various sources, review and reconciliation of input data and results, and customized reporting, including ESG and climate reporting. In addition, our RiskMetrics HedgePlatform service allows clients such as funds of funds, pension funds and endowments who invest in hedge funds to measure, evaluate and monitor the risk of their hedge fund investments across multiple hedge fund strategies.

For the year ended December 31, 2022, 25.6% of our revenues were attributable to our Analytics segment.

ESG and Climate

The ESG and Climate segment³ offers products and services that help institutional investors understand how ESG and climate considerations can impact the long-term risk and return of their portfolio and individual security-level investments. We provide data, ratings, research and tools to help investors navigate increasing regulation, meet new client demands and better integrate ESG and climate elements into their investment processes.

In recent years, ESG and climate related issues have become key business priorities across industries. At MSCI, we believe our ESG and Climate solutions support ESG integration by strengthening transparency around ESG and climate metrics and helping to analyze and quantify ESG and climate risks. Investors commonly use our ESG and Climate solutions, including MSCI ESG Ratings, to help assess ESG-related financial risks in their investment processes and to help inform their investment decisions. Our ESG and Climate solutions are also used by some clients to help them identify investments that may generate a social or environmental impact or that may otherwise align with an investor's ethical values.

Our ESG and Climate research team analyzes over 10,000⁴ entities worldwide, and we will continue to expand and deepen our coverage to help investors and others in their asset allocation, portfolio construction and risk management processes. Clients include global asset managers, leading asset owners, consultants, advisers, corporates and academics.

Our ESG and Climate offerings include:

- *MSCI ESG Ratings.* Our ESG ratings aim to measure a company's resilience to long-term ESG risks. Companies are scored on an industry-relative scale across the most relevant key ESG issues based on a company's business model. MSCI ESG Ratings include ratings of equity issuers and fixed income securities. The MSCI ESG Industry Materiality Map is a public tool that explores the key ESG issues by GICS sub-industry or sector and their contribution to companies' overall ESG ratings. In assigning an MSCI ESG Rating, we collect the most relevant, publicly available data and assess the most significant ESG risks a company faces. Investors use MSCI ESG Ratings for a variety of purposes, including to assist with fundamental or quantitative analysis, portfolio construction and risk management, engagement and thought leadership, benchmarking and custom index design.
- *MSCI ESG Business Involvement Screening Research.* MSCI ESG Business Involvement Screening Research is a screening service that enables institutional investors to manage ESG standards and restrictions reliably and efficiently. Asset managers, investment advisers and asset owners can access screening research through the online MSCI ESG Manager platform or a data feed to support alignment with their investment guidelines, implement client mandates or manage potential ESG portfolio risks.
- *MSCI Climate Solutions.* With MSCI Climate Solutions, investors and issuers utilize our climate data and tools to support their investment decision making. These activities can include measuring and reporting on climate risk exposure, implementing low-carbon or fossil-fuel-free strategies, factoring climate change research into risk management processes and engaging companies and external stakeholders. For example, in 2022, we launched Total Portfolio Footprinting, which helps financial institutions better understand the extent and impact of greenhouse gas emissions at companies they are financing and provides information needed to focus on sustainable business practices.

MSCI ESG ratings and certain other ESG and climate data provided to our clients are also made available to, and used in, our other operating segments, such as in the construction of our MSCI ESG and Climate equity and fixed income indexes. These Index products are designed to help institutional investors more effectively benchmark ESG investment performance, issue indexed investment products, as well as manage, measure and report on ESG mandates.

For a description of regulation applicable to MSCI ESG Research LLC, see “—Government Regulation” below.

³ Products and services in our ESG and Climate segment are provided by MSCI ESG Research LLC, a wholly owned subsidiary of MSCI Inc. that is registered with the U.S. Securities and Exchange Commission (SEC) as an Investment Adviser under the Investment Advisers Act of 1940. MSCI ESG Ratings are used as an input in the construction and calculation of MSCI ESG indexes, which are not subject to our SEC registration. MSCI indexes are products of MSCI Inc., and MSCI Limited is the benchmark administrator.

⁴ Does not include subsidiary-level companies.

For the year ended December 31, 2022, 10.2% of our revenues were attributable to our ESG and Climate segment.

All Other – Private Assets

For reporting purposes, our Real Assets and Burgiss operating segments are combined and presented as All Other – Private Assets.

Our Real Assets offerings include transaction data, benchmarks, return-analytics, climate assessments and market insights for tangible assets such as real estate and infrastructure. In 2021, we completed our acquisition of RCA to meaningfully accelerate our Real Assets strategy. RCA's rich transaction and pricing data enhances our offering to clients and allows us to integrate this information in other MSCI products including indexes, climate risk models and other MSCI solutions.

Our Real Assets performance and risk analytics range from enterprise-wide to property-specific analytics. We also provide business intelligence products to real estate owners, managers, developers and brokers worldwide. Some of the risk analytics generated as part of our Real Assets offerings are also used in the products offered by our other operating segments.

Our Real Assets offerings include:

- *Real Capital Analytics*. RCA aggregates timely transaction data and provides valuable information on market pricing, capital flows and investment trends in more than 170 countries. Our clients use this unique data to formulate strategies, source new opportunities and execute deals.
- *MSCI Real Estate Enterprise Analytics*. Our Real Estate Enterprise Analytics application offers an interactive, integrated view to private real estate investors and managers, providing them with the ability to evaluate and analyze the drivers of portfolio performance across an organization's investments, as well as review exposures and concentrations across markets, asset types and increasingly diverse portfolios.
- *MSCI Global Intel*. Our Global Intel offering is an extensive private real estate database that is used by institutional investors, asset managers, banks, custodians and investment consultants to drive allocation decisions, research and strategy developments, and portfolio and risk management. This tool comprises a consolidated set of global, regional, national, city and submarket indexes with segmentation by property type.
- *Datscha*. Datscha provides web-based services for the analysis of commercial real estate and offers extensive information on real estate, rental levels, property holdings, transactions, ownership, occupiers, footfall, lease data and the ability to simulate market values.
- *MSCI Real Estate Climate Value-at-Risk ("RE Climate VaR")*. Our RE Climate VaR solution provides forward-looking and return-based valuation assessments to measure climate-related risks for real estate assets in an investment portfolio. By calculating transition risk from changing legislation, regulation and sustainability strategies as well as physical risk from extreme weather impacts, RE Climate VaR offers a framework for investors to improve portfolio performance, risk management, regulatory reporting and progress towards broader sustainability goals.
- *INCANS*. Our INCANS solution enables investors to proactively measure and manage income risk. This offering uses intuitive dashboards, bond-equivalent rating scores and a proprietary global tenant grading system to enable investors to better understand the likelihood of current and future tenant default.

For the year ended December 31, 2022, 6.3% of our revenues were attributable to our Real Assets offerings.

Research and Product Development

We apply an integrated team approach to developing content across our operating segments. Our product management, research and product development, data operations and technology, and application development departments are at the center of this process. Our content is developed by a research and product development team comprised of mathematicians, economists, statisticians, financial engineers and industry experts. Content created in one segment can often be used for the creation of products in another segment. For example, the MAC models created in our Analytics segment offer a view of risk across market and asset classes, including private real estate, by incorporating content generated in the Real Assets operating segment. In addition, MSCI ESG indexes and our Climate Lab Enterprise analytics product are constructed using data from our ESG and Climate operating segment.

Through our relationships with the world's largest investment institutions, we monitor investment trends and their drivers globally and support instrument valuation, risk modeling, portfolio construction, portfolio attribution, asset allocation and VaR simulation. An important way we monitor global investment trends and their implications for our business is through direct public consultations and client advisory panels and through the forum provided by our Advisory Council. Our Advisory Council typically

meets three times during the year to discuss current and emerging investment industry trends and is comprised of senior investment professionals from around the world and senior members of our research and product development team.

Technology

Technology plays a pivotal role in our operations and our ability to innovate and launch products and services. Current areas of focus include:

- *Improving the client experience* by enhancing the way clients access, interact with and use our data, applications and other tools, including by developing and launching our new open-architecture ISaaS services, many of which are available via modern, web-based platforms, such as our new MSCI ONE offering, or integrate with our clients' existing ecosystems via APIs.
- *Enhancing data processing* by utilizing data science and machine learning in our data collection processes to more efficiently build scale and facilitate faster product enhancements and releases while also maintaining the highest quality standards.
- *Enhancing information security* by further strengthening our technology infrastructure and software security processes. We implement changes and upgrades to technology regularly and maintain processes to minimize risk on an ongoing basis, and we seek to improve employee awareness of cyber and information security issues through training.
- *Modernizing our workplace* to better support a remote and hybrid workforce that can collaborate and productively work from anywhere.
- *Migrating products, data and services onto a cloud platform* to accelerate the delivery of new capabilities that will help investors more swiftly and efficiently manage data and understand the drivers of risk and performance, drive automation across our corporate processes and minimize data center risks.

Competition

Index. Many industry participants compete with us by offering one or more indexes in similar categories. Such indexes vary widely in scope, including by geographic region, business sector and weighting methodology, and may be used by clients in a variety of ways in many different markets around the world. Among our Index competitors are S&P Dow Jones Indices LLC (a joint venture of S&P Global Inc. and CME Group Inc.); FTSE Russell, a subsidiary of the London Stock Exchange Group plc; and Solactive AG.

Competition also exists from industry participants, including asset managers and investment banks, that create their own indexes, often in cooperation with index providers, which may, among other things, provide some form of calculation agent service. Some asset managers also manage funds, including ETFs, based on their proprietary indexes, and some investment banks launch structured products or create over-the-counter derivatives based on their proprietary indexes. This is often referred to as self-indexing.

Analytics. Our Analytics offerings compete with those from a range of competitors, including Qontigo (formerly Axioma Inc.), BlackRock Solutions, Bloomberg Finance L.P. ("Bloomberg"), and FactSet Research Systems Inc. Additionally, some of the larger broker-dealers have developed proprietary analytics tools for their clients. Similarly, some of the large global investment organizations, such as custodians, have developed internal risk management and performance analytics tools that they offer to their clients.

ESG and Climate. Our ESG and Climate offerings compete with a growing number of companies that issue ESG data, ratings or research. For example, our ESG and Climate offerings compete with those from a range of competitors, including Sustainalytics Holding B.V. (a part of Morningstar, Inc.), Institutional Shareholder Services Inc. (majority owned by Deutsche Börse AG), Trucost (an S&P Global Inc. business), Refinitiv (a London Stock Exchange Group business), Bloomberg and Moody's Corporation.

All Other – Private Assets. We also have a variety of competitors for our offerings that provide data, market intelligence, indexes, and performance and risk attribution services relating to real estate and other private assets.

Intellectual Property, Other Proprietary Rights and Sources of Data

We consider many aspects of our offerings, processes and services to be proprietary. We have registered "MSCI" and other marks as trademarks or service marks in the United States and in certain other countries. We will continue to evaluate the registration of additional trademarks and service marks as appropriate. From time to time, we have also filed patent applications to protect our proprietary rights. Additionally, many of our offerings, processes and services require the use of intellectual property that we license for use from third parties. It may be necessary in the future to seek or renew licenses relating to various aspects of our offerings and

services. Our ownership and protection of intellectual property and other proprietary rights and our ability to obtain the rights to use third-party intellectual property are important to our business and contribute in part to our overall success.

In addition to our intellectual property, we rely on third-party data to create and deliver our products and services. For example, we require certain stock exchange data to construct equity indexes. Termination of or disputes regarding our rights to receive or use such data could limit the information available for us to use or distribute in connection with our products and services.

Corporate Responsibility

As a leader in providing ESG and climate solutions to investors, we also aim to demonstrate leading corporate responsibility practices and policies that are meaningful to our various stakeholders, including our clients, employees, shareholders and local communities. The Governance and Corporate Responsibility Committee of our Board of Directors provides oversight of our corporate responsibility strategy and activities and receives regular updates and reports from MSCI management, including our Chief Responsibility and Diversity Officer.

We are committed to continuing to develop and enhance our climate-focused strategies and to regularly reporting on our efforts. As part of our corporate responsibility efforts, we have published reports aligned with a number of international frameworks, including the Task Force on Climate-related Financial Disclosures (TCFD), the Sustainability Accounting Standard Board (SASB), CDP and the United Nations Department of Economic and Social Affairs' Sustainable Development Goals (UN SDG) as well as our carbon emissions metrics.

Additional information on our corporate responsibility progress, including our net-zero commitment and climate transition plan, can be found on our website at <https://www.msci.com/who-we-are/corporate-responsibility>. Information contained on our website is not deemed part of or incorporated by reference into this Annual Report on Form 10-K or any other report filed with the SEC.

Human Capital Management

MSCI is committed to creating a performance culture with a high degree of employee engagement. Our talent and leadership development programs are designed to ensure we have the right people with the necessary skills to deliver on MSCI's strategy, including a workplace that values and promotes diversity, equity and inclusion ("DE&I").

The Compensation, Talent and Culture Committee of our Board of Directors has oversight over talent management matters, including efforts relating to succession/progression planning, career progression and retention strategies, and learning and leadership development programs. In addition, this Committee oversees our efforts relating to our corporate culture, such as our DE&I strategy and our employee engagement. Our Chief Human Resources Officer, our Chief Responsibility and Diversity Officer and our Head of Talent report to our Board regularly on DE&I initiatives, our work towards enhancing corporate culture and our talent management strategies. We also engage with our shareholders around these aspects of our human capital management strategies.

The Board periodically reviews our executive talent, including our current leadership bench and succession/progression planning efforts relating to our entire executive team. Our Chief Executive Officer and our President and Chief Operating Officer also meet regularly with the heads of our functions to review talent plans, with an aim of identifying top talent with the most immediate or near-term potential to progress to the senior-most roles at MSCI.

MSCI is a global company with a highly diverse footprint. As of December 31, 2022, we employed 4,759 people, of which 49.7% of MSCI employees were located in the Asia Pacific region, 22.6% in Europe, Middle East and Africa, 18.7% in the U.S. and Canada, and 9.0% in Mexico and Brazil. For the one-year period ended December 31, 2022, voluntary turnover was 13.8% and involuntary turnover was 3.2%.

Diversity, Equity and Inclusion

Diversity, equity and inclusion are core values of MSCI. We strive to empower our people to maximize their potential in an environment where all individuals are respected and encouraged to bring their authentic selves to work. MSCI's culture embraces diverse experiences and perspectives, which we believe foster creativity and innovation. As a leading provider of tools and solutions to the global investment community, it is critical that DE&I principles are central to how we manage our business and global workforce. We firmly believe that a diverse team is a stronger team and that cultivating diverse, highly engaged talent is an important part of our success.

As of December 31, 2022, of those who self-identified, women represented 35.9% of our global employees, and people of color (defined as those who identify as Asian, Black or African American, Hispanic or Latino, American Indian or Alaska Native,

Native Hawaiian or Other Pacific Islander or two or more races) represented 47.3% of our U.S. employees and 42.1% of our U.S. employees in management roles⁵. The U.S. represents 17.8% of our global workforce. Our most recent EEO-1 consolidated reports can be found on our website at <https://www.msci.com/who-we-are/diversity-equity-and-inclusion>. Information contained on our website is not deemed part of or incorporated by reference into this Annual Report on Form 10-K or any other report filed with the SEC.

Our Chief Responsibility and Diversity Officer is responsible for operating across MSCI to align our DE&I goals with business outcomes. We have operationalized our DE&I strategy and alignment through our Executive DE&I Council (“EDC”) and our Inclusion and Belonging Council (“IBC”). The EDC consists of senior leaders and subject matter experts who develop and execute our DE&I efforts across three strategic pillars relating to talent, senior leader engagement and accountability, and stakeholder engagement.

The IBC proactively works with local leaders to adapt MSCI’s global DE&I strategy to local circumstances and requirements. The roughly 30 members on the IBC represent most geographies, functions and levels, including members of our employee resource groups (the Women’s Leadership Forum, Women in Tech, Pride & Allies, the Black Leadership Network, Asian Support Network, All Abilities Network and Hola! MSCI).

Our DE&I efforts aim to create a strong sense of belonging and inclusion, foster employee engagement, nurture a pipeline of diverse talent and position MSCI as a leading organization that recognizes diversity, equity and inclusion as strategic priorities. Additional information on our DE&I efforts and programs can be found on our website at <https://www.msci.com/who-we-are/diversity-equity-and-inclusion>. Information contained on our website is not deemed part of or incorporated by reference into this Annual Report on Form 10-K or any other report filed with the SEC.

Compensation, Benefits and Well-being

We offer a broad range of highly competitive compensation and benefits programs to our employees and their families, including same-sex domestic partners. These programs include health and welfare benefits, including an employee assistance program; enhanced maternity and paternity leave policies, including a global minimum standard applicable to all offices worldwide; contributions to defined contribution and defined benefit pensions plans globally and health savings accounts in the U.S.; life insurance; a global wellness initiative that can help employees improve their health and well-being; presentations on well-being topics, including retirement planning, parenting, meditation, stress management and nutrition; ergonomic equipment and desk assessments; and wellness rooms in all MSCI office locations.

Compensation at MSCI supports a culture of high performance and accountability. Our goal is to provide competitive compensation in the markets where we compete for talent. We believe in linking all employee compensation to Company, Product/Function and individual performance by making 100% of our employees eligible for annual cash bonuses. We strongly differentiate cash bonus payouts based on actual results against goals and for managers, how effectively they demonstrate behaviors consistent with our values and culture.

Senior employees and select other employees are eligible to participate in the MSCI Long-Term Incentive Program with awards of MSCI common stock that vest over a multi-year period. The goal of the Long-Term Incentive Program is to: (i) align the interests of eligible employees with those of our shareholders, (ii) enhance our “owner-operator” philosophy, (iii) recognize and reward potential long-term contributions, and (iv) retain key leaders and top performers.

In 2020, MSCI announced our hybrid-work initiative called the Future of Work at MSCI, and we formally began implementing this initiative in January 2022. For most of our employees, the Future of Work introduced a hybrid work environment allowing employees to work at times at the office and other times remotely, depending on the requirements of a specific role and the needs of our clients. The Future of Work at MSCI unites our inclusive culture with modern and flexible ways of working to give employees the accountability, responsibility and empowerment to perform at their very best, while keeping our clients at the center of all we do. As we continue to adapt and iterate how we work, employee feedback will remain central to this initiative.

Cultivating Talent and Employee Engagement

MSCI is committed to investing in employee learning and development. Throughout the year, we offer tools and workshops to help employees better understand how their work aligns with MSCI’s overall strategy, seek and receive real-time and transparent feedback and coaching, successfully deliver on their goals, and more effectively plan and develop their careers. MSCI also offers on demand learning tools covering a wide range of topics with numerous options for employees to pursue self-paced career development opportunities.

⁵ Management roles are employees in Managing Director, Executive Director or Vice President roles.

MSCI conducts an employee engagement survey at least annually that measures whether our approaches to performance, growth and career development are driving employee engagement. Managers receive anonymous feedback and are accountable for improving and enhancing the work environment to drive higher engagement. In our December 2022 employee engagement survey, we achieved a 78% response rate, and the percentage of respondents characterized as fully engaged was 74%, the highest since we implemented the engagement survey.

Additional information on our training programs and engagement metrics can be found on our website at <https://www.msci.com/who-we-are/corporate-responsibility/social-practices>. Information contained on our website is not deemed part of or incorporated by reference into this Annual Report on Form 10-K or any other report filed with the SEC.

Health and Safety

We are committed to providing a safe workplace, and the well-being of our employees is one of our highest priorities. We strive to meet or exceed all applicable laws, regulations and accepted practices relating to workplace safety. We have extensive safety policies, standards and procedures that all employees are required to follow.

In particular, the COVID-19 pandemic has underscored for us the importance of keeping our employees safe and healthy. In response to the pandemic, we have taken numerous steps to support our employees, including transitioning to a hybrid work environment for most employees, enhancing our sick leave policies, engaging with external health and ergonomics consultants and increasing the use of technology to allow our employees to remain fully engaged, productive and well. We continue to closely monitor and manage the situation regarding the COVID-19 pandemic and follow local requirements where our offices are located globally.

Government Regulation

The Company is subject to reporting, disclosure and recordkeeping obligations pursuant to SEC requirements applicable to U.S. public companies.

The United Kingdom’s Financial Conduct Authority (“UK FCA”) authorized MSCI Limited (a subsidiary of MSCI Inc.) to be the benchmark administrator for applicable MSCI indexes. Information about index regulation is periodically updated on our website at <https://www.msci.com/index-regulation>. Information contained on our website is not deemed part of or incorporated by reference into this Annual Report on Form 10-K or any other report filed with the SEC.

MSCI ESG Research LLC is a registered investment adviser and must comply with the requirements of the Investment Advisers Act of 1940 (the “Advisers Act”) and related SEC regulations. Such requirements relate to, among other things, disclosure obligations, recordkeeping and reporting requirements, marketing restrictions and general anti-fraud prohibitions. It is possible that in addition to MSCI ESG Research LLC, other entities in our corporate family may be required to register as an investment adviser under the Advisers Act or comply with similar laws or requirements in states or foreign jurisdictions.

A subsidiary of the Company is registered with the State Council Information Office of the Ministry of Commerce and the State Administration for Industry and Commerce in China as a foreign institution supplying financial information services in China. This license is currently administered by the Cyberspace Administration of China.

Information About Our Executive Officers

Name	Age	Position
Henry A. Fernandez	64	Chairman and Chief Executive Officer
C.D. Baer Pettit	58	Director, President and Chief Operating Officer
Andrew C. Wiechmann	43	Chief Financial Officer
Robert J. Gutowski	55	General Counsel
Scott A. Crum	66	Chief Human Resources Officer

There are no family relationships between any of our executive officers and any director or other executive officer of the Company.

Henry A. Fernandez

Mr. Fernandez has served as Chairman since October 2007 and as Chief Executive Officer and a director since 1998. He served as head of the MSCI business from 1996 to 1998 and as President from 1998 to October 2017. MSCI was previously a business

unit within Morgan Stanley prior to its IPO in 2007. Before leading MSCI, he was a Managing Director at Morgan Stanley, where he worked from 1983 to 1991 and from 1994 to 2007, in emerging markets business strategy, equity derivatives sales and trading, mergers and acquisitions, and corporate and mortgage finance. Mr. Fernandez also serves on boards of directors/trustees at Royalty Pharma plc, Stanford University, King Abdullah University of Science and Technology and its affiliate, KIMC, the Hoover Institution, Memorial Sloan-Kettering Cancer Center, the Foreign Policy Association, and Catholic Charities of the Archdiocese of New York. Mr. Fernandez previously served on the boards of trustees at Georgetown University, the Trinity School, The Browning School and MexDer (Mexican Derivatives Exchange) and was the Chair of the Advisory Council at the Stanford University Graduate School of Business. He holds a Bachelor of Arts in economics from Georgetown University, an M.B.A. from the Stanford University Graduate School of Business and pursued doctoral studies in economics at Princeton University.

C.D. Baer Pettit

Mr. Pettit has served as the Company's President since October 2017, the Company's Chief Operating Officer since January 2020 and a Director on the Company's Board since January 2023. As President and Chief Operating Officer, Mr. Pettit oversees the Company's business functions, including client coverage, marketing, product management, research and product development, technology and operations. He previously served as Chief Operating Officer from 2015 to 2017, Head of the Product Group from February 2015 to September 2015, Head of Index Products from 2011 to 2015, Head of Marketing from 2005 to 2012 and Head of Client Coverage from 2001 to 2012. Prior to joining MSCI, Mr. Pettit worked for Bloomberg L.P. from 1992 to 1999. Mr. Pettit holds a Master of Arts degree in history from Cambridge University and a Master of Science degree from the School of Foreign Service at Georgetown University.

Andrew C. Wiechmann

Mr. Wiechmann has served as the Company's Chief Financial Officer since September 2020. Mr. Wiechmann previously served as Treasurer from November 2021 to June 2022, Chief Strategy Officer from May 2019 to September 2020, Interim Chief Financial Officer from March 2019 to May 2019, Head of Strategy and Corporate Development from July 2012 to March 2019, Head of Investor Relations from December 2017 to March 2019 and Head of Financial Planning & Analysis from July 2015 to December 2017. Prior to joining MSCI in 2012, Mr. Wiechmann was an investment banker at Morgan Stanley where he executed M&A and capital markets transactions for financial technology and specialty finance companies, including advising MSCI on its IPO and various acquisitions. Mr. Wiechmann holds Bachelor of Arts degrees in Physics and Economics from Hamilton College.

Robert J. Gutowski

Mr. Gutowski has served as the Company's General Counsel since January 2020. Mr. Gutowski previously served as the Company's Deputy General Counsel and the Head of Compliance from 2010 to 2019 and the Head of Internal Audit from 2012 to 2019. He joined MSCI in 2002. Prior to joining MSCI, he was an attorney in private practice at Rogers & Wells LLP and Clifford Chance LLP. He received his B.A. from Georgetown University and his J.D. from the State University of New York at Buffalo Law School.

Scott A. Crum

Mr. Crum has served as the Company's Chief Human Resources Officer since April 2014. Prior to joining MSCI, Mr. Crum served as global head of human resources for four publicly traded companies. Mr. Crum worked for Avon Products, Inc. as Senior Vice President of Human Resources and Chief People Officer from 2012 to 2013. From 2010 to 2012, Mr. Crum served as Senior Vice President and Chief People Officer of Motorola Mobility Holdings, Inc., one of two publicly traded companies formally created when Motorola Inc. split in January 2011 until it was acquired by Google. Prior to that, he served as the Senior Vice President and Director of Human Resources of ITT Corporation from 2002 to 2010 and Senior Vice President of Administration and Employee Resources at General Instruments Corp. from 1997 to 2000. Mr. Crum holds a Bachelor of Business Administration with a concentration in industrial relations from Southern Methodist University.

Available Information

Our corporate headquarters is located at 7 World Trade Center, 250 Greenwich Street, 49th Floor, New York, New York, 10007, and our telephone number is (212) 804-3900. We maintain a website on the internet at www.msci.com. The contents of our website are not a part of or incorporated by reference in this Annual Report on Form 10-K.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains a website that contains reports, proxy and information statements and other information that we file electronically with the SEC at www.sec.gov. We also make available free of charge, on or through our website, these reports, proxy statements and other information

as soon as reasonably practicable following the time they are electronically filed with or furnished to the SEC. To access these, click on the “SEC Filings” link under the “Financial Information” tab found on our Investor Relations homepage (<http://ir.msci.com>).

We also use our Investor Relations homepage, Corporate Responsibility homepage and corporate Twitter account (@MSCI_Inc) as channels of distribution of Company information. The information we post through these channels may be deemed material.

Accordingly, investors should monitor these channels, in addition to following our press releases, SEC filings and public conference calls and webcasts. In addition, you may automatically receive email alerts and other information about us when you enroll your email address by visiting the “Email Alerts” on our Investor Relations homepage at <https://ir.msci.com/email-alerts>. The contents of our website, including our Investor Relations homepage and Corporate Responsibility homepage, and our social media channels are not, however, a part of or incorporated by reference in this Annual Report on Form 10-K.

Item 1A. Risk Factors

You should carefully consider the following risks and all of the other information set forth in this Annual Report on Form 10-K. If any of the following risks actually occurs, our business, financial condition or results of operations could be materially and adversely affected. You should read the section titled “Forward-Looking Statements” on page 1 for a description of the types of statements that are considered forward-looking statements, as well as the significance of such statements in the context of this Annual Report on Form 10-K. This information should be read in conjunction with “Management’s Discussion and Analysis of Financial Condition and Result of Operations” and the consolidated financial statements and related notes. These factors could cause our future results to differ materially from our historical results and from expectations reflected in forward-looking statements.

Summary of Risk Factors

Our business is subject to numerous risks and uncertainties, discussed in more detail in the following section. These risks include, among others, the following key risks:

- Our dependence on third parties to supply data, applications and services for our products and services and on certain vendors to distribute our products;
- Undetected errors, defects, malfunctions or similar problems in our products leading to increased costs or liability;
- Our exposure to potential reputational and credibility concerns;
- The impact of the COVID-19 pandemic or other widespread health crises;
- The possibility that our clients seek to negotiate lower asset-based fees or cease using our indexes as the basis for indexed investment products;
- Cancellations or reductions by any of our largest clients or reduced demand for our products or services;
- The impact of failures, disruptions, instability or vulnerabilities in our information technology systems or applications;
- Our inability to ensure and protect the confidentiality of data;
- Our exposure to security breaches including cyber-attacks or failures of our security plans, systems or procedures;
- Unanticipated failures, interruptions or delays in the performance or delivery of our products as a result of the adoption of new technologies;
- Security vulnerabilities resulting from our use of open source code;
- The impact of changes in economic conditions and the global capital markets, including resulting from geopolitical events, adverse equity market conditions, volatility in the financial markets and evolving investment trends;
- The effects on us from competition and financial and budgetary pressures affecting our clients;
- Our need to successfully develop new and enhanced products and services in order to remain competitive;
- The impact of our global operations and any future expansion on management and our exposure to additional issues from our increased global footprint;
- Failure to comply with laws, rules or regulations; changes to current laws, rules or regulations; or the introduction of new laws, rules or regulations relevant to our business;
- Our inability to protect our intellectual property rights;

- The impact of foreign currency exchange rate fluctuation;
- The impact of our indebtedness on our financial flexibility;
- The impact of changes in our credit ratings; and
- Our exposure to tax liabilities in various jurisdictions.

Operational Risks

We are dependent on third parties to supply data, applications and services for our products and services and are dependent on certain vendors to distribute our products. A refusal or failure by a key vendor to distribute our products; any loss of key outside suppliers of data, applications or services; a reduction in the accuracy or quality of such data, applications or services; or any failure by us to comply with our suppliers' or distributors' licensing requirements could impair our ability to provide our clients with our products and services, which could have a material adverse effect on our business, financial condition or results of operations.

We rely on third-party suppliers of data, applications and services, including data from stock exchanges and other suppliers (collectively, "Vendor Products"), and depend on the accuracy and quality of Vendor Products and the ability and willingness of such suppliers to deliver, support, enhance and develop new Vendor Products on a timely and cost-effective basis, and respond to emerging industry needs and other changes in order to produce, deliver and develop our products and services. Additionally, we depend on clients to supply certain data in order to provide our services to them. Any failure to supply, errors or reduction in the amount, accuracy or quality of such data supplied from clients impairs our ability to provide them with our products and services.

If Vendor Products include errors, design defects, are delayed, become incompatible with future versions of our products, are unavailable on acceptable terms or are not available at all, we may not be able to deliver our products and services. In addition, in the ordinary course suppliers of Vendor Products are subject to various forms of cyber-attacks or other failures or security breaches. Breaches of our suppliers' systems and networks may cause material interruptions or malfunctions in our or such suppliers' websites, applications or data processing, or may compromise the confidentiality and integrity of affected information.

Some of our agreements with third-party suppliers allow them to cancel on short notice and from time to time we receive notices from third-party suppliers threatening to terminate the provision of their products or services to us, and some data suppliers have terminated the provision of their data to us. Termination of the provision of Vendor Products by one or more of our significant suppliers or exclusion from, or restricted use of, or litigation in connection with Vendor Products could decrease the data and materials available for us to use and deliver to our clients. In addition, some of our competitors could enter into exclusive contracts with our data suppliers, including with certain stock exchanges. If our competitors enter into such exclusive contracts, we may be precluded from receiving certain data or other materials from these suppliers or restricted in our use of such data or other materials, which would give our competitors a competitive advantage. Such exclusive contracts could hinder our ability to create our products and services or to provide our clients with the data or other products or services they prefer, which could lead to a decrease in our client base.

Despite our efforts to comply with the licensing requirements of Vendor Products, there can be no assurance that third parties will not challenge our use, which could result in increased acquisition or licensing costs, loss of rights or costly legal actions. Our business could be materially adversely affected if we are unable to timely or effectively replace the data or functionality provided by Vendor Products that become unavailable or fail to operate effectively for any reason. Our operating costs could increase if additional license fees are imposed or current license fees increase or the efforts to incorporate enhancements to Vendor Products are substantial and we are unable to negotiate acceptable licensing arrangements with these suppliers or find alternative sources of equivalent products or services. If any of these risks materialize, they could have a material adverse effect on our business, financial condition or results of operations.

We also rely on certain third-party vendors to distribute our data to clients. While some of our vendors generate revenue in connection with distributing our data, others do not derive a direct financial benefit. Should any of our key vendors refuse to distribute our data for any reason or require that we pay them new or additional fees in connection with the distribution of our data, we would need to find alternative ways to distribute our data or lose revenue or profitability for certain products, which may have a material adverse effect on our business, financial condition or results of operations.

If our products contain undetected errors or fail to perform properly due to defects, malfunctions or similar problems, we may, among other things, become subject to increased costs or liability based on the use of our products or services to support our

clients' investment processes, which could have a material adverse effect on our business, financial condition or results of operations.

Our products and services support the investment processes of our clients, which relate to, in the aggregate, trillions of dollars in assets. Products or services we develop or license have contained, and in the future may contain, undetected errors or defects despite testing or other quality assurance practices. Use of our products or services as part of the investment process creates the risk that our clients, the parties whose assets are managed by our clients, investors in investment products linked to our indexes, the companies that we rate or assess in our ESG solutions or the shareholders of those companies, may pursue claims against us based on even a small error in our data, calculations, methodologies or analysis or a malfunction or failure in our systems, products or services.

Errors or defects can exist at any point in a product's lifecycle, but are frequently found after introduction of new products or services or enhancements to existing products. We continually introduce new methodologies and products, and new versions of and updates to our existing products or services. Despite internal testing and in some cases testing or use by clients, our products or services have contained, and in the future may contain, errors in our data, calculations, methodologies or analysis, including serious defects or malfunctions. This risk may grow with the increase in the number, type and complexity of our products, such as complex client-designed indexes that may require unique and more manual implementation and maintenance. If we detect any errors before we release or deliver a product or service or publish a methodology or analysis, we might have to suspend or delay the product or service release or delivery for an extended period of time while we address the problem. We may not discover errors that affect our products or services or enhancements until after they are deployed, and we may need to provide enhancements or corrections to address such errors, and in certain cases it may be impracticable to do so. If undetected errors exist in our products or services, or if our products or services fail to perform properly due to defects, malfunctions or similar problems, it could result in harm to our brand or reputation, significantly increased costs, lost sales and revenues, delays in commercial release, third-party claims, contractual disputes, negative publicity, delays in or loss of market acceptance of our products or services, license terminations or renegotiations or unexpected expenses and diversion of resources to remedy or mitigate such errors, defects or malfunctions. The realization of any of these events could materially adversely affect our business, financial condition or results of operations.

While we have provisions in our client contracts that are designed to limit our liability from claims brought by our clients or third parties relating to our products or services, these provisions could be invalidated or fail to adequately or effectively limit our liability. In addition, clients also increasingly require us to provide contractual assurances regarding our IT and operational risk management and security practices or policies, and many of our clients in the financial services sector are subject to regulations and requirements to adopt risk management processes to oversee their third-party relationships. Contractual disputes could result in the provision of credits, adverse monetary judgments and other penalties and damages. Any such claims brought against us, even if the outcome were to be ultimately favorable to us, would require attention of our management, personnel, financial and other resources and could have a negative impact on our reputation or pose a significant disruption to our normal business operations. In addition, the duration or outcome of such claims and lawsuits is difficult to predict, which could further exacerbate the adverse effect they may have on our business, financial condition or results of operations.

MSCI is exposed to potential reputational and credibility concerns.

To the extent that any of MSCI's operating segments or product lines or MSCI as a whole suffers a reputational or other loss in credibility, it could have a material adverse impact on MSCI's business, financial condition or results of operations. Real or perceived factors that may have already affected credibility, or which could potentially have an impact in this regard, include: the appearance of a conflict of interest; the editorial independence of our index composition and ESG rating and assessment processes and decisions; the influence, attempted influence or appearance of influence of third parties, including governments, politicians and large investors or asset owners, on our editorial decisions; the performance of companies relative to their ESG ratings, index inclusion, risk characteristics or other MSCI content or analytics; the timing and nature of changes to our indexes or ESG ratings and assessments; disagreement with our methodologies or models, including for calculating indexes, value-at-risk and other risk measures, ESG ratings and assessments, data, information and analysis; the accuracy and completeness of our data; views expressed by the media, politicians, other government officials or representatives, regulators or other third parties regarding our company or our industry or our role in the investment process, including allegations or suggestions that we encourage investment in certain companies, countries or regions or in support of certain causes or trends; and the impact of political tensions relating to countries, industries, companies or issues relevant to our products and services, such as the inclusion of certain Chinese companies in our indexes or the focus on sustainable or ESG investing and climate considerations in our products.

In some cases, our ESG and Climate offerings, such as our country and company ESG ratings or our Net-Zero Tracker, may insert MSCI into a public spotlight or a public debate regarding the environment, climate change, social concerns or corporate responsibility. In addition, our position as a leading source of ESG research, ratings, data and assessments may at times become contentious, politicized or controversial and lead to disputes with companies or investors or other interested stakeholders and create negative media or regulatory attention.

In addition, there has been increased regulatory and political focus on ESG-related practices of asset managers. Certain of our clients make use of our ESG data and tools as well as our ESG indexes to benchmark ESG investment performance and to construct and manage ETFs and other indexed financial products. These institutional investors are increasingly the subject of additional disclosure requirements, as well as media and political scrutiny, that are focused on preventing asset managers from “greenwashing” (i.e., holding out an investment product as having “green” or “sustainable” characteristics when this is not, in fact, the case). Use of our products by these investors could draw MSCI into debates about and criticisms of greenwashing.

Factors affecting our reputation and credibility also include our own sustainability and corporate responsibility policies or practices, including as a result of failure to meet publicly disclosed ESG and climate-related targets or goals, or misalignment with evolving market standards or the methodologies and standards used in our own products and ESG ratings.

Errors and other actions by MSCI competitors could also damage the reputation of the industries that we operate in and, therefore, harm the reputation of the Company or certain of our products. In addition, we believe that MSCI’s corporate culture and reputation positively contribute to our ability to attract and retain talent, and that reputational damage could negatively affect our hiring, employee engagement and retention. Damage to our reputation, brand or credibility could have a material adverse effect on MSCI’s business, financial condition or results of operations.

The COVID-19 pandemic, or other widespread health crises, could have a material adverse effect on our business, financial condition or results of operations.

The COVID-19 pandemic has caused significant economic disruption, including volatility in the global equity markets and continues to persist throughout the world, including in locations where we operate. To date, the COVID-19 pandemic has negatively impacted the global economy, created significant financial market volatility, disrupted global supply chains and resulted in a significant number of infections and deaths worldwide. The COVID-19 pandemic has also created significant uncertainties. These uncertainties include, but are not limited to, the adverse effects of the pandemic on the economy and financial markets, our employees, our clients and our third-party service providers. Certain long-term effects of the efforts of governments and monetary authorities to ameliorate the impacts of the pandemic have also become evident, including both price and wage inflation as well as increased competition for workers.

While to date the COVID-19 pandemic has not had a material negative impact on our business, financial condition or results of operations, we cannot assure you that we will be successful in our attempts to mitigate any negative effects of this global pandemic or any other widespread health crisis on our business. We closely monitor the impact of the COVID-19 pandemic and continually assess its potential effects on our business and take appropriate actions in accordance with the recommendations and requirements of relevant authorities. The extent to which the COVID-19 pandemic may impact our operational and financial performance remains uncertain and will depend on many factors outside of our control, including the timing, extent, trajectory and duration of the pandemic; the emergence, spread and severity of new variants of COVID-19; the development, availability, distribution and effectiveness of vaccines and treatments; the imposition of protective public safety measures, including vaccine and testing mandates; and the impact of the pandemic on the global economy, including financial markets. If we are not able to respond to and manage the impact of such events effectively, or if we are not able to cope with the effects of new widespread health crises, our business, financial condition or results of operations may be negatively impacted.

Client Risks

Our clients that pay us a variable license fee (e.g., based on the assets under management or total expense ratio or trading volumes of an indexed investment product) may seek to negotiate a lower fee structure or may lower the total expense ratio of such products or may cease using our indexes, which could limit the growth of or decrease our revenues from asset-based or other variable fees.

A portion of our revenues are from asset-based fees or fees based on trading volumes and some of these revenue streams are concentrated in some of our largest clients, including BlackRock, and in our largest market, the U.S. Our clients, including our largest clients, may seek for a variety of reasons to negotiate to pay us lower asset-based fee percentages, which are sometimes calculated as a percentage of the relevant product’s total expense ratio (“TER”). Additionally, competition is intense among our clients that offer or manage indexed investment products, including ETFs, and low fees are one of the competitive differentiators. Where an investment product’s TER determines our fees, a reduction in the TER may negatively impact our revenues. Additionally, our clients, including our largest clients, may seek to renegotiate existing asset-based fee models with the objective of achieving lower fees, either on a rate basis or in aggregate, which may have a negative impact on our operating revenues.

Moreover, clients that have licensed our indexes to serve as the basis of indexed investment products are generally not required to continue to use our indexes and could elect at any time to cease offering the investment product or switch to using a non-MSCI index. Clients that license our indexes to serve as the basis for listed futures and options contracts might also discontinue such

contracts. Additionally, we have a differentiated licensing strategy for our indexes and from time to time experience faster growth from lower fee products, resulting in a lower average asset-based fee percentage from indexed investment products. While we aim to maximize the price and volume trade-off over the long-term, there can be no assurance that we will be able to do so. Results for any given quarter could be materially adversely affected by stronger growth in assets in indexed investment products with lower-than-average fees not sufficiently offset by growth in assets in indexed investment products with higher-than-average fees. Our asset-based fees could dramatically decrease, which could have a material adverse effect on our business, financial condition or results of operations. Finally, to the extent that multiple investment products are based on the same index, (i) assets under management in one product could shift to products that pay MSCI lower fee levels, (ii) the products could compete for the same assets such that none of the products becomes large enough to be successful or sustained, or (iii) the failure or discontinuance of one product (e.g., derivatives used for hedging) could have a detrimental effect on the use of the other products (e.g., ETFs).

Cancellations or reductions by any of our largest clients could have a material adverse effect on our business, financial condition or results of operations.

A material portion of our revenues is concentrated in some of our largest clients. For the fiscal year ended December 31, 2022, our largest client organization by revenue, BlackRock, accounted for 10.3% of our consolidated operating revenues. For the fiscal year ended December 31, 2021, BlackRock accounted for 12.7% of our consolidated operating revenues. Our revenue growth depends on our ability to obtain new clients, quickly onboard our clients and deploy our products and services to them, sell additional services to existing clients and achieve and sustain a high level of renewal rates with respect to our existing licenses. Failure to achieve one or more of these objectives could have a material adverse effect on our business, financial condition or results of operations. A client's activity with us may decrease for a variety of reasons, including the client's level of satisfaction with our products and services, the effectiveness of our support services, the pricing of our products and services, the pricing and quality of competing products or services or the effects of changes in economic conditions and the global capital markets. If one or more of our largest clients cancels or reduces its licenses and we are unsuccessful in replacing those licenses, our business, financial condition or results of operations could be materially adversely affected.

Our clients may become more self-sufficient, which may reduce demand for our products or services and materially adversely affect our business, financial condition or results of operations.

Our clients may internally develop certain functionality contained in the products or services they currently license from us. For example, a number of our clients have obtained regulatory clearance to create indexes for use as the basis of ETFs that they manage and others have invested in direct indexing strategies, allowing investors to purchase individual stocks making up an index rather than investing in a fund or ETF. Similarly, some of our clients who currently license our risk or ESG and climate data to analyze their portfolio risk may develop their own tools to collect data and assess risk or embed ESG and climate considerations into their investment processes, making our products or services unnecessary for them. A growing number of asset managers and investment banks, in partnership with index providers that offer calculation agent services, or acting together with an industry group or association, have created or may create their own range of proprietary indexes, which they use to manage funds or as the basis of ETFs, structured products or over-the-counter derivatives. To the extent that our clients become more self-sufficient, demand for our products or services may be reduced, which could have a material adverse effect on our business, financial condition or results of operations.

Technology Risks

Any failures, disruptions, instability or vulnerabilities in our information technology architecture, platforms, vendors and service providers, production and delivery systems, software, code, internal network, the Internet or other systems or applications may disrupt our operations, cause our products to be unavailable or fail and impose delays or additional costs in deploying our products, or impose conditions or restrictions on our ability to commercialize our products or keep them confidential and result in reputational and other harm and have a material adverse effect on our business, financial condition or results of operations.

We depend heavily on the capacity, reliability and security of our information technology systems and platforms and their components, including our data centers, cloud providers and other vendors and service providers, production and delivery systems as well the Internet, to create and deliver our products and service our clients. Our employees also depend on these systems, platforms and providers for internal use. Heavy use of our electronic delivery systems and other factors such as loss of service from third parties, operational failures, human error, terrorist or other attacks, climate or weather related events (e.g., hurricanes, floods or other natural disasters), another outbreak of pandemic or contagious disease, power loss, telecommunications failures, technical breakdowns, Internet failures or malicious attacks exploiting security vulnerabilities could impair our systems' operations or interrupt their availability for extended periods of time or impact the availability of personnel. Our ability to effectively use the Internet, including

our remote work force's ability to access the Internet, may also be impaired due to infrastructure failures, service outages at third-party Internet providers, malicious attacks exploiting security vulnerabilities or increased government regulation.

Disruptions, failures or slowdowns that could occur with respect to our operations, including to our information technology systems and platforms, our electronic delivery systems or the Internet, could damage our brand and reputation, result in litigation and negatively affect our ability to distribute our products effectively and to service our clients, including delivering managed services or delivering real-time index data. To the extent we grow through acquisitions, newly acquired businesses may not have invested in technological infrastructure and disaster recovery to the same extent as we have. As their systems are integrated into ours, a vulnerability could be introduced, which could impact our platforms across the Company.

There is no assurance that we will be able to successfully defend against such disruptions or that our disaster recovery or business continuity plans, or those of our third-party service providers (including cloud providers), will be effective in mitigating the risks and associated costs, which could be exacerbated by our shift to an increasingly remote working environment, and which could have a material impact on our business, financial condition or results of operations.

Any failure to ensure and protect the confidentiality of data could have a material adverse effect on our business, financial condition or results of operations.

Many of our products, as well as our internal systems and processes, involve the collection, retrieval, processing, storage and transmission, through a variety of channels, of proprietary, third party and client confidential information. We also handle personal information of our employees in connection with their employment. We rely on a complex system of internal processes and IT controls along with policies, procedures and training to protect this information, including sensitive client data such as material non-public information and client portfolio data that may be provided to us or hosted on our systems, against unauthorized access or disclosure. In addition, we believe that when we change the composition of our indexes, in some cases the changes can have an indirect effect on the prices of constituent securities and on certain indexed investment products as a result of trading activity related to tracking our indexes. As the usage and types of uses of our ESG ratings increase, the ratings and changes to the ratings in some cases could also potentially have an impact on the companies that we rate, the price of their securities and the price of other securities that reference their securities.

If our internal processes, confidentiality policies, conflict of interest policies or information barrier procedures fail or are insufficient, including as a result of human error or manual processes, system error, other inadvertent release or other failure, or if an employee purposely circumvents or violates our internal controls, policies or procedures, then unauthorized access to, or disclosure or misappropriation of, data, including material non-public or other confidential information (e.g., certain index composition data or ESG rating data), our brand and reputation may suffer and we may become subject to litigation, regulatory actions, sanctions or other penalties, leading to a loss of client confidence, which could have a material adverse effect on our business, financial condition or results of operations.

Successful cyber-attacks or other security breaches and the failure of security plans, systems and procedures could have a material adverse effect on our business, financial condition or results of operations.

Our operations rely on the secure processing, storage and transmission of confidential, sensitive, proprietary and other types of data and information that is managed internally and with third-party vendors. We and our vendors are subject to security risks, including cyber-attacks and other security breaches, such as phishing scams, hacking, tampering, intrusions, viruses, ransomware, malware and denial-of-service attacks. In some cases, these risks are heightened when employees are working remotely. Our and our vendors' use of mobile and cloud technologies may also increase our risk for such threats. We may be exposed to more targeted and more sophisticated cyber and other security attacks aimed at accessing certain information on our systems because of our role or prominence in the global marketplace, including client portfolio data, the composition of our indexes and MSCI ESG Research ratings of corporate issuers. Any such threats may cause material interruptions or malfunctions in our or our vendors' products or services, networks, systems, websites, applications, data or data processing, or may otherwise compromise the availability, confidentiality or integrity of data or information in our possession. While we have not experienced cyber or other security incidents that are individually, or in the aggregate, material to the Company, we have experienced cyber-attacks of varying degrees in the past, including denial-of-service attacks. There can be no assurance that there will not be material adverse effects relating to these types of incidents in the future, in particular as these incidents have generally become increasingly frequent, sophisticated, difficult to detect and difficult to successfully defend against.

Our security measures or those of our third-party providers, including any cloud-based technologies, may prove insufficient depending upon the attack or threat posed. Cyber-attacks, security breaches or third-party reports of perceived security vulnerability to our systems, even if no breach has occurred, could damage our brand and reputation, result in litigation, regulatory actions, sanctions or other penalties, lead to loss of client confidence, which would harm our ability to retain clients and gain new ones, and lead to

financial losses. Any of the foregoing could lead to unexpected or higher than estimated costs. We may also incur additional costs as a result of increasing and refining our internal processes and IT controls and policies and procedures related to security, processing integrity and confidentiality or privacy.

Migration of our applications, systems, processes and infrastructure to new technologies, cloud providers, data centers, processes, platforms or applications could result in unanticipated failures, interruptions or delays in the performance and delivery of our products, services and client support. Such incidents could have a material adverse effect on our business, financial condition or results of operations.

In the past, we have experienced unanticipated interruption and delay in the performance and delivery of certain products, including after we migrated applications and infrastructure to new data centers, database storage facilities or other network infrastructure located across multiple facilities globally. While we have taken steps to mitigate such interruptions and delays, we cannot provide assurance that they will not occur again in the future as part of migration efforts to new technologies, applications or processes (e.g., cloud migration), even after extensive testing of new systems, processes, applications and hardware, or if we experience significant growth of our customer base or increases in the number of products or services or in the speed at which we are required to provide products and services. Such disruptions may result in cancellations and reduced demand for our products and services, resulting in decreased revenues, or in cost increases relating to our use of power and data storage. After adopting new technologies, applications and processes, such as cloud computing, virtualization and agile software development, we may experience unanticipated interruption and delay in the performance and delivery of certain of our products, services and client support. We may also incur increased operating expenses to recover data, repair, replace or remediate systems, equipment or facilities, and to protect ourselves from such disruptions. Accordingly, any significant failures, disruptions or instability affecting our information technology platform, cloud providers, data centers, production and delivery systems, applications, processes or the Internet could negatively affect our ability to distribute our products effectively and to service our clients, damage our brand and reputation and result in litigation, which may have a material adverse effect on our business, financial condition or results of operations.

Our use of open source code could introduce security vulnerabilities, impose unanticipated delays or costs in deploying our products or services, or impose conditions or restrictions on our ability to commercialize our products or services or keep them confidential.

We rely on open source code to develop software and to incorporate it in our products and internal systems. The use of open source code may entail greater risks than the use of third-party commercial software, as open source licensors generally do not provide warranties or other contractual protections regarding infringement claims, the quality of the code or the security of the code. Some open source licenses provide that if we combine our proprietary code with open source code and distribute it in a certain manner, we could be required to release the source code of our proprietary applications to the public. This would allow our competitors to create similar products with less development effort and time and ultimately put us at a competitive disadvantage. Additionally, the terms of many open source code licenses are ambiguous and have not been interpreted by U.S. courts. Therefore, we could be required to seek licenses from third parties on terms that are not commercially feasible, to make generally available portions of our proprietary code, to re-engineer our products or systems, to discontinue the licensing of our products if re-engineering could not be accomplished on a timely or cost-effective basis, or to take other remedial action that could divert resources away from our development efforts. Any of these requirements could materially adversely affect our business, financial condition or results of operations.

Strategy and Growth Risks

Our business may be affected by changes in economic conditions and the global capital markets, including resulting from geopolitical events, adverse equity market conditions, volatility in the financial markets and evolving investment trends. Such changes could decrease the use of our products and services which could have a material adverse effect on our business, financial condition or results of operations.

Our business is impacted by economic conditions, volatility in the global capital markets and evolving investment trends (including conditions, volatility and trends that result from geopolitical events, such as Russia's invasion of Ukraine and the related global escalation of geopolitical tensions). Our clients use our products for a variety of purposes, including benchmarking, performance attribution, portfolio construction and risk management, and to support investment strategies including ESG, climate, factor, thematic, private asset and MAC investing. Volatile capital markets, geopolitical instability or unrest and other economic and market conditions and trends, including a recession or other significant financial-market event or crisis, may impact whether, how, where and when investors choose to invest, for example between developed or emerging markets, U.S. or non-U.S. markets, as well as whether to adopt different investment strategies.

A portion of our revenues comes from clients who use our indexes as the basis for indexed investment products. These fees are primarily based on a client's assets under management or trading volumes, and if the level of assets under management or trading

volumes declines, we expect our fee-based revenue to show a corresponding decline. The value of an investment product's assets may increase or decrease in response to changes in market performance and cash inflows and outflows, which could impact our revenues.

Additionally, an increasing portion of our revenues comes from products and services that relate to certain investment trends, such as ESG and climate, factor, thematic, private asset and MAC investing. A decline in the equity markets or movement away from such investment trends, including as a result of changing economic conditions or political or regulatory concerns or scrutiny, could decrease demand for our related products and services, which could have a material adverse effect on our business, financial condition or results of operations.

Competition and financial and budgetary pressures affecting clients in our industry may cause price reductions or loss of market share, which may materially adversely affect our business, financial condition or results of operations.

Competition exists across all markets for our products and services. Our competitors range in size from large companies with substantial resources to small, single-product businesses that are highly specialized. Our larger competitors may have access to more resources and may be able to achieve greater economies of scale, and our specialized competitors may be more effective in devoting technical, marketing and financial resources to compete with us with respect to a particular product or service. Some competitors may offer price incentives or different pricing structures that are more attractive to clients. The competitive landscape may also experience consolidation in the form of mergers and acquisitions, joint ventures or strategic partnerships, which result in a narrower pool of competitors that are better capitalized or that are able to gain a competitive advantage through synergies.

Barriers to entry may be low or declining in many of the markets for our products and services, including for single-purpose product companies, which could lead to the emergence of new competitors. For example, more broker-dealers, data suppliers, credit rating agencies or other market participants or vendors could begin developing their own content such as proprietary risk analytics, ESG and climate data or indexes. Recent developments, including increases in the availability of free or relatively inexpensive information through Internet sources or other low-cost delivery systems, advances in cloud computing, increased use of open source code, the ability of machine learning and other artificial intelligence systems to process and organize large data sets, as well as client development of proprietary applications in specific areas, have further reduced barriers to entry in some cases.

We may experience pressures to reduce our fees on account of financial and budgetary pressures affecting our clients, including those resulting from weak or volatile economic or market conditions, including uncertainty regarding a global recession or significant financial-market event or crisis, the duration and long-term economic and societal consequences of the COVID-19 pandemic, the Russia-Ukraine conflict and the inflationary environment, which may lead certain clients to reduce their overall spending on our products or services, including by seeking similar products or services at a lower cost than what we are able to provide, by consolidating their spending with fewer providers, by consolidating with other clients or by self-sourcing certain of their information and analytical needs. Accordingly, competitive and market pressures may result in fewer clients or reduced sales, including as a result of client closures and consolidations, price reductions, prolonged selling and renewal cycles and increased operating costs, such as for marketing and product development, which could, individually or in the aggregate, result in a material adverse effect on our business, financial condition or results of operations.

To remain competitive, we must successfully develop new and enhanced products and services and effectively manage product transitions and integrations.

To remain competitive, we must continually introduce new products and services; enhance existing products and services, including through integration of products and services within MSCI and with third-party platforms; collect, organize, analyze and protect large amounts of information to generate insights; and effectively generate client demand for new and enhanced products and services. We may not be successful in developing, introducing, implementing, marketing, pricing, launching or licensing new products or enhancements on a timely or cost-effective basis or without impacting the stability and efficiency of existing products and systems. Any new products and enhancements may not adequately meet the requirements of the marketplace or industry standards or achieve market acceptance.

The process of developing and enhancing our products and services is complex and may become increasingly complex and expensive in the future due to the introduction of new platforms, operating systems, technologies and client expectations. This process often requires effective collaboration across various functions and product lines, and ineffective or insufficient collaboration may harm our ability to meet our business objectives. In addition, our reputation could be harmed if we are perceived as not innovating rapidly enough to meet the changing needs of investors or their advisors. We must make long-term investments and commit significant resources before knowing whether these investments will eventually result in new or enhanced products and services that satisfy our clients' needs and generate adequate revenues. From time to time, we also incur costs to integrate existing products and services and transition clients to enhanced products and services, which also present execution risks and challenges and could lead to price reductions or other concessions. If we are unable to effectively manage the development of new or enhanced products and services, we

may not be able to remain competitive and our business, financial condition or results of operations could be materially adversely affected.

Our global operations and any future expansions may continue to place significant strain on our management and other resources, as well as subject us to additional, and in some cases unanticipated, risks and costs in connection with political, economic, legal, operational and other issues resulting from our increased global footprint, which could materially adversely impact our businesses.

Our global operations and any future expansion are expected to continue to place significant demands on our personnel, management and other resources. In our existing global operations or any future expansion, including as a result of acquisition, there can be no assurance that we will effectively attract, engage and retain qualified personnel, develop and retain effective leadership in all our locations; operate and expand our physical facilities and information technology, legal and compliance infrastructure; integrate acquired businesses; or otherwise adequately manage our global operations and any future expansion.

Our global operations also expose us to political, economic, legal, operational, reputational, franchise and other risks that are inherent in operating in many countries, including risks of possible capital controls, exchange controls, customs duties, sanctions compliance, tax penalties, levies or assessments, legal uncertainty, broad regulatory discretion and other restrictive governmental actions, as well as the outbreak of hostilities or political and governmental instability in certain of the countries or regions in which we conduct operations. The majority of our employees are located in offices outside of the U.S., and a number of those employees are located in emerging market locations. The cost of establishing and maintaining these offices, including costs related to information technology infrastructure, as well as the costs of attracting, training and retaining employees in these locations may be higher, or may increase at a faster rate, than we anticipate. Additionally, public health epidemics impacting the global economy and our employees, such as the worldwide COVID-19 pandemic, may have a material adverse effect on our business, financial condition or results of operations.

The laws and regulations in many countries applicable to our business are uncertain and evolving, and it may be difficult or costly for us to determine and remain compliant with the exact requirements of local laws in every market. Our inability to maintain consistent internal policies and procedures across our offices and remain in compliance with local laws in a particular market could have a significant and negative effect not only on our businesses in that market but also on our reputation generally.

Demand for our products and services is still nascent in many parts of the world, particularly in emerging market locations where risk management and ESG and climate integration practices are often not fully developed. In addition, the data required to model local securities in some emerging markets might be difficult to source and local investment product nuances may be difficult or costly to model. If we do not appropriately tailor our products and services to fit the needs of the local market, we may be unable to effectively grow sales of our products and services in some locations outside of the U.S. There can be no assurances that demand for our products and services will develop in these countries.

Any failure to effectively manage expansion or to effectively manage the business globally could damage our brand and reputation, result in increased costs and litigation and have a material adverse effect on our business, financial condition or results of operations.

Legal and Regulatory Risks

Failure to comply with laws, rules or regulations, or the introduction of new laws, rules or regulations or changes to existing laws, rules or regulations could materially adversely affect our business, financial condition or results of operations.

Failure to comply with any applicable laws, rules, orders, regulations, codes or other requirements could subject us to litigation, regulatory actions, sanctions, fines or other penalties, as well as damage our brand and reputation. The financial services industry, within which we and many of our clients operate, is subject to extensive laws, rules and regulations at the federal and state levels, as well as by foreign governments, with some jurisdictions regulating indexes directly. These laws, rules and regulations are complex, evolve frequently and sometimes quickly and unexpectedly, and are subject to administrative interpretation and judicial construction in ways that are difficult to predict, and could materially adversely affect our business and our clients' businesses. Uncertainty caused by political change globally heightens regulatory uncertainty. Additionally, we may be required to comply with multiple and potentially conflicting laws, rules or regulations in various jurisdictions, which could, individually or in the aggregate, result in materially higher compliance costs to us. It is possible that laws, rules or regulations could cause us to restrict or change the way we license and price our products and services across our offerings, including if data or information from one offering is used in another offering, or could impose additional costs on us. Changes to the laws, rules and regulations applicable to our clients could limit our clients' ability to use our products and services or could otherwise impact our clients' demand for our products and services. As such, to the extent that our clients become subject to certain laws, rules or regulations, we may incur higher costs in connection

with modifying our products or services. To the extent that we rely on our clients and vendors to provide data for our products and services and certain laws, rules or regulations impact our clients' and vendors' ability or willingness to provide that data to us or regulate the fees for which such data can be provided, our ability to continue to produce our products and services or the related costs could be negatively impacted. The regulations and regulatory developments that most significantly impact us are described below:

- **Brexit.** The United Kingdom ("UK") exited the European Union ("EU") on January 31, 2020 (commonly referred to as "Brexit") and the UK's membership in the EU single market ended on December 31, 2020. On December 24, 2020, the UK and the EU announced that they had struck a new bilateral trade and cooperation deal governing the future relationship between the UK and the EU (the "EU-UK Trade and Cooperation Agreement") which was formally approved by the 27 member states of the EU on December 29, 2020. In March 2021, the UK and EU agreed on a framework for voluntary regulatory cooperation and dialogue on financial services issues between them in a Memorandum of Understanding (the "MOU"), which is expected to be signed after formal steps are completed, although this has not yet occurred. There remain uncertainties related to Brexit and the new relationship between the UK and EU that will continue to be developed and defined, as well as uncertainties related to the wider trading, legal, regulatory, tax and labor environments, and the resulting impact on our business and that of our clients. For instance, under the EU Benchmarks Regulation, benchmarks provided by a third-country (i.e. non-EU) benchmark administrator may be used by EU-supervised entities in the EU if the benchmark administrator applies for recognition, endorsement or if its home jurisdiction's regime is deemed equivalent by the European Commission. The EU Benchmarks Regulation currently provides for a transition period until December 31, 2023, allowing supervised entities to continue to utilize benchmarks provided by non-EU administrators. The European Commission has indicated that it may further extend the transition period for the use of benchmarks provided by non-EU administrators until at least January 1, 2026. One of our subsidiaries is authorized as a UK benchmark administrator regulated by the UK FCA, we have significant operations in the EU and certain members of our senior management team are based in the UK. As a result, uncertainties related to Brexit and the new relationship between the UK and EU could increase our costs of doing business, or in some cases, affect our ability to do business, which could have a material adverse effect on our business, financial condition or results of operations.
- **Regulation Affecting Benchmarks.** Compliance efforts associated with regulations affecting benchmarks or their uses and any related technical standards and guidance could have a negative impact on our business and results of operations. In particular, compliance requirements could lead to a change in our business practices, product offerings or our ability to offer indexes in certain jurisdictions, including the EU, including without limitation, by increasing our costs of doing business, including direct costs paid to regulators, diminishing our intellectual property rights, impacting the fees we can charge for our indexes, imposing constraints on our ability to meet contractual commitments to our data providers, imposing constraints on how we offer our products or causing our data providers to refuse to provide data to us, any of which could have a material adverse effect on our index products.

For example, the benchmark industry is subject to regulations in the EU, such as Regulation (EU) 2016/1011 (as amended), which is also applicable in the UK as it forms part of UK domestic law by virtue of the European Union (Withdrawal) Act 2018 (as amended), as well as increased scrutiny and potential new or increased regulation in various other jurisdictions. Additionally, the European Securities and Markets Authority ("ESMA") issues guidance from time to time regarding interpretations of the EU Benchmarks Regulation (such as Regulation (EU) 2016/1011 (as amended) and Regulation (EU) No 600/2014). The ESMA Guidelines on ETFs and other UCITS Issues limit the types of indexes that can be used as the basis of Undertakings for Collective Investment in Transferable Securities ("UCITS") funds and require, among other things, index constituents, together with their respective weightings, to be made easily accessible free of charge, such as via the internet, to investors and prospective investors on a delayed and periodic basis. The International Organization of Securities Commissions ("IOSCO") recommends that benchmark administrators, on a voluntary basis, publicly disclose whether they comply with the principles for financial benchmarks published by IOSCO. Other jurisdictions have also indicated they may consider potential benchmark regulation or conduct reviews of the benchmark industry. For instance, the UK FCA has announced that it will conduct a market study into how competition is working in the markets for benchmarks and indices. The heightened attention and scrutiny on benchmarks and index providers by regulators, policymakers and the media in the EU, the U.S. and other jurisdictions around the world could result in negative publicity or comments about the role or influence of our company or the index industry generally, which could harm our reputation and credibility.

Further, laws, rules, regulations and orders affecting users of our indexes can have an indirect impact on our indexes, including their construction and composition, such as sanctions that prohibit users of our indexes from investing or transacting in securities included in our indexes.

- **Data Privacy Legislation.** Changes in laws, rules or regulations, or consumer environments relating to privacy or data collection and use may affect our ability to collect, manage, aggregate, store, transfer and use personal data.

There could be a material adverse impact on our direct marketing due to the enactment of legislation or industry regulations, or simply a change in practices, arising from public concern over privacy issues. Restrictions or bans could be placed, or penalties could be levied, relating to the collection, management, aggregation, storage, transfer and use of information that is currently legally available, in which case our costs related to handling information could increase materially. For example, California passed the California Consumer Privacy Act (“CCPA”), which took effect on January 1, 2020, and the California Privacy Rights Act (“CPRA”), which took effect on January 1, 2023 and significantly amends and expands the CCPA. The CCPA and CPRA regulate the processing of personal data of all Californians and imposes significant penalties for non-compliance. The European General Data Protection Regulation imposes enhanced operational requirements for companies that receive or process personal data of residents of the EU and includes significant penalties for non-compliance. In Japan, the Act on the Protection of Personal Information regulates the use of personal information and personal data of “data subjects” for business purposes without regard to whether such use is within Japan. In addition, other jurisdictions, including China and India, are considering imposing or have already imposed additional restrictions on the use and transfer of personal and other types of data.

- *Investment Advisers Act.* Except with respect to certain products provided by MSCI ESG Research LLC and certain of its designated foreign affiliates, we believe that our products and services do not constitute or provide investment advice as contemplated by the Advisers Act. See Part I, Item 1. “Business—Government Regulation” above. The Advisers Act imposes fiduciary duties, recordkeeping and reporting requirements, disclosure requirements, limitations on agency and principal transactions between an adviser and advisory clients, as well as general anti-fraud prohibitions. Future developments in our product lines or changes to current laws, rules, regulations or interpretations could cause this status to change, requiring other entities in our corporate family to register as investment advisers under the Advisers Act or comply with similar laws or requirements in states or foreign jurisdictions. In the U.S., the SEC has recently sought public comment on the role of certain third-party information providers to the asset management industry, including index providers and model providers, and whether, under particular facts and circumstances, information providers are acting as investment advisers under the Advisers Act. The specific questions in the SEC’s request for comment demonstrate that the SEC is considering whether, and to what extent, information providers, including index providers, should register as investment advisers and be subject to all aspects of the Advisers Act. The SEC’s request for comment is far-reaching and could lead to regulation pursuant to the Advisers Act or other framework. If our index business were to be deemed an investment adviser, we could be deemed a fiduciary to our clients, increasing the costs and complexity of our business. In addition, aspects of this regulatory framework may be at odds with our obligations under other benchmark regulations. The SEC has also recently proposed a rule that would prohibit SEC-registered investment advisers from outsourcing certain services or functions to service providers that do not meet minimum requirements. This proposed rule would impose on investment advisers due diligence, monitoring and record-keeping requirements of their service providers, and index providers, among others, are identified as service providers that could fall within the scope of the proposed requirements. This proposed rule could therefore impose additional requirements on our business.

In some instances, in connection with the provision of data and services, we have incurred additional costs to implement processes and systems at the request of our clients to ensure that the products and services that they in turn provide to their clients using our data are compliant with the financial regulations to which our clients may be subject. For example, a U.S. Executive Order prohibiting many of our clients from transacting in the securities of certain Chinese companies resulted in our decision to remove these companies from relevant indexes in order to support our clients’ needs that our indexes meet their objective to be replicable in investment portfolios. To the extent that our clients are subject to increased regulation, we may be indirectly impacted and could incur increased costs that could have a negative impact on the profitability of certain products.

Additionally, there has been increased attention on and scrutiny of index and ESG rating and data providers by politicians, regulators, policymakers and the media, which could create negative publicity that could harm our reputation or credibility as well as result in new or additional regulation that could increase our costs and have a negative impact on our business, financial condition or results of operations. For example, IOSCO has asked regulators to consider focusing more attention on the use of ESG ratings and data products. In the EU, the European Commission published a Summary Report in August 2022, following a targeted consultation on the functioning of the ESG ratings market in the EU and on the consideration of ESG factors in credit ratings, which the Commission will use to consider the need for possible policy initiatives. In addition, in December 2022, the UK government announced a consultation on the regulation of ESG ratings. Furthermore, in December 2022, the Japan Financial Services Agency published a Code of Conduct for ESG rating and data providers, and the UK FCA announced the formation of an industry-led group to develop a voluntary Code of Conduct for ESG data and ratings providers. These or similar regulatory regimes or initiatives could impose significant compliance burdens and costs on our ESG and Climate products and services. Furthermore, regulation in multiple jurisdictions may be inconsistent, which could create implementation challenges and result in inadvertent noncompliance.

Legal protections for our intellectual property rights and other rights may not be sufficient or available to protect our competitive advantages. Third parties may infringe on our intellectual property rights or we may infringe upon their intellectual property rights, which, in each case, could have a material adverse effect on our business, financial condition or results of operations.

We consider many aspects of our products and services to be proprietary. We rely primarily on a combination of trade secrets, patents, copyrights and trademark rights, laws regarding unfair competition and the misappropriation of intellectual property, as well as technical measures and contractual protections, such as non-disclosure obligations, to protect our products and services. Moreover, we license or acquire technology that we incorporate into our services and products, and third parties or previous owners may not have taken sufficient measures to protect intellectual property. Despite our best efforts, we cannot be certain that the steps we have taken to protect our intellectual property rights, and the rights of those from whom we license or acquire intellectual property, are adequate to prevent unauthorized use, misappropriation, distribution or theft of our intellectual property.

Intellectual property laws in various jurisdictions in which we operate are subject to change or varying interpretations at any time and could further restrict our ability to protect our intellectual property rights. The enforceability of intellectual property rights and obligations under our agreements, as well as the availability of remedies in the event of a breach, may vary due to the different jurisdictions in which our clients and employees are located. Failure to protect our intellectual property adequately could harm us, our brand or reputation and affect our ability to compete effectively.

There is no guarantee that any intellectual property rights that we may obtain will protect our competitive advantages, nor is there any assurance that our competitors will not infringe upon our rights. Furthermore, our competitors may independently develop and protect products and services that are the same or similar to ours. We may be unable to detect the unauthorized use or disclosure of our intellectual property or confidential information, or to take the necessary steps to enforce our rights. In addition, our products and services, or third-party products that we provide to our clients, could infringe upon the intellectual property rights of others.

Pursuing intellectual property claims to preserve our intellectual property rights or responding to intellectual property claims, regardless of merit, can consume valuable time, and result in costly litigation or delays, and there is no guarantee that we will be successful. From time to time, we receive claims or notices from third parties alleging infringement or potential infringement of their intellectual property rights; and the number of these claims may grow. These intellectual property claims would likely be costly to defend and could require us to pay damages, limit our future use of certain technologies, harm our brand and reputation, significantly increase our costs and prevent us from offering some services or products. We may need to settle such claims on unfavorable terms, pay damages, stop providing or using the affected products or services, undertake workarounds or substantial reengineering of our products or services or enter into royalty or licensing agreements, which may include terms that are not commercially acceptable to us. From time to time, we receive notices calling upon us to defend partners, clients, suppliers or distributors against third-party claims under indemnification clauses in our contracts. If any of these risks materialize, they could have a material adverse effect on our business, financial condition or results of operations.

There have been a number of lawsuits in multiple jurisdictions, including in the U.S. and Germany, regarding whether issuers of indexed investment products are required to obtain a license from the index owner or whether issuers may issue investment products based on publicly available index-level data without obtaining permission from (or making payment to) the index owner. The outcome of these cases depends on a number of factors, including the governing law, the amount of information about the index available without a license and the other particular facts and circumstances of the cases. In some instances, the results have been unfavorable to the index owner. If courts or regulators or other governmental bodies in relevant jurisdictions determine that a license is not required to issue investment products linked to indexes, this could have a material adverse effect on our business, financial condition or results of operations. It might also lead to changes in current industry practices such that we would no longer make our index level data publicly available, such as via our website or news media, on a timely basis.

Some of our products and services help our clients to meet their regulatory requirements. Changes to regulatory requirements may obviate the need for these products or services or may cause us to invest in enhancing the products or services to help our clients meet the new regulatory requirements.

Financial Risks

Our revenues, expenses, assets and liabilities are subject to foreign currency exchange rate fluctuation risk.

We are subject to foreign currency exchange rate fluctuation risk. Exchange rate movements can impact the U.S. dollar reported value of our revenues, expenses, assets and liabilities denominated in non-U.S. dollar currencies or where the currency of such items is different than the functional currency of the entity where these items were recorded. Additionally, the value of assets in indexed investment products can fluctuate significantly over short periods of time and such volatility may be further impacted by fluctuations in foreign currency exchange rates.

We manage certain portions of our foreign currency exchange rate risk, in part, through the use of derivative financial instruments comprised principally of forward contracts on foreign currency which are not designated as hedging instruments for accounting purposes. Any derivative financial instruments that we are currently party to or may enter into in the future may not be successful, resulting in an adverse impact on our results of operations.

To the extent that our international activities recorded in local currencies increase or decrease in the future, our exposure to fluctuations in foreign currency exchange rates may correspondingly increase or decrease and could have a material adverse effect on our business, financial condition or results of operations.

Our indebtedness could materially adversely affect our cash flows and financial flexibility.

For an overview of our current outstanding indebtedness, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations.” Although we believe that our cash flows will be sufficient to service our outstanding indebtedness, we cannot provide assurance that we will generate and maintain cash flows sufficient to permit us to pay the principal, premium, if any, and interest on our indebtedness. Our ability to make payments on indebtedness and to fund planned capital expenditures depends on our ability to generate and access cash in the future, which, in turn, is subject to general economic, financial, competitive, regulatory and other factors, many of which are beyond our control. If we are unable to pay our obligations as they mature, we may need to refinance all or a portion of our indebtedness on or before maturity. If we are unable to secure additional financing on terms favorable or acceptable to us or at all, we could also be forced to sell assets to make up for any shortfall in our payment obligations. If we cannot refinance or otherwise pay our obligations as they mature and fund our liquidity needs, our business, financial condition, results of operations, cash flows, liquidity, ability to obtain financing and ability to compete in our industry could be materially adversely affected.

We may need or want to refinance our existing debt or incur additional debt from time to time to finance working capital, capital expenditures, investments or acquisitions, or for other purposes. If we do so, we may be subject to less favorable terms. The risks related to our level of indebtedness could also intensify, including by making it difficult for us to optimally capitalize and manage the cash flow for our business or placing us at a competitive disadvantage compared to our competitors that have less indebtedness.

Furthermore, the terms of our debt agreements include restrictive covenants that limit, among other things, our and our existing and future subsidiaries’ financial flexibility. If we are unable to comply with the restrictions and covenants in our debt agreements, there could be a default that, in some cases, if continuing, could result in the accelerated payment of our debt obligations or the termination of borrowing commitments on the part of the lenders under our revolving credit facility (the “Revolving Credit Facility”) or our term loan A facility (the “TLA Facility”) under the Amended and Restated Credit Agreement (the “Credit Agreement”), dated as of June 9, 2022, by and among the Company, the guarantors party thereto, JPMorgan Chase Bank, N.A., as administrative agent and the lenders from time to time party thereto, as amended, supplemented, modified or amended and restated from time to time. As of December 31, 2022, there were no amounts outstanding under our Revolving Credit Facility, and the TLA Facility was fully drawn.

In 2017, the UK Financial Conduct Authority (the “FCA”), which regulates London Interbank Offered Rate (“LIBOR”), announced that the FCA will no longer persuade or compel banks to submit rates for the calculation of the LIBOR benchmark after 2021. The administrator for LIBOR announced on March 5, 2021 that it will permanently cease to publish most LIBOR settings beginning on January 1, 2022 and cease to publish the overnight, one-month, three-month, six-month and 12-month USD LIBOR settings on July 1, 2023. Accordingly, the FCA has stated that it does not intend to persuade or compel banks to submit to LIBOR after such respective dates. Until such time, however, FCA panel banks have agreed to continue to support LIBOR. The U.S. Federal Reserve, in conjunction with the Alternative Reference Rates Committee, a steering committee comprised of large U.S. financial institutions, is recommending replacing USD LIBOR with the Secured Overnight Financing Rate (“SOFR”), a new index calculated by short-term repurchase agreements, backed by Treasury securities.

In 2022, we amended our prior credit agreement to, among other things, replace LIBOR with SOFR. Any borrowings under the credit facilities under our Credit Agreement are primarily based on SOFR. It is unknown whether SOFR will attain market acceptance as a replacement for LIBOR and, because SOFR differs fundamentally from LIBOR, there is no assurance that SOFR will perform in the same way as LIBOR would have performed at any time, and there is no guarantee that it is a comparable substitute for LIBOR. As a result, we cannot reasonably predict the potential effect, if any, of the replacement of LIBOR with SOFR or the establishment of other alternative reference rates on our business, financial condition or results of operations. In addition, we have incurred variable rate indebtedness under the TLA Facility, and we may incur variable rate indebtedness under our Revolving Credit Facility, which subjects us to interest rate risk generally and could cause our debt service obligations to increase significantly.

A change in our credit ratings could materially adversely affect our financial condition.

Our credit ratings are not recommendations to buy, sell or hold any of our common stock or outstanding debt. Our outstanding debt under our senior unsecured notes (the “Senior Notes”) currently has non-investment grade ratings. Any rating assigned to our debt is subject to ongoing evaluation by the credit rating agencies and could be lowered or withdrawn entirely at any time by any of the agencies if, in the agency’s judgment, future circumstances relating to the basis of the rating so warrant. Such future circumstances include, but are not limited to, adverse changes to our results of operations, financial condition or cash flows, or revisions to our corporate strategy pertaining to capitalization or leverage. Any such downgrade or withdrawal could adversely affect the amount of capital we can access, as well as the terms of any financing we obtain.

In addition, our debt covenants contain certain obligations that are triggered by a change in our credit rating, including obligations to make repurchase offers to the noteholders of our Senior Notes if we experience one of the specified kinds of changes in control and related lowering of our credit ratings, as detailed in the indentures governing our Senior Notes.

Any adverse change in our credit rating could have a negative effect on our liquidity and future growth through transactions in which we rely on the ability to receive debt capital at an advantageous cost and on favorable terms. Accordingly, actual or anticipated changes or downgrades to or withdrawal of our credit ratings, including any announcement that our ratings are under review or have been assigned a negative outlook, could result in damage to our brand and reputation and have a material adverse effect on our business, financial condition, results of operations and cash flows and on the market value of our common stock and outstanding debt.

We may have exposure to tax liabilities in various jurisdictions. Future changes in tax law could materially affect our tax obligations and effective tax rate.

We are subject to income taxes, as well as non-income or indirect taxes, in the U.S. and various foreign jurisdictions. Significant judgment is required in determining our global provision for income taxes and other tax liabilities. In the ordinary course of a global business, there are many intercompany transactions and calculations where the ultimate tax determination is uncertain.

Changes in domestic and international tax laws could negatively impact our overall effective tax rate. Over the last several years, many jurisdictions and intergovernmental organizations have been discussing or are in the process of implementing proposals that may change aspects of the existing framework under which our tax obligations are determined in many of the jurisdictions in which we operate, including to ensure that multinational enterprises pay a global minimum tax, among other changes. Recent pronouncements and directives related to this project suggest an implementation of the proposed 15% global minimum tax in the near term. Continued negotiations on important details of this project are ongoing, and ultimate enactment and timing in the EU, United States, UK and other jurisdictions remain uncertain. Based on our current understanding of these proposals and directives, we expect that we may be within their scope and that their implementation could impact the amount of tax we have to pay.

We are regularly under audit by tax authorities. We may be subject to additional tax liabilities as the jurisdictions in which we do business globally are increasingly focused on digital taxes and the treatment of remote workforces. Although we believe that our tax provisions are reasonable, there can be no assurance that the final determination of tax audits or tax disputes will not be different from what is reflected in our historical income tax provisions and accruals. To the extent we are required to pay amounts in excess of our reserves, such differences could have a material adverse effect on our Consolidated Statement of Income for a particular future period. In addition, an unfavorable tax settlement could require use of our cash and result in an increase in our effective tax rate in the period in which such resolution occurs.

General Risks

Our business performance might not be sufficient for us to meet the full-year financial guidance or long-term targets that we provide publicly.

We provide certain full-year financial guidance and long-term targets to the public based upon our assumptions regarding our expected financial performance that may not always prove to be accurate and may vary from actual results. In addition, uncertainty regarding macroeconomic factors such as inflation could impact our ability to forecast costs, which inform our financial guidance and long-term targets. If we fail to meet the full-year financial guidance or achieve the long-term targets that we provide, or if we find it necessary to revise such guidance or targets, the market value of our common stock or other securities could be adversely affected.

Our growth and profitability may not continue at the same rate as we have experienced in the past for several reasons, including if our operating costs are higher than expected, which could have a material adverse effect on our business, financial condition or results of operations.

We have experienced significant revenue and earnings growth since we began operations. There can be no assurance that we will be able to maintain the levels of growth and profitability that we have experienced in the past. If we experience higher than expected operating costs, including increased compensation costs, regulatory compliance costs, occupancy costs, selling and marketing costs, investments in geographic expansion, market data costs, software license costs, communication costs, travel costs, application development costs, professional fees, costs related to information technology infrastructure, cloud usage and other IT costs, and we cannot adjust to these costs, our operating results may fluctuate significantly or our anticipated profitability may be reduced and our anticipated results of operations and financial position may be materially adversely affected. Additionally, there can be no assurance that we will be as successful in our product development, selling and marketing efforts, or capital return or allocation strategies as we have been in the past, or that such efforts will result in growth or profit margins comparable to those we have experienced in the past.

We may be exposed to liabilities as a result of failure to comply with laws and regulations relating to our global operations, including anti-corruption laws, and any determination that we violated these laws could have a material adverse effect on our business.

We are subject to complex laws and regulations that are applicable to our global operations, such as laws and regulations governing economic and trade sanctions, tariffs, embargoes, anti-boycott restrictions and anti-corruption and other similar laws and regulations. Any determination that we have violated these laws or regulations could have a material adverse effect on our business, financial condition or results of operations.

In particular, we are subject to various anti-corruption laws that prohibit improper payments or benefits or offers of payments or benefits to foreign governments and their officials and, in some cases, to employees of a business for the purpose of directing, obtaining or retaining business. We conduct business in countries and regions that are less developed than the U.S. and in some cases are generally recognized as potentially more corrupt business environments. Our activities in these countries create the risk of unauthorized payments or offers of payments by one of our employees or agents that could be in violation of various anti-corruption laws including the Foreign Corrupt Practices Act of 1977, as amended (the “FCPA”) and the UK Bribery Act 2010.

We have implemented safeguards and policies to discourage these types of practices by our employees and agents. However, our existing safeguards and any future improvements may prove to be less than fully effective, and our employees or agents may engage in conduct for which we might be held responsible. If employees violate our policies or we fail to maintain adequate record-keeping and internal accounting practices to accurately record our transactions we may be subject to regulatory fines, sanctions, damages or other penalties or costs. Violations of any of these laws, including the FCPA or other anti-corruption laws, may result in severe criminal or civil sanctions and penalties, damage our brand and reputation and subject us to other liabilities which could have a material adverse effect on our business, financial condition or results of operations.

If we are unable to successfully identify, execute and realize expected returns and synergies from acquisitions or strategic partnerships or investments, or if we experience integration, financing, or other risks resulting from our acquisitions or strategic partnerships or investments, our financial results may be materially adversely affected.

An element of our growth strategy is growth through acquisitions, strategic partnerships and investments. Despite our best efforts to continue pursuing such transactions, there can be no assurance that we will be able to identify and execute transactions with suitable strategic partners, investment opportunities or attractive acquisition candidates at acceptable terms. In addition, we may require additional debt or equity financing for future acquisitions and doing so may be made more difficult by the terms of our existing indebtedness.

Our ability to achieve the expected returns and synergies from our past and future acquisitions, strategic partnerships and investments depends, in part, upon our ability to effectively leverage or integrate the offerings, technology, sales, administrative functions and personnel of these businesses. We cannot provide assurance that we will be successful in integrating acquired businesses, that our acquired businesses will perform at the levels we anticipate or that our strategic partnerships and investments will advance the long-term growth strategy of our company. Our past and future acquisitions, strategic partnerships and investments may subject us to unanticipated risks or liabilities, including the potential to disrupt our operations. Additionally, strategic partnerships may increase our reliance on third parties, which may result in future disruptions if those partnerships are unsuccessful or discontinued or the content or level of support provided by strategic partners is diminished.

If we experience a high level of acquisition, strategic partnership or investment-related activity within a limited period of time, the probability that certain of these risks would occur would likely increase. In addition, if we are unsuccessful in completing acquisitions of other businesses or assets, executing strategic partnerships or investments, or if such opportunities for expansion do not arise, our brand or reputation could suffer, and our future growth, business, financial condition or results of operations could be materially adversely affected.

Our goodwill and other intangible assets resulting from our acquisitions could be impaired as a result of future business conditions, requiring us to record substantial write-downs that would reduce our operating income.

We evaluate the recoverability of recorded goodwill amounts annually or when evidence of potential impairment exists. Intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of the asset may not be recoverable. These impairment tests are based on several factors requiring management's judgment. Changes in fair market valuations and our operating performance or business conditions, in general, could result in future impairments of goodwill or intangible assets which could materially adversely affect our results of operations. In addition, if we are not successful in achieving anticipated operating efficiencies associated with acquisitions, our goodwill and intangible assets may become impaired.

If we fail to attract, develop or retain the necessary qualified personnel, including through our compensation programs, our business, financial condition or results of operations could be materially adversely affected.

The development, maintenance and support of our products and services are dependent upon the knowledge, skills, experience and abilities of our employees. Accordingly, we believe the success of our business depends to a significant extent upon the continued service of our executives and other key employees. Although we do not believe that we are overly dependent upon any individual employee, our management and other employees may terminate employment at any time, and the loss of any of our key employees and our inability to replace them with suitable candidates quickly or at all, as well as any negative market perception resulting from such loss, could have a material adverse effect on our business, financial condition or results of operations.

We compete for key employees not only with other companies in our industry but also with companies in other industries, such as software services, engineering services and financial services companies, and there is a limited pool of employees who have the skills and training needed to do our work. Competition for these employees is intense, and employee turnover may impact our objectives and place strain on our human resources teams. We may not be able to attract these employees or to develop and retain similar highly qualified personnel in the future.

Rising compensation expenses could also adversely affect our ability to attract and retain high-quality employees. Competitors may seek to attract talent by providing more favorable working conditions or offering significantly more attractive compensation packages. If our compensation programs do not adequately engage our key employees or are not competitive, or if we fail to attract, engage and retain the necessary qualified personnel, the quality of our products and services as well as our ability to support and retain our clients and achieve business objectives may suffer.

We cannot provide any guaranty that we will continue to repurchase shares of our common stock pursuant to our share repurchase program.

The timing, price and volume of repurchases of shares of our common stock will be based on market conditions, relevant securities laws and other factors. The stock repurchases may be made from time to time, through one or more open market repurchases or privately negotiated transactions, including, without limitation, accelerated share repurchase transactions, trading plans or derivative transactions, or otherwise.

Share repurchases under our share repurchase program constitute components of our capital return strategy, which we fund with free operating cash flow and borrowings. However, we are not required to make any share repurchases under our share repurchase program. The share repurchase program does not obligate us to repurchase any set dollar amount or number of shares and may be modified, suspended, or terminated at any time without prior notice. The reduction or elimination of our share repurchase program could adversely affect the market price of our common stock. Additionally, the existence of a share repurchase program could cause the market price of our common stock to be higher than it would be in the absence of such a program and could potentially reduce the market liquidity for our shares. As a result, any repurchase program may not ultimately result in enhanced value to our shareholders and may not prove to be the best use of our cash resources.

Item 1B. *Unresolved Staff Comments*

Nothing required to be disclosed.

Item 2. Properties

As of December 31, 2022, our principal offices consisted of the following leased properties:

Location	Square Feet	Expiration Date
New York, New York	125,811 (1)	February 28, 2033
Budapest, Hungary	70,833	February 28, 2029
Mumbai, India	63,143	July 31, 2032
Monterrey, Mexico	56,213	October 31, 2028
Manila, Philippines	31,544	February 28, 2027
London, England	30,519	December 25, 2026
Pune, India	24,434	January 19, 2026
Berkeley, California	19,808	February 28, 2030

(1) As of December 31, 2022, 41,759 square feet of this location have been subleased.

As of December 31, 2022, we had more than 30 leased and occupied locations of which the principal offices are listed above. We believe that our properties are in good operating condition and adequately serve our current business operations. We also anticipate that suitable additional or alternative space, including those under lease options, will be available at commercially reasonable terms for future expansion.

Item 3. Legal Proceedings

Various lawsuits, claims and proceedings have been or may be instituted or asserted against the Company in the ordinary course of business. While the amounts claimed could be substantial, the ultimate liability cannot now be determined because of the considerable uncertainties that exist. Therefore, it is possible that MSCI's business, operating results, financial condition or cash flows in a particular period could be materially affected by certain contingencies. However, based on facts currently available, management believes that the disposition of matters that are currently pending or asserted will not, individually or in the aggregate, have a material effect on MSCI's business, operating results, financial condition or cash flows.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. *Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities*

Stock Price and Dividends

Our common stock is traded on the New York Stock Exchange under the symbol “MSCI.” As of February 3, 2023, there were 109 shareholders of record of our common stock. Because many shares of our common stock are held by brokers and other institutions on behalf of beneficial holders, we are unable to estimate the total number of shareholders represented by these shareholders of record.

Dividend Policy

The payment amounts of future dividends will be determined by the Board of Directors in light of conditions then existing, including our earnings, financial condition and capital requirements, business conditions, corporate law requirements and other factors. See Part II, Item 7. “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources” for additional information on our dividend policy.

Stock Repurchases

Our Board of Directors has approved a stock repurchase program for the purchase of the Company’s common stock in the open market. See Note 11, “Shareholders’ Equity (Deficit),” of the Notes to Consolidated Financial Statements included herein for additional information on our stock repurchase program.

The following table provides information with respect to purchases made by or on behalf of the Company of its shares of common stock during the quarter ended December 31, 2022.

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased ⁽¹⁾	Average Price Paid Per Share	Total Number of Shares Purchased As Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs ⁽²⁾
October 1, 2022-October 31, 2022	163,117	\$ 430.06	163,064	\$1,304,379,000
November 1, 2022-November 30, 2022	167	\$ 502.00	—	\$1,304,379,000
December 1, 2022-December 31, 2022	—	\$ —	—	\$1,304,379,000
Total	<u>163,284</u>	\$ 430.14	<u>163,064</u>	\$1,304,379,000

- (1) Includes (i) shares purchased by the Company on the open market under the stock repurchase program; (ii) shares withheld to satisfy tax withholding obligations on behalf of employees that occur upon vesting and delivery of outstanding shares underlying restricted stock units; and (iii) shares held in treasury under the MSCI Inc. Non-Employee Directors Deferral Plan. The value of shares withheld to satisfy tax withholding obligations was determined using the fair market value of the Company’s common stock on the date of withholding, using a valuation methodology established by the Company.
- (2) See Note 11, “Shareholders’ Equity (Deficit),” of the Notes to the Consolidated Financial Statements included herein for further information regarding our stock repurchase program.

Recent Sales of Unregistered Securities

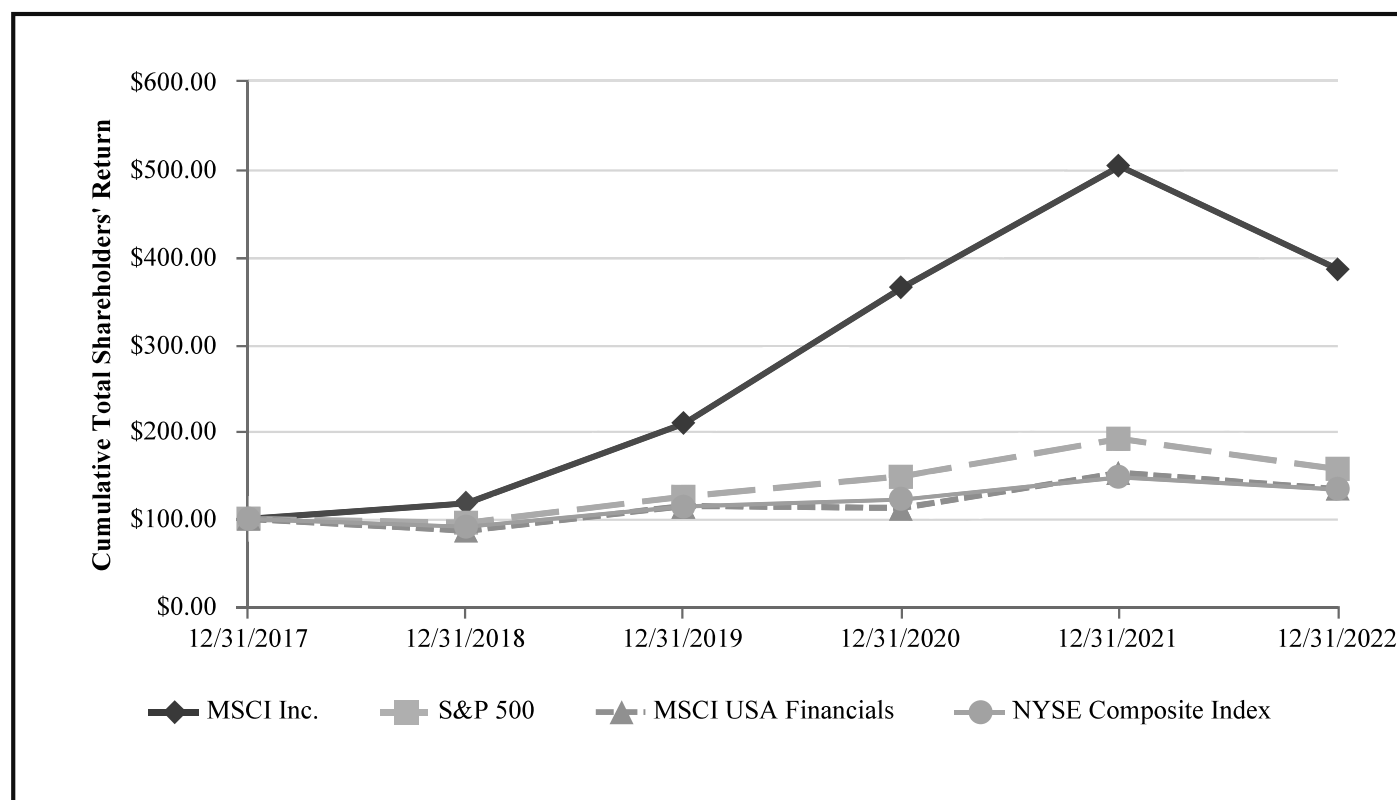
There were no unregistered sales of equity securities in the year ended December 31, 2022.

Use of Proceeds from Sale of Registered Securities

None.

FIVE-YEAR STOCK PERFORMANCE GRAPH

The following graph compares the cumulative total shareholders' return on our common stock, the Standard & Poor's 500 Stock Index, the MSCI USA Financials Index and the NYSE Composite Index since December 31, 2017 assuming an investment of \$100 at the closing price on December 31, 2017. In calculating total annual shareholders' return, reinvestment of dividends, if any, is assumed. The indexes are included for comparative purposes only. They do not necessarily reflect management's opinion that such indexes are an appropriate measure of the relative performance of the common stock. This graph is not "soliciting material," is not to be deemed filed with the SEC and is not to be incorporated by reference in any of our filings under the Securities Act of 1933, as amended (the "Securities Act") or the Securities Exchange Act of 1934, as amended, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.



Total Investment Value

	Years Ended					
	December 31, 2017	December 31, 2018	December 31, 2019	December 31, 2020	December 31, 2021	December 31, 2022
MSCI Inc.	\$100	\$118	\$209	\$364	\$503	\$386
S&P 500	\$100	\$96	\$126	\$149	\$192	\$157
MSCI USA Financials Index ⁽¹⁾	\$100	\$86	\$115	\$113	\$153	\$134
NYSE Composite Index ⁽¹⁾	\$100	\$91	\$114	\$122	\$148	\$134

(1) To better align with comparable investment opportunities, for the year ended December 31, 2022, MSCI replaced the NYSE Composite Index with the MSCI USA Financials Index. Both indices are presented, in accordance with SEC rules, which require that if a company selects a different index from that used in the immediately preceding fiscal year, the company's stock performance must be compared against both the newly selected index and previous index in the year of change. MSCI USA Financials Index is an index operated by MSCI.

Item 6. [Reserved]

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following Management's Discussion and Analysis of Financial Condition and Results of Operations is a discussion and analysis of the financial condition and results of the operations of MSCI Inc. and its consolidated subsidiaries for the year ended December 31, 2022. This discussion should be read in conjunction with the consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K. The discussion summarizing the significant factors affecting the results of operations and financial condition of MSCI for the year ended December 31, 2021 can be found in Part II, "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" of our Annual Report on Form 10-K for the year ended December 31, 2021 (the "2021 Annual Report"), which was filed with the Securities and Exchange Commission on February 11, 2022.

Overview

We are a leading provider of critical decision support tools and solutions for the global investment community. Our mission-critical offerings help investors address the challenges of a transforming investment landscape and power better investment decisions. Leveraging our knowledge of the global investment process and our expertise in research, data and technology, we enable our clients to understand and analyze key drivers of risk and return and confidently and efficiently build more effective portfolios. We operate in four reportable segments as follows: Index, Analytics, ESG and Climate, and All Other – Private Assets.

The operating segments of Real Assets and The Burgiss Group, LLC ("Burgiss") do not individually meet the segment reporting thresholds and have been combined and presented as part of the All Other – Private Assets reportable segment. During the year ended December 31, 2022, we renamed the Real Estate operating segment to Real Assets.

Our growth strategy includes: (a) extending leadership in research-enhanced content across asset classes, (b) leading the enablement of ESG and climate investment integration, (c) enhancing distribution and content-enabling technology, (d) expanding solutions that empower client customization, (e) strengthening client relationships and growing into strategic partnerships with clients and (f) executing strategic relationships and acquisitions with complementary content and technology companies. For more information about our Company's operations, see "*Item 1: Business*".

Key Financial and Operating Metrics and Drivers

In evaluating our financial performance, we focus on revenue and profit growth, including results accounted for under generally accepted accounting principles in the United States ("GAAP") as well as non-GAAP measures, for the Company as a whole and by operating segment.

We present revenues disaggregated by types and by segments, which represent our major product lines. We also review expenses by activity, which provides more transparency into how resources are being deployed. In addition, we utilize operating metrics including Run Rate, subscription sales and Retention Rate to manage and assess performance and to provide deeper insights into the recurring portion of our business.

In the discussion that follows, we provide certain variances excluding the impact of foreign currency exchange rate fluctuations and acquisitions. 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 AUM, which is the primary component of asset-based fees, is not adjusted for foreign currency fluctuations. Approximately three-fifths of the AUM is 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.

Revenues

Our revenues are presented by type and by reportable segment. For each reportable segment, we present revenues disaggregated by the nature of the revenues, which are recurring subscriptions, asset-based fees and non-recurring revenues.

Recurring subscription revenues represent fees earned from clients primarily under renewable contracts and are generally recognized ratably over the term of the license or service pursuant to the contract terms. The fees are recognized as we provide the product and service to the client over the license period and are generally billed in advance, prior to the license start date.

Asset-based fees represent fees earned that are variable in nature, as they are primarily calculated based on the AUM linked to our indexes. Asset-based fees also include revenues related to futures and options contracts linked to our indexes, which are based on trading volumes and fee levels.

Non-recurring revenues primarily represent fees earned on products and services where we typically do not have renewal clauses within the contract. Examples of such products and services include one-time license fees, certain derivative financial products, certain implementation services and historical data sets. Based on the nature of the services provided, non-recurring revenues are generally billed either in advance or after delivery and recognized point in time or over the service period.

Operating Expenses

We group our operating expenses into the following activity categories:

- Cost of revenues;
- Selling and marketing;
- Research and development (“R&D”);
- General and administrative (“G&A”);
- Amortization of intangible assets; and
- Depreciation and amortization of property, equipment and leasehold improvements.

Costs are assigned to these activity categories based on the nature of the expense or, when not directly attributable, an estimated allocation based on the type of effort involved. Cost of revenues, selling and marketing, R&D and G&A all include both compensation as well as non-compensation related expenses

Cost of Revenues

Cost of revenues expenses consist of costs related to the production and servicing of our products and services and primarily includes related information technology costs, including data center, cloud service, platform and infrastructure costs; costs to acquire, produce and maintain market data information; costs of research to support and maintain existing products; costs of product management teams; costs of client service and consultant teams to support customer needs; as well as other support costs directly attributable to the cost of revenues including certain human resources, finance and legal costs.

Selling and Marketing

Selling and marketing expenses consist of costs associated with acquiring new clients or selling new products or product renewals to existing clients and primarily includes the costs of our sales and marketing teams, as well as costs incurred in other departments associated with acquiring new business, including product management, research, technology and sales operations.

Research and Development

R&D expenses consist of costs to develop new or enhance existing products and the costs to develop new or enhanced technologies and service platforms for the delivery of our products and services and primarily include the costs of development, research, product management, project management and the technology support directly associated with these activities.

General and Administrative

G&A expenses consist of costs primarily related to finance operations, human resources, office of the CEO, legal, corporate technology, corporate development, impairment charges associated with right of use assets and certain other administrative costs that are not directly attributed, but are instead allocated, to a product or service.

Amortization of Intangible Assets

Amortization of intangible assets expense relates to definite-lived intangible assets arising from past acquisitions and capitalization of internally developed software projects. Intangibles arising from past acquisitions consist of customer relationships, proprietary data, trademarks and trade names and technology and software. We amortize definite-lived intangible assets over their estimated useful lives. We have no indefinite-lived intangible assets.

Depreciation and Amortization of Property, Equipment and Leasehold Improvements

Depreciation and amortization of property, equipment and leasehold improvements consists of expenses related to depreciating or amortizing the cost of computer and related equipment, leasehold improvements, software and furniture and fixtures over the estimated useful life of the assets.

Other Expense (Income), Net

Other expense (income), net consists primarily of interest we pay on our outstanding indebtedness, including losses on early extinguishment of debt, income and losses associated with our equity method investment, foreign currency exchange rate gains and losses, interest we collect on cash and short-term investments, as well as other non-operating income and expense items that may arise from time to time.

Non-GAAP Financial Measures

Adjusted EBITDA

“Adjusted EBITDA,” a non-GAAP measure used by management to assess operating performance, 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, when applicable, impairment related to sublease of leased property and certain non-recurring acquisition-related integration and transaction costs.

“Adjusted EBITDA expenses,” a non-GAAP measure used by management to assess operating performance, 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, when applicable, impairment related to sublease of leased property and certain non-recurring acquisition-related integration and transaction costs.

“Adjusted EBITDA margin” is defined as adjusted EBITDA divided by operating revenues.

Adjusted EBITDA, Adjusted EBITDA margin and Adjusted EBITDA expenses are believed to be meaningful measures for management to assess the operating performance of the Company 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 the Company’s ongoing operating performance in the period. All companies do not calculate adjusted EBITDA, adjusted EBITDA margin and adjusted EBITDA expenses in the same way. 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 the Adjusted EBITDA, Adjusted EBITDA margin and Adjusted EBITDA expenses measures may not be comparable to similarly titled measures computed by other companies.

Run Rate

Run Rate is a key operating metric and is important because an increase or decrease in our Run Rate ultimately impacts our future operating revenues over time. At the end of any period, we generally have subscription and investment product license agreements in place for a large portion of total revenues for the following 12 months. We measure the fees related to these agreements and refer to this as “Run Rate.” See “—Operating Metrics—Run Rate” below for additional information on the calculation of this metric.

Subscription Sales

Subscription sales is a key operating metric and is important to management because new subscription sales increase our Run Rate and represent future operating revenues that will be recognized over time. See “—Operating Metrics—Sales” below for additional information.

Retention Rate

Retention Rate is a key operating metric and is important to management because subscription cancellations decrease our Run Rate and ultimately our future operating revenues over time. See “—Operating Metrics—Retention Rate” below for additional information on the calculation of this metric.

Critical Accounting Estimates

Our consolidated financial statements are prepared in accordance with GAAP. These accounting principles require us to make certain estimates and judgments that can affect the reported amounts of assets and liabilities as of the date of the consolidated financial statements, as well as the reported amounts of revenues and expenses during the periods presented. Significant estimates and judgments made by management include such examples as assessment of impairment of goodwill and intangible assets and income taxes. We believe the estimates and judgments upon which we rely are reasonable based upon information available to us at the time these estimates and judgments are made. To the extent there are material differences between these estimates and actual results, our consolidated financial statements will be affected.

Goodwill

Goodwill is recorded as a result of business combinations undertaken by the Company when the purchase price exceeds the fair value of the net tangible assets and separately identifiable intangible assets acquired. We test goodwill for impairment on an annual basis on July 1st and on an interim basis when certain events and circumstances exist. The test for impairment is performed at the reporting unit level. When testing goodwill for impairment, we first assess qualitative factors to determine whether it is necessary to perform the quantitative goodwill impairment test; however, on a periodic basis, we may elect to bypass the qualitative assessment and proceed directly to the quantitative test. When performing the quantitative test for impairment, we use the income approach to estimate the fair value of each reporting unit. Under the income approach, we estimate the fair value of each reporting unit based on the present value of estimated future cash flows. Estimating discounted future cash flows requires significant management judgment including in estimating forecasted future cash flows and determining both discount rates and terminal growth rates. Forecasted future cash flows are estimated based on a combination of historical experience and assumptions regarding the future growth and profitability of each reporting unit. Discount rates are selected based on discount rates of similar public companies to the reporting unit being valued and terminal growth rates are selected based on consideration of growth rates used during the reporting unit's forecast period in combination with economic conditions. These assumptions require management's judgment and changes to these estimates or assumptions could materially affect the determination of the reporting unit's fair value. Any impairment is measured as the difference between the carrying amount and its fair value. Based on our qualitative assessment for 2022, we determined that it was not more likely than not that the fair value of the company's reporting units is less than their respective carrying values and no impairments were recorded.

Definite Lived Intangible Assets

Definite-lived intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of the asset or asset group may not be recoverable. These events or circumstances include adverse changes in the manner in which the asset will be used, adverse changes in legal factors related to the asset or negative changes in expected financial performance of the asset, including accumulation of costs and operating losses. Determining whether an event or changes in circumstances warrant an impairment review involves management judgment.

Once it is determined that an impairment review is necessary, determination of recoverability is determined based on comparing the carrying amount of the asset group to the estimated future undiscounted cash flows. If the carrying amount exceeds the estimated future undiscounted cash flows, the asset grouping is considered to be impaired. Measurement of impairment for intangible assets is based on the amount the carrying value exceeds the fair value of the asset, which is based on estimated discounted future cash flows. Estimated undiscounted and discounted cash flows used in the determination and calculation of impairments represent management forecasts and require significant management judgment. While management believes that its forecasts are reasonable, differences between forecasts and actual experience could materially affect the valuations. There were no events or changes in circumstances that would indicate that the carrying value of the definite-lived intangible assets may not be recoverable during the years presented.

With respect to our acquisition of RCA on September 13, 2021, the valuation of intangible assets, as part of the acquisition method of accounting, was subjective and based, in part, on inputs that were unobservable. The significant assumptions used to estimate the fair value of the acquired intangible assets included, forecasted cash flows which were determined based on certain assumptions that included, among others, projected future revenues, and expected market royalty rate, technology obsolescence rates and discount rates. These estimates are inherently uncertain and unpredictable, and if different estimates were used, the purchase price for the acquisition could be allocated to the acquired assets and assumed liabilities of RCA differently from the allocation that we have made.

We amortize our intangible assets over the estimated period of economic benefit. If the estimated period of economic benefit is changed, the prospective amortization of the intangible asset could materially change.

Income Taxes

We are subject to income taxes in the U.S. and other foreign jurisdictions. Our tax provision is an estimate based on our understanding of laws in federal, state and foreign tax jurisdictions. These laws can be complicated and are difficult to apply to any business. The tax laws also require us to allocate our taxable income to many jurisdictions based on subjective allocation methodologies and information collection processes.

Provision for income taxes is provided for using the asset and liability method, under which deferred tax assets and deferred tax liabilities are determined based on the temporary differences between the financial statement and income tax bases of assets and liabilities using currently enacted tax rates. Deferred tax assets are reduced by a valuation allowance when, in our opinion, it is more likely than not that all or some portion of the deferred tax assets will not be realized. In assessing the need for a valuation allowance, management is required to estimate future taxable income which requires judgment.

We must regularly assess the likelihood of additional assessments in each of the taxing jurisdictions in which we file income tax returns and adjust unrecognized tax benefits when additional information is available or when an event occurs. This assessment requires significant judgment in assessment of tax laws, frequency of tax examinations, and the nature of intercompany transactions and tax positions.

Factors Affecting the Comparability of Results

Acquisition of RCA

On September 13, 2021, MSCI completed the acquisition of RCA for an aggregate cash purchase price of \$949.0 million, subject to working capital adjustments. See Note 5, “Acquisitions,” of the Notes to the Consolidated Financial Statements included herein for additional information on the acquisition of RCA.

Results of Operations

Operating Revenues

Our operating revenues are grouped by the following types: recurring subscriptions, asset-based fees and non-recurring. We also group operating revenues by major product or reportable segment as follows: Index, Analytics, ESG and Climate and All Other – Private Assets, which includes the Real Assets product line and our equity method investment in Burgiss.

The following table presents operating revenues by type for the years indicated:

(in thousands)	Years Ended		Increase/(Decrease)
	December 31, 2022	December 31, 2021	
Recurring subscriptions	\$ 1,659,523	\$ 1,426,040	16.4 %
Asset-based fees	528,127	553,991	(4.7)%
Non-recurring	60,948	63,513	(4.0)%
Total operating revenues	<u>\$ 2,248,598</u>	<u>\$ 2,043,544</u>	10.0 %

Total operating revenues increased 10.0% for the year ended December 31, 2022 compared to the year ended December 31, 2021. Adjusting for the impact of acquisitions and foreign currency exchange rate fluctuations, total operating revenues would have increased 8.9%.

Operating revenues from recurring subscriptions increased 16.4% for the year ended December 31, 2022 compared to the year ended December 31, 2021, primarily driven by strong growth in Index products, which increased \$79.1 million, or 12.2%, strong growth in ESG and Climate products, which increased \$60.6 million, or 37.2%, strong growth in All Other - Private Assets products, which increased \$60.0 million, or 75.4%, and growth in Analytics products, which increased \$33.8 million, or 6.3%. Adjusting for the impact of acquisitions and foreign currency exchange rate fluctuations, operating revenues from recurring subscriptions would have increased 14.6%.

Operating revenues from asset-based fees decreased 4.7% for the year ended December 31, 2022 compared to the year ended December 31, 2021, driven by a decline in revenues from ETFs linked to MSCI equity indexes and non-ETF indexed funds linked to MSCI indexes, partially offset by an increase in revenues from exchange traded futures and options contracts linked to MSCI indexes. Operating revenues from ETFs linked to MSCI equity indexes decreased by 7.7%, primarily driven by a decrease in average basis point fees and average AUM. Operating revenues from non-ETF indexed funds linked to MSCI indexes decreased by 6.9%, primarily

driven by a decrease in average basis point fees, partially offset by an increase in average AUM. Operating revenues from exchange traded futures and options contracts linked to MSCI indexes increased by 15.1%, driven by volume increases.

The following table presents the value of AUM in ETFs linked to MSCI equity indexes and the sequential change of such assets as of the end of each of the periods indicated:

(in billions)	Period Ended							
	2021				2022			
	March 31,	June 30,	September 30,	December 31,	March 31,	June 30,	September 30,	December 31,
AUM in ETFs linked to MSCI equity indexes ⁽¹⁾⁽²⁾	\$ 1,209.6	\$ 1,336.2	\$ 1,336.6	\$ 1,451.6	\$ 1,389.3	\$ 1,189.5	\$ 1,081.2	\$ 1,222.9
<u>Sequential Change in Value</u>								
Market Appreciation/ (Depreciation)	\$ 43.2	\$ 73.7	\$ (30.7)	\$ 56.5	\$ (89.7)	\$ (207.3)	\$ (105.7)	\$ 118.8
Cash Inflows	62.8	52.9	31.1	58.5	27.4	7.5	(2.6)	22.9
Total Change	\$ 106.0	\$ 126.6	\$ 0.4	\$ 115.0	\$ (62.3)	\$ (199.8)	\$ (108.3)	\$ 141.7

The following table presents the average value of AUM in ETFs linked to MSCI equity indexes for the periods indicated:

(in billions)	Year-to-Date Average							
	2021				2022			
	March	June	September	December	March	June	September	December
AUM in ETFs linked to MSCI equity indexes ⁽¹⁾⁽²⁾	\$ 1,169.2	\$ 1,230.8	\$ 1,274.5	\$ 1,309.6	\$ 1,392.5	\$ 1,338.9	\$ 1,295.6	\$ 1,267.2

(1) The historical values of the AUM in ETFs linked to our equity indexes as of the last day of the month and the monthly average balance can be found under the link “AUM in ETFs Linked to MSCI Equity Indexes” on our Investor Relations homepage at <http://ir.msci.com>. This information is updated mid-month each month. Information contained on our website is not deemed part of or incorporated by reference into this Annual Report on Form 10-K or any other report filed with the SEC. The AUM in ETFs also includes AUM in Exchange Traded Notes, the value of which is less than 1.0% of the AUM amounts presented.

(2) The value of AUM in ETFs linked to MSCI equity indexes is calculated by multiplying the equity ETF net asset value by the number of shares outstanding.

For the year ended December 31, 2022, the average value of AUM in ETFs linked to MSCI equity indexes was down \$42.4 billion, or 3.2%, compared to the year ended December 31, 2021.

The following table presents operating revenues by reportable segment and revenue type for the years indicated:

(in thousands)	Years Ended		Increase/(Decrease)
	December 31, 2022	December 31, 2021	
Operating revenues:			
Index			
Recurring subscriptions	\$ 729,710	\$ 650,629	12.2 %
Asset-based fees	528,127	553,991	(4.7)%
Non-recurring	45,372	47,144	(3.8)%
Index total	1,303,209	1,251,764	4.1 %
Analytics			
Recurring subscriptions	567,004	533,178	6.3 %
Non-recurring	9,103	11,121	(18.1)%
Analytics total	576,107	544,299	5.8 %
ESG and Climate			
Recurring subscriptions	223,160	162,609	37.2 %
Non-recurring	5,151	3,583	43.8 %
ESG and Climate total	228,311	166,192	37.4 %
All Other - Private Assets			
Recurring subscriptions	139,649	79,624	75.4 %
Non-recurring	1,322	1,665	(20.6)%
All Other - Private Assets total	140,971	81,289	73.4 %
Total operating revenues	\$ 2,248,598	\$ 2,043,544	10.0 %

Refer to the section titled “Segment Results” that follows for further discussion of segment revenues.

Operating Expenses

Total operating expenses increased 7.2% for the year ended December 31, 2022 compared to the year ended December 31, 2021. Adjusting for the impact of foreign currency exchange rate fluctuations, the increase would have been 11.2%.

The following table presents operating expenses by activity category for the years indicated:

(in thousands)	Years Ended		Increase/ (Decrease)
	December 31, 2022	December 31, 2021	
Operating expenses:			
Cost of revenues	\$ 404,341	\$ 358,684	12.7 %
Selling and marketing	264,583	243,185	8.8 %
Research and development	107,205	111,564	(3.9)%
General and administrative	146,857	147,893	(0.7)%
Amortization of intangible assets	91,079	80,592	13.0 %
Depreciation and amortization of property, equipment and leasehold improvements	26,893	28,901	(6.9)%
Total operating expenses	\$ 1,040,958	\$ 970,819	7.2 %

Cost of Revenues

Cost of revenues increased 12.7% for the year ended December 31, 2022 compared to the year ended December 31, 2021, reflecting increases across the All Other - Private Assets, ESG and Climate and Index reportable segments. The change was driven by increases in non-compensation costs, primarily relating to higher information technology costs and professional fees, as well as

increases in compensation and benefit costs, reflecting higher wages and salaries and higher severance costs, partially offset by lower incentive compensation costs.

Selling and Marketing

Selling and marketing expenses increased 8.8% for the year ended December 31, 2022 compared to the year ended December 31, 2021, primarily reflecting increases across the All Other - Private Assets, ESG and Climate and Index segments. The change was primarily driven by higher compensation and benefits costs, primarily relating to higher wages and salaries, benefits and severance costs, partially offset by lower incentive compensation. The change was also driven by higher non-compensation costs, primarily related to higher costs associated with conferences and events and travel.

Research and Development

R&D expenses decreased 3.9% for the year ended December 31, 2022 compared to the year ended December 31, 2021, primarily driven by increased capitalization of costs related to internally developed software projects. The decrease was partially offset by higher wages and salaries costs, driven by headcount increases, as well as higher non-compensation costs, reflecting increased information technology costs. Taking into consideration investments eligible for capitalization, R&D spending increased across the All Other - Private Assets, ESG and Climate and Index reportable segments, partially offset by decreased spending in the Analytics reportable segment.

General and Administrative

G&A expenses decreased 0.7% for the year ended December 31, 2022 compared to the year ended December 31, 2021, reflecting decreased spending in the Analytics reportable segment, partially offset by increases across the All Other - Private Assets, ESG and Climate and Index reportable segments. The change was primarily driven by the absence of impairment charges associated with right of use assets and lower transaction costs related to the acquisition of RCA. The decrease was partially offset by higher compensation and benefit costs, primarily relating to higher severance costs, wages and salaries and incentive compensation.

The following table presents operating expenses using compensation and non-compensation categories, rather than using activity categories, for the years indicated:

(in thousands)	Years Ended		Increase/(Decrease)
	December 31, 2022	December 31, 2021	
Compensation and benefits	\$ 652,364	\$ 614,950	6.1 %
Non-compensation expenses	270,622	246,376	9.8 %
Amortization of intangible assets	91,079	80,592	13.0 %
Depreciation and amortization of property, equipment and leasehold improvements	26,893	28,901	(6.9)%
Total operating expenses	<u>\$ 1,040,958</u>	<u>\$ 970,819</u>	7.2 %

A significant portion of the incentive compensation component of operating expenses is based on the achievement of a number of financial and operating metrics. In a scenario where operating revenue growth and profitability moderate, incentive compensation would be expected to decrease accordingly.

Fixed costs constitute a significant portion of the non-compensation component of operating expenses. The discretionary non-compensation component of operating expenses could, however, be reduced in the near-term in a scenario where operating revenue growth moderates.

We had 4,759 employees as of December 31, 2022 compared to 4,303 employees as of December 31, 2021, reflecting a 10.6% growth in the number of employees. Continued growth of our emerging market centers around the world is an important factor in our ability to manage and control the growth of our compensation and benefits costs. As of December 31, 2022, 65.0% of our employees were located in emerging market centers compared to 63.2% as of December 31, 2021.

Compensation and benefits costs increased 6.1% for the year ended December 31, 2022 compared to the year ended December 31, 2021, primarily driven by an increase in salaries and benefits due to headcount growth and an increase in severance costs, partially offset by increased capitalization of costs related to internally developed software projects and lower incentive compensation.

Non-compensation expenses increased 9.8% for the year ended December 31, 2022 compared to the year ended December 31, 2021, primarily driven by higher information technology costs, professional fees, market data costs and travel and entertainment expenses, partially offset by lower impairment charges associated with right of use assets, lower non-recurring transaction and integration costs related to the acquisition of RCA as well as decreased other non-income tax expenses as a result of favorable settlements reached in the current period.

Amortization of Intangible Assets

Amortization of intangible assets expense increased 13.0% for the year ended December 31, 2022 compared to the year ended December 31, 2021, primarily driven by additional amortization recognized on acquired intangible assets from the acquisition of RCA, partially offset by the absence of intangible assets write-off costs.

Depreciation and Amortization of Property, Equipment and Leasehold Improvements

Depreciation and amortization of property, equipment and leasehold improvements decreased 6.9% for the year ended December 31, 2022 compared to the year ended December 31, 2021, primarily driven by lower amortization on software and the lack of impairment charges on leasehold improvements.

Total Other Expense (Income), Net

The following table shows our other expense (income), net for the years indicated:

(in thousands)	Years Ended		Increase/(Decrease)
	December 31, 2022	December 31, 2021	
Interest income	\$ (11,769)	\$ (1,497)	686.2 %
Interest expense	171,571	159,614	7.5 %
Other expense (income)	3,997	56,472	(92.9)%
Total other expense (income), net	<u>\$ 163,799</u>	<u>\$ 214,589</u>	(23.7)%

Total other expense (income), net decreased 23.7% for the year ended December 31, 2022 compared to the year ended December 31, 2021, primarily driven by the absence of debt extinguishment costs and higher interest income, partially offset by higher interest expense associated with higher average outstanding debt balances and by the absence in the current period of a one-time gain of \$7.0 million resulting from changes in our ownership interest of Burgiss.

Income Taxes

The following table shows our income tax provision and effective tax rate for the years indicated:

(in thousands)	Years Ended		Increase/(Decrease)
	December 31, 2022	December 31, 2021	
Provision for income taxes	\$ 173,268	\$ 132,153	31.1 %
ETR	16.6 %	15.4 %	7.8 %

The effective tax rate of 16.6% for the year ended December 31, 2022 reflects the impact of certain favorable discrete items totaling \$29.1 million, in relation to pretax income, primarily related to \$28.4 million of excess tax benefits recognized on share-based compensation vested during the period.

The effective tax rate of 15.4% for the year ended December 31, 2021 reflects the impact of certain favorable discrete items totaling \$28.3 million, in relation to pretax income, primarily related to \$22.7 million of excess tax benefits recognized on share-based compensation vested during the period, a \$5.1 million benefit related to prior year settlements, a \$2.3 million benefit related to the revaluation of deferred taxes as a result of the enactment of an increase in the UK corporate tax rate and a \$2.0 million benefit related to the filing of prior year refund claims, partially offset by a \$3.8 million expense related to other prior year items. In addition, the effective tax rate was impacted by the level of earnings.

Net Income

The following table shows our net income for the years indicated:

(in thousands)	Years Ended		Increase/(Decrease)
	December 31, 2022	December 31, 2021	
Net income	\$ 870,573	\$ 725,983	19.9 %

As a result of the factors described above, net income increased 19.9% for the year ended December 31, 2022 compared to the year ended December 31, 2021.

Weighted Average Shares and Common Shares Outstanding

The following table shows our weighted average shares and common shares outstanding for the years indicated:

(in thousands)	Years Ended		% Change
	December 31, 2022	December 31, 2021	
Weighted average shares outstanding:			
Basic	80,746	82,508	(2.1%)
Diluted	81,215	83,479	(2.7%)
Common shares outstanding	79,960	82,439	(3.0%)

The decrease in weighted average shares and common shares outstanding primarily reflects the impact of share repurchases made pursuant to the stock repurchase program.

Adjusted EBITDA

The following table presents non-GAAP Adjusted EBITDA, Adjusted EBITDA expenses and Adjusted EBITDA margin for the years indicated:

(in thousands)	Years Ended		Increase/(Decrease)
	December 31, 2022	December 31, 2021	
Operating revenues:	\$ 2,248,598	\$ 2,043,544	10.0 %
Adjusted EBITDA expenses	918,927	846,754	8.5 %
Adjusted EBITDA	\$ 1,329,671	\$ 1,196,790	11.1 %
Operating margin %	53.7 %	52.5 %	
Adjusted EBITDA margin %	59.1 %	58.6 %	

The increase in Adjusted EBITDA and Adjusted EBITDA margin reflects a higher rate of growth in operating revenues as compared to the rate of growth of Adjusted EBITDA expenses, driven by the factors previously described.

Reconciliation of Net Income to Adjusted EBITDA and Operating Expenses to Adjusted EBITDA Expenses

The following table presents the reconciliation of net income to Adjusted EBITDA for the years indicated:

(in thousands)	Years Ended		Increase/(Decrease)
	December 31, 2022	December 31, 2021	
Net income	\$ 870,573	\$ 725,983	19.9 %
Provision for income taxes	173,268	132,153	31.1 %
Other expense (income), net	163,799	214,589	(23.7)%
Operating income	1,207,640	1,072,725	12.6 %
Amortization of intangible assets	91,079	80,592	13.0 %
Depreciation and amortization of property, equipment and leasehold improvements	26,893	28,901	(6.9)%
Impairment related to sublease of leased property	—	7,702	(100.0)%
Acquisition-related integration and transaction costs ⁽¹⁾	4,059	6,870	(40.9)%
Consolidated Adjusted EBITDA	<u>\$ 1,329,671</u>	<u>\$ 1,196,790</u>	11.1 %
Index Adjusted EBITDA	985,407	951,312	3.6 %
Analytics Adjusted EBITDA	247,895	198,799	24.7 %
ESG and Climate Adjusted EBITDA	61,094	29,748	105.4 %
All Other - Private Assets Adjusted EBITDA	35,275	16,931	108.3 %
Consolidated Adjusted EBITDA	<u>\$ 1,329,671</u>	<u>\$ 1,196,790</u>	11.1 %

(1) Incremental and non-recurring costs attributable to acquisitions directly related to the execution of the transaction and integration of the acquired business that have occurred no later than 12 months after the close of the transaction.

The following table presents the reconciliation of operating expenses to Adjusted EBITDA expenses for the years indicated:

(in thousands)	Years Ended		Increase/(Decrease)
	December 31, 2022	December 31, 2021	
Total operating expenses	\$ 1,040,958	\$ 970,819	7.2 %
Amortization of intangible assets	91,079	80,592	13.0 %
Depreciation and amortization of property, equipment and leasehold improvements	26,893	28,901	(6.9)%
Impairment related to sublease of leased property	—	7,702	(100.0)%
Acquisition-related integration and transaction costs ⁽¹⁾	4,059	6,870	(40.9)%
Consolidated Adjusted EBITDA expenses	<u>\$ 918,927</u>	<u>\$ 846,754</u>	8.5%
Index Adjusted EBITDA expenses	317,802	300,452	5.8%
Analytics Adjusted EBITDA expenses	328,212	345,500	(5.0)%
ESG and Climate Adjusted EBITDA expenses	167,217	136,444	22.6%
All Other - Private Assets Adjusted EBITDA expenses	105,696	64,358	64.2%
Consolidated Adjusted EBITDA expenses	<u>\$ 918,927</u>	<u>\$ 846,754</u>	8.5 %

(1) Incremental and non-recurring costs attributable to acquisitions directly related to the execution of the transaction and integration of the acquired business that have occurred no later than 12 months after the close of the transaction.

Segment Results

The results for each of our four reportable segments for the years ended December 31, 2022, and 2021 are presented below:

Index Segment

The following table presents the results for the Index segment for the years indicated:

(in thousands)	Years Ended		Increase/(Decrease)
	December 31, 2022	December 31, 2021	
Operating revenues:			
Recurring subscriptions	\$ 729,710	\$ 650,629	12.2 %
Asset-based fees	528,127	553,991	(4.7)%
Non-recurring	45,372	47,144	(3.8)%
Operating revenues total	1,303,209	1,251,764	4.1 %
Adjusted EBITDA expenses	317,802	300,452	5.8 %
Adjusted EBITDA	\$ 985,407	\$ 951,312	3.6 %
Adjusted EBITDA margin %	75.6 %	76.0 %	

Index operating revenues increased 4.1% for the year ended December 31, 2022 compared to the year ended December 31, 2021, primarily driven by growth from recurring subscriptions, partially offset by a decline in asset-based fees and non-recurring revenues. Adjusting for the impact of foreign currency exchange rate fluctuations, Index operating segment revenues would have increased 4.5%.

Revenues from recurring subscriptions increased 12.2% for the year ended December 31, 2022 compared to the year ended December 31, 2021, primarily driven by strong growth from both market cap-weighted and factor, ESG and climate Index products.

Operating revenues from asset-based fees decreased 4.7% for the year ended December 31, 2022 compared to the year ended December 31, 2021, driven by a decline in revenues from ETFs linked to MSCI equity indexes and non-ETF indexed funds linked to MSCI indexes, partially offset by an increase in revenues from exchange traded futures and options contracts linked to MSCI indexes. Operating revenues from ETFs linked to MSCI equity indexes decreased by 7.7%, primarily driven by a decrease in average basis point fees and average AUM. Operating revenues from non-ETF indexed funds linked to MSCI indexes decreased by 6.9%, primarily driven by a decrease in average basis point fees, partially offset by an increase in average AUM. Operating revenues from exchange traded futures and options contracts linked to MSCI indexes increased by 15.1%, driven by volume increases.

Index segment Adjusted EBITDA expenses increased 5.8% for the year ended December 31, 2022 compared to the year ended December 31, 2021, driven by higher non-compensation expenses across the cost of revenues, R&D and selling and marketing expense categories, primarily relating to higher information technology costs. The change was also driven by higher compensation costs across all expense activity categories, primarily reflecting higher wages and salaries and benefits costs, as a result of increased headcount, partially offset by lower incentive compensation. Adjusting for the impact of foreign currency exchange rate fluctuations, Index segment Adjusted EBITDA expenses would have increased 9.9%.

Analytics Segment

The following table presents the results for the Analytics segment for the years indicated:

(in thousands)	Years Ended		Increase/(Decrease)
	December 31, 2022	December 31, 2021	
Operating revenues:			
Recurring subscriptions	\$ 567,004	\$ 533,178	6.3 %
Non-recurring	9,103	11,121	(18.1)%
Operating revenues total	576,107	544,299	5.8 %
Adjusted EBITDA expenses	328,212	345,500	(5.0)%
Adjusted EBITDA	\$ 247,895	\$ 198,799	24.7 %
Adjusted EBITDA margin %	43.0 %	36.5 %	

Analytics operating revenues increased 5.8% for the year ended December 31, 2022 compared to the year ended December 31, 2021, primarily driven by growth from recurring subscriptions related to both Multi-Asset Class and Equity Analytics products. Adjusting for the impact of foreign currency exchange rate fluctuations, Analytics operating revenues would have increased 6.8%.

Analytics segment Adjusted EBITDA expenses decreased 5.0% for the year ended December 31, 2022 compared to the year ended December 31, 2021, primarily driven by lower compensation expenses across all expense activity categories, as a result of lower incentive compensation and increased capitalization of expenses related to internally developed software projects. Adjusting for the impact of foreign currency exchange rate fluctuations, Analytics segment Adjusted EBITDA expenses would have decreased 1.7%.

ESG and Climate Segment

The following table presents the results for the ESG and Climate segment for the years indicated:

(in thousands)	Years Ended		Increase/(Decrease)
	December 31, 2022	December 31, 2021	
Operating revenues:			
Recurring subscriptions	\$ 223,160	\$ 162,609	37.2 %
Non-recurring	5,151	3,583	43.8 %
Operating revenues total	228,311	166,192	37.4 %
Adjusted EBITDA expenses	167,217	136,444	22.6 %
Adjusted EBITDA	\$ 61,094	\$ 29,748	105.4 %
Adjusted EBITDA margin %	26.8 %	17.9 %	

ESG and Climate operating revenues increased 37.4% for the year ended December 31, 2022 compared to the year ended December 31, 2021, primarily driven by strong growth from recurring subscriptions related to Ratings, Climate and Screening products. Adjusting for the impact of foreign currency exchange rate fluctuations, ESG and Climate operating revenues would have increased 47.5%.

ESG and Climate segment Adjusted EBITDA expenses increased 22.6% for the year ended December 31, 2022 compared to the year ended December 31, 2021, reflecting higher compensation and non-compensation expenses to support growth across all expense categories. The increase was primarily driven by increased salaries and benefits costs, as a result of increased headcount, as well as increased information technology costs and professional fees. The increase was partially offset by increased capitalization of expenses related to internally developed software projects. Adjusting for the impact of foreign currency exchange rate fluctuations, ESG and Climate segment Adjusted EBITDA expenses would have increased 28.0%.

All Other – Private Assets Segment

The following table presents the results for the All Other – Private Assets segment for the years indicated:

(in thousands)	Years Ended		Increase/(Decrease)
	December 31, 2022	December 31, 2021	
Operating revenues:			
Recurring subscriptions	\$ 139,649	\$ 79,624	75.4 %
Non-recurring	1,322	1,665	(20.6)%
Operating revenues total	140,971	81,289	73.4 %
Adjusted EBITDA expenses	105,696	64,358	64.2 %
Adjusted EBITDA	\$ 35,275	\$ 16,931	108.3 %
Adjusted EBITDA margin %	25.0 %	20.8 %	

All Other – Private Assets operating revenues increased 73.4% for the year ended December 31, 2022 compared to the year ended December 31, 2021, primarily driven by revenues attributable to the acquisition of RCA as well as growth from recurring subscriptions related to Global Intel, Enterprise Analytics and Climate Value-at-Risk products, partially offset by unfavorable foreign currency exchange rate fluctuations. Adjusting for both the impact of the acquisition and foreign currency exchange rate fluctuations, All Other – Private Assets operating revenues would have increased 12.5%. Adjusting for the impact of the acquisition and foreign currency exchange rate fluctuations individually, All Other - Private Assets operating revenues would have increased 2.5% and 83.4%, respectively.

All Other – Private Assets segment Adjusted EBITDA expenses increased 64.2% for the year ended December 31, 2022 compared to the year ended December 31, 2021, reflecting higher compensation and non-compensation across all spending categories, primarily driven by the acquisition of RCA. Adjusting for the impact of the acquisition and foreign currency exchange rate fluctuations individually, All Other - Private Assets segment Adjusted EBITDA expenses would have increased 6.7% and 73.7%, respectively.

Operating Metrics

Run Rate

“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, or reach the end of the committed subscription period, 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, non-renewal or an indication the client does not intend to continue their subscription 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.

Changes in our recurring revenues typically lag changes in Run Rate. The actual amount of recurring revenues we will realize over the following 12 months will differ from Run Rate for numerous reasons, including:

- fluctuations in revenues associated with new recurring sales;
- modifications, cancellations and non-renewals of existing Client Contracts, subject to specified notice requirements;
- differences between the recurring license start date and the date the Client Contract is executed due to, for example, contracts with onboarding periods or fee waiver periods;
- fluctuations in asset-based fees, which may result from changes in certain investment products’ total expense ratios, market movements, including foreign currency exchange rates, or from investment inflows into and outflows from investment products linked to our indexes;
- fluctuations in fees based on trading volumes of futures and options contracts linked to our indexes;
- fluctuations in the number of hedge funds for which we provide investment information and risk analysis to hedge fund investors;

- price changes or discounts;
- revenue recognition differences under U.S. GAAP, including those related to the timing of implementation and report deliveries for certain of our products and services;
- fluctuations in foreign currency exchange rates; and
- the impact of acquisitions and divestitures.

The following table presents Run Rates by reportable segment as of the dates indicated and the growth percentages over the years indicated:

(in thousands)	As of		Increase/(Decrease)
	December 31, 2022	December 31, 2021	
Index:			
Recurring subscriptions	\$ 777,633	\$ 694,591	12.0 %
Asset-based fees	514,253	589,320	(12.7)%
Index total	1,291,886	1,283,911	0.6 %
Analytics	616,069	585,223	5.3 %
ESG and Climate	267,019	199,597	33.8 %
All Other - Private Assets	145,333	135,150	7.5 %
Total Run Rate	<u>\$ 2,320,307</u>	<u>\$ 2,203,881</u>	5.3 %
Recurring subscriptions total	\$ 1,806,054	\$ 1,614,561	11.9 %
Asset-based fees	514,253	589,320	(12.7)%
Total Run Rate	<u>\$ 2,320,307</u>	<u>\$ 2,203,881</u>	5.3 %

Total Run Rate increased 5.3% for the year ended December 31, 2022 compared to the year ended December 31, 2021, driven by an 11.9% increase from recurring subscriptions, offset by a 12.7% decrease from asset-based fees. Adjusting for the impact of foreign currency exchange rate fluctuations, recurring subscriptions Run Rate would have increased 13.0%.

Run Rate from Index recurring subscriptions increased 12.0% for the year ended December 31, 2022 compared to the year ended December 31, 2021, primarily driven by strong growth from market cap-weighted, factor, ESG and climate, and custom Index products and special packages. The increase reflected growth across all regions and client segments.

Run Rate from Index asset-based fees decreased 12.7% for the year ended December 31, 2022 compared to the year ended December 31, 2021, primarily driven by lower AUM in ETFs linked to MSCI equity indexes and non-ETF indexed funds linked to MSCI indexes, partially offset by higher exchange traded futures and options volume.

Run Rate from Analytics products increased 5.3% for the year ended December 31, 2022 compared to the year ended December 31, 2021, driven by strong growth in Equity Analytics products as well as growth in Multi-Asset Class products, and reflected growth across all regions. Adjusting for the impact of foreign currency exchange rate fluctuations, Analytics Run Rate would have increased 6.6%.

Run Rate from ESG and Climate products increased 33.8% for the year ended December 31, 2022 compared to the year ended December 31, 2021, primarily driven by strong growth in Ratings, Climate and Screening products. Adjusting for the impact of foreign currency exchange rate fluctuations, ESG and Climate Run Rate would have increased 36.8%.

Run Rate from All Other - Private Assets increased 7.5% for the year ended December 31, 2022 compared to the year ended December 31, 2021, primarily driven by growth in RCA, Global Intel, Climate Value-at-Risk and Enterprise Analytics products across all regions, partially offset by unfavorable foreign currency exchange rate fluctuations. Adjusting for the impact of foreign currency exchange rate fluctuations, All Other - Private Assets Run Rate would have increased 11.6%.

Sales

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.

The following table presents our recurring subscription sales, cancellations and non-recurring sales by reportable segment for the years indicated:

	Years Ended		
(in thousands)	December 31, 2022	December 31, 2021	Increase/(Decrease)
New recurring subscription sales			
Index	\$ 109,699	\$ 99,686	10.0 %
Analytics	75,584	71,656	5.5 %
ESG and Climate	78,980	69,964	12.9 %
All Other - Private Assets	23,213	14,142	64.1 %
New recurring subscription sales total	287,476	255,448	12.5 %
Subscription cancellations			
Index	(27,103)	(24,399)	11.1%
Analytics	(37,171)	(34,291)	8.4%
ESG and Climate	(5,618)	(4,811)	16.8%
All Other - Private Assets	(7,569)	(6,737)	12.3 %
Subscription cancellations total	(77,461)	(70,238)	10.3%
Net new recurring subscription sales			
Index	82,596	75,287	9.7 %
Analytics	38,413	37,365	2.8 %
ESG and Climate	73,362	65,153	12.6 %
All Other - Private Assets	15,644	7,405	111.3 %
Net new recurring subscription sales total	210,015	185,210	13.4 %
Non-recurring sales			
Index	57,560	54,030	6.5 %
Analytics	11,143	12,407	(10.2)%
ESG and Climate	4,268	4,135	3.2 %
All Other - Private Assets	1,264	1,694	(25.4)%
Non-recurring sales total	74,235	72,266	2.7 %
Gross sales			
Index	\$ 167,259	\$ 153,716	8.8 %
Analytics	86,727	84,063	3.2 %
ESG and Climate	83,248	74,099	12.3 %
All Other - Private Assets	24,477	15,836	54.6 %
Total gross sales	\$ 361,711	\$ 327,714	10.4 %
Net sales			
Index	\$ 140,156	\$ 129,317	8.4 %
Analytics	49,556	49,772	(0.4)%
ESG and Climate	77,630	69,288	12.0 %
All Other - Private Assets	16,908	9,099	85.8 %
Total net sales	\$ 284,250	\$ 257,476	10.4 %

Retention Rate

Another key metric is our “Retention Rate.” The following table presents our Retention Rate by reportable segment for the periods indicated:

	Index	Analytics	ESG and Climate	All Other - Private Assets ⁽¹⁾	Total
2022					
Three Months Ended March 31,	96.6%	94.4%	98.7%	94.1%	95.9%
Three Months Ended June 30,	95.9%	94.3%	97.3%	96.0%	95.5%
Three Months Ended September 30,	96.9%	95.9%	97.4%	94.8%	96.4%
Three Months Ended December 31,	95.0%	90.0%	95.4%	92.6%	93.0%
Year Ended December 31, ⁽²⁾	96.1%	93.6%	97.2%	94.4%	95.2%
2021					
Three Months Ended March 31,	96.6%	95.8%	97.0%	95.1%	96.3%
Three Months Ended June 30,	95.6%	92.7%	96.4%	93.7%	94.4%
Three Months Ended September 30,	96.0%	93.4%	96.1%	91.0%	94.5%
Three Months Ended December 31,	96.0%	93.4%	96.6%	88.1%	94.4%
Year Ended December 31, ⁽²⁾	96.1%	93.8%	96.5%	90.5%	94.7%

(1) Includes RCA’s Run Rate commencing as of the acquisition date of September 13, 2021.

(2) Retention rate for All Other – Private Assets excluding the impact of RCA was 92.7% and 92.4% for the years ended December 31, 2022 and 2021, respectively.

Retention Rate is an important metric because subscription cancellations decrease our Run Rate and ultimately our future 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 or discontinue the subscription 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.

For example, in the fourth quarter of 2022, we recorded cancellations of \$28.1 million. To derive the Retention Rate for the fourth quarter, we annualized the actual cancellations during the quarter of \$28.1 million to derive \$112.3 million of annualized cancellations. This \$112.3 million was then divided by the \$1,614.6 million subscription Run Rate at the beginning of the year to derive a cancellation rate of 7.0%. The 7.0% was then subtracted from 100.0% to derive a Retention Rate of 93.0% for the fourth quarter.

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 cancellation. In the Analytics and the ESG and Climate 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 Assets 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-sell 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.

For the year ended December 31, 2022, 36.2% of our cancellations occurred in the fourth quarter. In our product lines, Retention Rate is generally higher during the first three quarters and lower in the fourth quarter, as the fourth quarter is traditionally the largest renewal period in the year.

Liquidity and Capital Resources

We require capital to fund ongoing operations, internal growth initiatives and acquisitions. Our primary sources of liquidity are cash flows generated from our operations, existing cash and cash equivalents and credit capacity under our existing credit facility. In addition, we believe we have access to additional funding in the public and private markets. We intend to use these sources of liquidity to, among other things, service our existing and future debt obligations, fund our working capital requirements for capital expenditures, investments, acquisitions and dividend payments, and make repurchases of our common stock. In connection with our business strategy, we regularly evaluate acquisition and strategic partnership opportunities. We believe our liquidity, along with other financing alternatives, will provide the necessary capital to fund these transactions and achieve our planned growth.

Senior Notes and Credit Agreement

As of December 31, 2022, we had an aggregate of \$4,200.0 million in Senior Notes outstanding. In addition, under the Credit Agreement, we had as of December 31, 2022: (i) an aggregate of \$347.8 million in Tranche A Term Loans outstanding under the TLA Facility and (ii) \$500 million of undrawn borrowing capacity under the Revolving Credit Facility. See Note 6, “Commitments and Contingencies,” of the Notes to Consolidated Financial Statements included herein for additional information on our outstanding indebtedness and revolving credit facility.

The Senior Notes and the Credit Agreement are fully and unconditionally, and jointly and severally, guaranteed by our direct or indirect wholly owned domestic subsidiaries that account for more than 5% of our and our subsidiaries’ consolidated assets, other than certain excluded subsidiaries (the “subsidiary guarantors”). Amounts due under the Credit Agreement are our and the subsidiary guarantors’ senior unsecured obligations and rank equally with the Senior Notes and any of our other unsecured, unsubordinated debt, senior to any of our subordinated debt and effectively subordinated to our secured debt to the extent of the assets securing such debt.

The indentures governing our Senior Notes (the “Indentures”) among us, each of the subsidiary guarantors, and Computershare, National Association, as trustee and successor to Wells Fargo Bank, National Association, contain covenants that limit our and certain of our subsidiaries’ ability to, among other things, incur liens, enter into sale/leaseback transactions and consolidate, merge or sell all or substantially all of our assets. In addition, the Indentures restrict our non-guarantor subsidiaries’ ability to create, assume, incur or guarantee additional indebtedness without such non-guarantor subsidiaries guaranteeing the Senior Notes on a *pari passu* basis.

The Credit Agreement contains affirmative and restrictive covenants that, among other things, limit our ability and/or the ability of our existing or future subsidiaries to:

- incur liens and further negative pledges;
- incur additional indebtedness or prepay, redeem or repurchase indebtedness;
- make loans or hold investments;
- merge, dissolve, liquidate, consolidate with or into another person;
- enter into acquisition transactions;
- enter into sale/leaseback transactions;
- issue disqualified capital stock;
- pay dividends or make other distributions in respect of our capital stock or engage in stock repurchases, redemptions and other restricted payments;
- create new subsidiaries;
- permit certain restrictions affecting our subsidiaries;
- change the nature of our business, accounting policies or fiscal periods;
- enter into any transactions with affiliates other than on an arm’s-length basis; and
- amend our organizational documents or amend, modify or change the terms of certain agreements relating to our indebtedness.

The Credit Agreement and the Indentures also contain customary events of default, including those relating to non-payment, breach of representations, warranties or covenants, cross-default and cross-acceleration, and bankruptcy and insolvency events, and, in the case of the Credit Agreement, invalidity or impairment of loan documentation, change of control and customary ERISA defaults in addition to the foregoing. None of the restrictions above are expected to impact our ability to effectively operate the business.

The Credit Agreement also requires us and our subsidiaries to achieve financial and operating results sufficient to maintain compliance with the following financial ratios on a consolidated basis through the termination of the Credit Agreement: (1) the maximum Consolidated Leverage Ratio (as defined in the Credit Agreement) measured quarterly on a rolling four-quarter basis not to exceed 4.25:1.00 (or 4.50:1.00 for two fiscal quarters following a material acquisition) and (2) the minimum Consolidated Interest Coverage Ratio (as defined in the Credit Agreement) measured quarterly on a rolling four-quarter basis of at least 4.00:1.00. As of December 31, 2022, our Consolidated Leverage Ratio was 3.08:1.00 and our Consolidated Interest Coverage Ratio was 8.45:1.00.

Our non-guarantor subsidiaries under the Senior Notes and the Credit Agreement consist of: (i) domestic subsidiaries of the Company that account for 5% or less of consolidated assets of the Company and its subsidiaries and (ii) any foreign or domestic subsidiary of the Company that is deemed to be a controlled foreign corporation within the meaning of Section 957 of the Internal Revenue Code of 1986, as amended. Our non-guarantor subsidiaries accounted for approximately \$1,363.1 million, or 60.6%, of our total revenue for the trailing 12 months ended December 31, 2022, approximately \$537.4 million, or 44.5%, of our consolidated operating income for the trailing 12 months ended December 31, 2022, and approximately \$1,043.0 million, or 20.9%, of our consolidated total assets (excluding intercompany assets) and \$863.5 million, or 14.4%, of our consolidated total liabilities, in each case as of December 31, 2022.

Share Repurchases

In 2022, our Board of Directors approved a stock repurchase program for the purchase of shares of the Company's common stock in the open market. See Note 11, "Shareholders' Equity (Deficit)," of the Notes to Consolidated Financial Statements included herein for additional information on our stock repurchase program.

As of trade date February 9, 2023, a total of \$1,304.4 million of authorization remained available under the share repurchase program. This authorization may be modified, suspended or terminated by the Board of Directors at any time without prior notice.

Cash Dividends

On September 17, 2014, our Board of Directors approved a plan to initiate a regular quarterly cash dividend to our shareholders. On October 30, 2014, we began paying regular quarterly cash dividends and have paid such dividends each quarter thereafter.

On January 30, 2023, the Board of Directors declared a quarterly cash dividend of \$1.38 per share for the three months ending March 31, 2023. This reflects an increase of 10.4% over the quarterly cash dividend declared for the three months ended December 31, 2022. The first quarter 2023 dividend is payable on February 28, 2023 to shareholders of record as of the close of trading on February 17, 2023.

Cash Flows

The following table presents the Company's cash and cash equivalents as of the dates indicated:

(in thousands)	As of	
	December 31, 2022	December 31, 2021
Cash and cash equivalents	\$ 993,564	\$ 1,421,449

The following table presents the breakdown of the Company's cash flows for the periods indicated:

(in thousands)	Years Ended	
	December 31, 2022	December 31, 2021
Net cash provided by operating activities	\$ 1,095,369	\$ 936,069
Net cash used in investing activities	(79,335)	(1,035,713)
Net cash provided by (used in) financing activities	(1,425,380)	229,505
Effect of exchange rate changes	(18,539)	(8,933)
Net increase (decrease) in cash	\$ (427,885)	\$ 120,928

Cash and Cash Equivalents

We typically seek to maintain minimum cash balances globally of approximately \$225.0 million to \$275.0 million for general operating purposes. As of December 31, 2022 and 2021, \$344.5 million and \$542.2 million, respectively, of the cash and cash equivalents were held by foreign subsidiaries. Repatriation of some foreign cash may be subject to certain withholding taxes in local jurisdictions and other distribution restrictions. We believe the global cash and cash equivalent balances that are maintained will be available to meet our global needs whether for general corporate purposes or other needs, including acquisitions or expansion of our products.

Cash Flows From Operating Activities

Cash flows from operating activities consist of net income adjusted for certain non-cash items and changes in assets and liabilities. The year-over-year change was primarily driven by higher cash collections from customers, partially offset by higher payments for cash expenses, mainly reflecting higher cash compensation and benefits costs, information technology costs, professional fees, market data costs and travel & entertainment costs.

Our primary uses of cash from operating activities are for the payment of cash compensation and benefits costs, income taxes, interest expense, information technology costs, professional fees, market data costs and office rent. Historically, the payment of cash for compensation and benefits is at its highest level in the first quarter when we pay discretionary employee compensation related to the previous fiscal year.

Cash Flows From Investing Activities

The year-over-year change was primarily driven by the absence of cash outflows associated with acquisitions and equity method investment, partially offset by higher capitalized software development costs.

Cash Flows From Financing Activities

The year-over-year change was primarily driven by the impact of lower proceeds from borrowings and higher share repurchases, partially offset by lower repayments on debt.

We believe that global cash flows from operations, together with existing cash and cash equivalents and funds available under our existing revolving credit facility and our ability to access bank debt and the capital markets for additional funds, will continue to be sufficient to fund our global operating activities and cash commitments for investing and financing activities, such as material capital expenditures and share repurchases, for at least the 12 months following issuance of this Form 10-K and for the foreseeable future thereafter. In addition, we expect that foreign cash flows from operations, together with existing cash and cash equivalents, will continue to be sufficient to fund our foreign operating activities and cash commitments for investing activities, such as material capital expenditures, for at least the 12 months following issuance of this Form 10-K and for the foreseeable future thereafter.

Contractual Obligations

Our contractual obligations consist primarily of our debt obligations arising from the issuance of the Senior Notes, Tranche A Term Loans, leases for office space, leases for equipment and other operating leases and obligations to vendors arising out of market data contracts. The following table summarizes our contractual obligations for the periods indicated as of December 31, 2022:

(in thousands)	Total	Years Ending December 31,					Thereafter
		2023	2024	2025	2026	2027	
Senior Notes ⁽¹⁾	5,505,073	155,875	155,875	155,875	155,875	155,875	4,725,698
Tranche A Term Loans ⁽²⁾	431,685	30,718	32,309	40,007	44,990	283,661	—
Operating leases	178,234	28,063	23,890	22,673	21,142	16,708	65,758
Vendor obligations	212,146	76,316	45,215	28,751	32,485	29,379	—
Other obligations ⁽³⁾	19,392	1,465	7,968	9,959	—	—	—
Total contractual obligations	<u>\$ 6,346,530</u>	<u>\$ 292,437</u>	<u>\$ 265,257</u>	<u>\$ 257,265</u>	<u>\$ 254,492</u>	<u>\$ 485,623</u>	<u>\$ 4,791,456</u>

(1) Includes the impact of payments for the principal amount on the Senior Notes due 2029, the Senior Notes due 2030, the 3.875% Senior Notes due 2031, the 3.625% Senior Notes due 2031 and the Senior Notes due 2033 plus interest based on the 4.000%, 3.625%, 3.875%, 3.625% and 3.250% coupon interest rates, respectively.

- (2) Includes the impact of payments for the principal amount as well as coupon interest payments at the interest rate in effect as of December 31, 2022 on the variable rate Tranche A Term Loans due 2027.
- (3) Primarily includes amounts payable related to an estimated one-time tax on deemed repatriation of historic earnings of foreign subsidiaries (the "Toll Charge") imposed after Tax Reform was enacted. The Toll Charge, to the extent it is payable in more than one year, is included within "Other non-current liabilities" in our Consolidated Statements of Financial Condition.

The obligations related to our uncertain tax positions, which are not considered material, have been excluded from the table above because of the uncertainty surrounding the timing and final amounts of any settlement.

Recent Accounting Standards Updates

See Note 2, "Recent Accounting Standards Updates," of the Notes to the Consolidated Financial Statements included herein for further information.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Foreign Currency Risk

We are subject to foreign currency exchange fluctuation risk. Exchange rate movements can impact the U.S. dollar-reported value of our revenues, expenses, assets and liabilities denominated in non-U.S. dollar currencies or where the currency of such items is different than the functional currency of the entity where these items were recorded.

We generally invoice our clients in U.S. dollars; however, we invoice a portion of our clients in Euros, British pounds sterling, Japanese yen and a limited number of other non-U.S. dollar currencies. For the years ended December 31, 2022 and 2021, 15.9% and 15.1%, respectively, of our revenues were subject to foreign currency exchange rate risk and primarily included clients billed in foreign currency as well as U.S. dollar exposures on non-U.S. dollar foreign operating entities. Of the 15.9% of non-U.S. dollar exposure for the year ended December 31, 2022, 41.4% was in Euros, 30.4% was in British pounds sterling and 18.8% was in Japanese yen. Of the 15.1% of non-U.S. dollar exposure for the year ended December 31, 2021, 41.6% was in Euros, 26.5% was in British pounds sterling and 23.8% was in Japanese yen.

Revenues from asset-based fees represented 23.5% and 27.1% of operating revenues for the years ended December 31, 2022 and 2021, respectively. While a substantial portion of our asset-based fees are invoiced in U.S. dollars, the fees are based on the assets in investment products, of which approximately three-fifths are invested in securities denominated in currencies other than the U.S. dollar. Accordingly, declines in such other currencies against the U.S. dollar will decrease the fees payable to us under such licenses. In addition, declines in such currencies against the U.S. dollar could impact the attractiveness of such investment products resulting in net fund outflows, which would further reduce the fees payable under such licenses.

We are exposed to additional foreign currency risk in certain of our operating costs. Approximately 42.1% and 41.1% of our operating expenses for the years ended December 31, 2022 and 2021, respectively, were denominated in foreign currencies, the significant majority of which were denominated in British pounds sterling, Indian rupees, Euros, Hungarian forints, Mexican pesos and Swiss francs.

We have certain monetary assets and liabilities denominated in currencies other than local functional amounts, and when these balances are remeasured into their local functional currency, either a gain or a loss results from the change of the value of the functional currency as compared to the originating currencies. We manage foreign currency exchange rate risk, in part, through the use of derivative financial instruments comprised principally of forward contracts on foreign currency which are not designated as hedging instruments for accounting purposes. The objective of the derivative instruments is to minimize the impact on the income statement of the volatility of amounts denominated in certain foreign currencies. We recognized total foreign currency exchange gains of \$0.5 million for the year ended December 31, 2022 and foreign currency exchange losses of \$1.9 million for the year ended December 31, 2021.

Item 8. *Financial Statements and Supplementary Data*

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of MSCI Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated statements of financial condition of MSCI Inc. and its subsidiaries (the “Company”) as of December 31, 2022 and 2021, and the related consolidated statements of income, of comprehensive income, of shareholders' equity (deficit) and of cash flows for each of the three years in the period ended December 31, 2022, including the related notes (collectively referred to as the “consolidated financial statements”). We also have audited the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Annual Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of

critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Revenue Recognition - Recurring Subscriptions, Asset-Based Fees, and Non-Recurring Revenues

As described in Notes 1 and 3 to the consolidated financial statements, the Company recognized operating revenues of \$2.1 billion for the year ended December 31, 2022, related to recurring subscriptions, asset-based fees, or non-recurring revenues from the Index, Analytics, and ESG and Climate segments. Recurring subscription revenues represent fees earned from clients primarily under renewable contracts or agreements and are generally paid annually in advance and recognized in most cases ratably over the term of the license or service pursuant to the contract terms. Asset-based fees are principally recognized based on the estimated assets under management (AUM) linked to the Company's indexes from independent third-party sources or the most recently reported information provided by the client. Asset-based fees also include revenues related to futures and options contracts linked to the Company's indexes, which are primarily based on trading volumes and fee levels. Asset-based fees are generally variable based upon AUM or the volume of trades or fee levels and are generally billed quarterly in arrears. Non-recurring revenues primarily represent fees earned on products and services where the Company typically does not have renewal clauses within the contract. Examples of such products and services include one-time license fees, certain derivative financial products, certain implementation services and historical data sets. Based on the nature of the services provided, non-recurring revenues are generally billed either in advance or after delivery and recognized point in time or over the service period.

The principal considerations for our determination that performing procedures relating to revenue recognition for recurring subscriptions, asset-based fees, and non-recurring revenues is a critical audit matter are the significant audit effort in performing procedures and evaluating audit evidence related to management's assessment of revenue recognition.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to revenue recognition, including controls over revenue transactions recognized as recurring subscriptions, asset-based fees, and non-recurring revenues. These procedures also included, among others, evaluating revenue transactions by testing a sample of revenue transactions by obtaining and inspecting source documents which included (i) sales contracts or agreements, invoices, and cash receipts, where applicable, for recurring subscriptions and non-recurring revenues and (ii) sales contracts or agreements, invoices, and cash receipts, where applicable, and AUM data from independent third-party sources or information provided by the Company's customers, where applicable, to calculate revenue recognized for asset-based fees.

/s/ PricewaterhouseCoopers LLP

New York, New York
February 10, 2023

We have served as the Company's auditor since 2014.

MSCI INC.
CONSOLIDATED STATEMENTS OF FINANCIAL CONDITION

(In thousands, except per share and share data)	As of	
	December 31, 2022	December 31, 2021
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 993,564	\$ 1,421,449
Accounts receivable, net of allowances	663,236	664,511
Prepaid income taxes	36,654	5,951
Prepaid and other assets	54,520	51,499
Total current assets	1,747,974	2,143,410
Property, equipment and leasehold improvements, net	53,853	66,715
Right of use assets	126,584	144,584
Goodwill	2,229,670	2,236,386
Intangible assets, net	558,517	593,341
Equity method investment	214,389	218,763
Deferred tax assets	29,207	40,119
Other non-current assets	37,341	63,385
Total assets	\$ 4,997,535	\$ 5,506,703
LIABILITIES AND SHAREHOLDERS' EQUITY (DEFICIT)		
Current liabilities:		
Accounts payable	\$ 15,039	\$ 13,448
Income taxes payable	8,058	59,635
Accrued compensation and related benefits	182,370	207,640
Current portion of long-term debt	8,713	—
Other accrued liabilities	153,461	145,302
Deferred revenue	882,886	824,912
Total current liabilities	1,250,527	1,250,937
Long-term debt	4,503,233	4,161,422
Long-term operating lease liabilities	131,575	150,029
Deferred tax liabilities	29,098	3,650
Other non-current liabilities	91,027	104,132
Total liabilities	6,005,460	5,670,170
Commitments and Contingencies (see Note 6 and Note 10)		
Shareholders' equity (deficit):		
Preferred Stock (par value \$0.01, 100,000,000 shares authorized, no shares issued)	—	—
Common stock (par value \$0.01; 750,000,000 common shares authorized; 133,623,005 and 133,162,178 common shares issued and 79,959,989 and 82,439,449 common shares outstanding at December 31, 2022 and December 31, 2021, respectively)	1,336	1,332
Treasury shares, at cost (53,663,016 and 50,722,729 common shares held at December 31, 2022 and December 31, 2021, respectively)	(5,938,116)	(4,540,144)
Additional paid in capital	1,515,874	1,457,623
Retained earnings	3,473,192	2,976,517
Accumulated other comprehensive loss	(60,211)	(58,795)
Total shareholders' equity (deficit)	(1,007,925)	(163,467)
Total liabilities and shareholders' equity (deficit)	\$ 4,997,535	\$ 5,506,703

See Notes to Consolidated Financial Statements.

MSCI INC.
CONSOLIDATED STATEMENTS OF INCOME

(In thousands, except per share data)	Years Ended		
	December 31, 2022	December 31, 2021	December 31, 2020
Operating revenues	\$ 2,248,598	\$ 2,043,544	\$ 1,695,390
Operating expenses:			
Cost of revenues (exclusive of depreciation and amortization)	404,341	358,684	291,704
Selling and marketing	264,583	243,185	216,496
Research and development	107,205	111,564	101,053
General and administrative	146,857	147,893	114,627
Amortization of intangible assets	91,079	80,592	56,941
Depreciation and amortization of property, equipment and leasehold improvements	26,893	28,901	29,805
Total operating expenses	1,040,958	970,819	810,626
Operating income	1,207,640	1,072,725	884,764
Interest income	(11,769)	(1,497)	(5,030)
Interest expense	171,571	159,614	156,324
Other expense (income)	3,997	56,472	47,245
Other expense (income), net	163,799	214,589	198,539
Income before provision for income taxes	1,043,841	858,136	686,225
Provision for income taxes	173,268	132,153	84,403
Net income	\$ 870,573	\$ 725,983	\$ 601,822
Earnings per share:			
Basic	\$ 10.78	\$ 8.80	\$ 7.19
Diluted	\$ 10.72	\$ 8.70	\$ 7.12
Weighted average shares outstanding:			
Basic	80,746	82,508	83,716
Diluted	81,215	83,479	84,517

See Notes to Consolidated Financial Statements.

MSCI INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(In thousands)	Years Ended		
	December 31, 2022	December 31, 2021	December 31, 2020
Net income	\$ 870,573	\$ 725,983	\$ 601,822
Other comprehensive (loss) income:			
Foreign currency translation adjustments	(16,016)	(3,624)	4,771
Income tax effect	2,722	943	(62)
Foreign currency translation adjustments, net	(13,294)	(2,681)	4,709
Pension and other post-retirement adjustments	15,593	3,546	(1,675)
Income tax effect	(3,715)	(801)	686
Pension and other post-retirement adjustments, net	11,878	2,745	(989)
Other comprehensive (loss) income, net of tax	(1,416)	64	3,720
Comprehensive income	\$ 869,157	\$ 726,047	\$ 605,542

See Notes to Consolidated Financial Statements.

MSCI INC.
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (DEFICIT)

(in thousands)	Common Stock	Treasury Stock	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total
Balance at December 31, 2019	\$ 1,324	\$ (3,565,784)	\$ 1,351,031	\$ 2,199,294	\$ (62,579)	\$ (76,714)
Net income				601,822		601,822
Cumulative-effect adjustment				631		631
Dividends declared (\$2.92 per common share)				(247,452)		(247,452)
Dividends paid in shares			186			186
Other comprehensive income (loss), net of tax					3,720	3,720
Shares withheld for tax withholding and exercises		(51,176)				(51,176)
Common stock issued	4					4
Compensation payable in common stock			51,320			51,320
Common stock repurchased and held in treasury		(727,343)				(727,343)
Common stock issued to Directors and (held in)/released from treasury		1,768				1,768
Balance at December 31, 2020	\$ 1,328	\$ (4,342,535)	\$ 1,402,537	\$ 2,554,295	\$ (58,859)	\$ (443,234)
Net income				725,983		725,983
Dividends declared (\$3.64 per common share)				(303,761)		(303,761)
Dividends paid in shares			128			128
Other comprehensive income (loss), net of tax					64	64
Shares withheld for tax withholding and exercises		(58,794)				(58,794)
Common stock issued	4					4
Compensation payable in common stock			54,958			54,958
Common stock repurchased and held in treasury		(139,580)				(139,580)
Common stock issued to Directors and (held in)/released from treasury		765				765
Balance at December 31, 2021	\$ 1,332	\$ (4,540,144)	\$ 1,457,623	\$ 2,976,517	\$ (58,795)	\$ (163,467)
Net income				870,573		870,573
Dividends declared (\$4.58 per common share)				(373,898)		(373,898)
Dividends paid in shares			162			162
Other comprehensive income (loss), net of tax					(1,416)	(1,416)
Shares withheld for tax withholding and exercises		(112,681)				(112,681)
Common stock issued	4					4
Compensation payable in common stock			58,089			58,089
Common stock repurchased and held in treasury		(1,284,825)				(1,284,825)
Common stock issued to Directors and (held in)/released from treasury		(466)				(466)
Balance at December 31, 2022	\$ 1,336	\$ (5,938,116)	\$ 1,515,874	\$ 3,473,192	\$ (60,211)	\$ (1,007,925)

See Notes to Consolidated Financial Statements.

MSCI INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)	Years Ended		
	December 31, 2022	December 31, 2021	December 31, 2020
Cash flows from operating activities			
Net income	\$ 870,573	\$ 725,983	\$ 601,822
Adjustments to reconcile net income to net cash provided by operating activities:			
Amortization of intangible assets	91,079	80,592	56,941
Stock-based compensation expense	58,094	54,917	51,094
Depreciation and amortization of property, equipment and leasehold improvements	26,893	28,901	29,805
Amortization of right of use assets	24,524	24,632	24,049
Loss on impairment of right of use assets, net	705	8,385	—
Amortization of debt origination fees	5,132	4,923	4,445
Loss on extinguishment of debt	—	59,103	44,930
Deferred taxes	36,436	(111,369)	(55,645)
Other adjustments	1,361	(146)	1,744
Changes in assets and liabilities, net of the effect of acquisitions and dispositions:			
Accounts receivable	(6,624)	(99,203)	(57,606)
Prepaid income taxes	(31,684)	15,264	11,608
Prepaid and other assets	(3,781)	(4,240)	(410)
Other non-current assets	31,448	(35,445)	(3,792)
Accounts payable	1,337	(2,195)	7,482
Income taxes payable	(49,296)	33,903	9,576
Accrued compensation and related benefits	(22,432)	42,719	(2,641)
Other accrued liabilities	10,654	(9,249)	1,674
Deferred revenue	72,752	116,863	98,330
Long-term operating lease liabilities	(25,467)	(22,078)	(22,497)
Other non-current liabilities	4,106	21,536	6,536
Other	(441)	2,273	3,664
Net cash provided by operating activities	1,095,369	936,069	811,109
Cash flows from investing activities			
Acquisition of a business, net of cash acquired	—	(948,989)	—
Acquisition of equity method investment	(5)	(26,361)	(190,816)
Acquisition of assets, net of cash acquired	—	(6,512)	—
Capital expenditures	(13,617)	(13,509)	(21,826)
Capitalized software development costs	(59,278)	(39,285)	(29,149)
Other	(6,435)	(1,057)	—
Net cash used in investing activities	(79,335)	(1,035,713)	(241,791)
Cash flows from financing activities			
Proceeds from borrowings, inclusive of premium	355,000	1,803,750	1,405,000
Repayment of borrowings	(7,188)	(1,051,810)	(1,142,382)
Repurchase of common stock held in treasury	(1,397,506)	(198,374)	(778,519)
Payment of dividends	(372,915)	(302,449)	(246,444)
Payment of debt issuance costs in connection with debt	(2,560)	(21,612)	(16,693)
Payment of contingent consideration	(211)	—	—
Net cash provided by (used in) financing activities	(1,425,380)	229,505	(779,038)
Effect of exchange rate changes	(18,539)	(8,933)	3,674
Net (decrease) increase in cash	(427,885)	120,928	(206,046)
Cash and cash equivalent, beginning of period	1,421,449	1,300,521	1,506,567
Cash and cash equivalent, end of period	\$ 993,564	\$ 1,421,449	\$ 1,300,521
Supplemental disclosure of cash flow information:			
Cash paid for interest	\$ 165,116	\$ 151,335	\$ 163,391
Cash paid for income taxes, net of refunds received	\$ 180,686	\$ 222,620	\$ 113,646
Supplemental disclosure of non-cash investing activities			
Property, equipment and leasehold improvements in other accrued liabilities	\$ 1,849	\$ 3,498	\$ 3,061
Supplemental disclosure of non-cash financing activities			
Cash dividends declared, but not yet paid	\$ 3,748	\$ 2,599	\$ 1,438

See Notes to Consolidated Financial Statements.

MSCI INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. INTRODUCTION AND BASIS OF PRESENTATION

Organization

MSCI Inc., together with its wholly owned subsidiaries (the “Company” or “MSCI”) is a leading provider of critical decision support tools and solutions for the global investment community. Our mission-critical offerings help investors address the challenges of a transforming investment landscape and power better investment decisions. Leveraging our knowledge of the global investment process and our expertise in research, data and technology, we enable our clients to understand and analyze key drivers of risk and return and confidently and efficiently build more effective portfolios. Our products and services include indexes; portfolio construction and risk management tools; environmental, social and governance (“ESG”) and climate solutions; and real estate market and transaction data and analysis.

Basis of Presentation

The consolidated financial statements and accompanying notes to financial statements, which include the accounts of MSCI Inc. and its wholly owned subsidiaries, are prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”).

Certain prior period amounts have been reclassified to conform to the current period presentation. Effective January 1, 2021, the ESG and Climate operating segment is being presented as a separate reportable segment. The operating segments of Real Assets and The Burgiss Group, LLC (“Burgiss”) do not individually meet the segment reporting thresholds and have been combined and presented as part of the All Other – Private Assets reportable segment. As of December 31, 2022, the Company had an approximately \$214.4 million equity method investment in Burgiss, representing a 33.6% equity ownership.

Significant Accounting Policies

Basis of Financial Statements and Use of Estimates

The Company makes certain estimates and judgments that can affect the reported amounts of assets and liabilities as of the date of the consolidated financial statements, as well as the reported amounts of operating revenues and expenses during the periods presented. Significant estimates and judgments made by management include such examples as assessment of impairment of goodwill and intangible assets and income taxes. The Company believes that estimates used in the preparation of these consolidated financial statements are reasonable; however, actual results could differ materially from these estimates. Inter-company balances and transactions are eliminated in consolidation.

Revenue Recognition

Performance Obligations and Transaction Price

The Company recognizes revenues for products and services when performance obligations are satisfied. For revenue arrangements containing multiple products or services, the Company accounts for the individual products or services as a separate performance obligation if they are distinct. A product or service is distinct if a client can benefit from it either on its own or together with other resources that are readily available to the client, and the Company’s promise to transfer the product or service to the client is separately identifiable from other promises in the contract. If both criteria are not met, the promised products or services are accounted for as a combined performance obligation.

The transaction price is the amount of consideration to which an entity expects to be entitled in exchange for transferring products or services to the client. The Company allocates the transaction price to each performance obligation identified in the contract based on the best estimate of a relative standalone selling price of each distinct product or service in the contract. To allocate the transaction price to each performance obligation on a relative standalone selling price basis, at contract inception the Company determines the standalone selling prices of the distinct products or services underlying each performance obligation in proportion to the total transaction price. This standalone selling price may be the contract price but is more often than not the best estimate of the price the Company would receive for selling the product or service separately in similar circumstances and to other similar customers. A client can receive a discount for purchasing a bundle of products or services if the sum of the standalone selling price of those promised products or services in the contract exceeds the promised consideration in the contract.

For services where the transaction price is variable such as based upon assets under management (“AUM”), volume of trades or fee levels, the transaction price is based upon pricing models and is not allocated at the inception of the contract but rather falls

within the sales and usage-based royalty exception under which the price and associated revenue are based upon actual known performance or best estimates of actual performance during the performance period.

Revenue is recognized when a client obtains control of promised products or services in an amount that reflects the consideration the entity expects to receive in exchange for those products or services. Determining when control has transferred can sometimes require management's judgment (*e.g.*, implementation services), which could affect the timing of revenue recognition. Revenue is recognized exclusive of any applicable sales or other indirect taxes.

Disaggregation of Revenue

Revenues are characterized by type, which broadly reflects the nature of how they are recognized or earned. Our revenue types are recurring subscriptions, asset-based fees and non-recurring revenues. We also group our revenues by segment.

Revenues By Type

Recurring subscription revenues represent fees earned from clients primarily under renewable contracts or agreements and are generally paid annually in advance and recognized in most cases ratably over the term of the license or service pursuant to the contract terms.

Asset-based fees are principally recognized based on the estimated AUM linked to our indexes from independent third-party sources or the most recently reported information provided by the client. Asset-based fees also include revenues related to futures and options contracts linked to our indexes, which are primarily based on trading volumes and fee levels. Asset-based fees are generally variable based upon AUM or the volume of trades or fee levels and are generally billed quarterly in arrears.

Non-recurring revenues primarily represent fees earned on products and services where we typically do not have renewal clauses within the contract. Examples of such products and services include one-time license fees, certain derivative financial products, certain implementation services and historical data sets. Based on the nature of the services provided, non-recurring revenues are generally billed either in advance or after delivery and recognized point in time or over the service period.

Revenues By Segment

Index segment operating revenues consist of fees earned for licenses of index data subscriptions, performance obligations to deliver the data are satisfied over time and, accordingly, revenue is recognized ratably over the term of the agreement pursuant to the contract terms. With respect to licenses to create indexed investment products, such as ETFs, passively managed funds, or licenses which allow certain exchanges to use MSCI's indexes as the basis for futures and options contracts, MSCI's performance obligation allows customers to use the Company's intellectual property (*e.g.*, the indexes) as the basis of the funds or other investment products the customers create over the term of the agreement. The fees earned for these rights are typically variable, in which case they are accrued under the sales and usage-based royalty exception pursuant to the level of performance achieved, which is primarily measured based on AUM, volume of trades or fee levels. The level of performance achieved is based on information obtained from independent third-party sources or best estimates taking into account the most recently reported information from the client.

Analytics segment operating revenues are recognized as MSCI satisfies performance obligations through providing access to its proprietary models or hosted applications and, in some cases, delivery of managed services, which are typically satisfied over time, and accordingly, operating revenues are recognized ratably over the term of the service period. For implementation services, MSCI meets its performance obligation once the implementation is complete and the related service is available for the client to use. Operating revenues are recognized at the point in time when the implementation service is completed.

ESG and Climate segment operating revenues are recognized as MSCI's performance obligations to provide data to or update data for clients are satisfied. The majority of these performance obligations are satisfied over the term of the license period, with operating revenues recognized ratably. For custom ESG research data, the performance obligation is typically satisfied, and revenue is recognized, at the point in time when the data is updated and available to the client.

All Other – Private Assets segment operating revenues are recognized as MSCI's performance obligations to provide publications, analysis, insights and data to clients are satisfied. The majority of these performance obligations are satisfied over the term of the license period, with operating revenues recognized ratably. Certain other Real Assets products, including benchmark reports, are recognized at the point in time when the Company satisfies the performance obligation through delivery to the client.

Share-Based Compensation

Certain of the Company's employees have received share-based compensation under various compensation programs. The Company's compensation expense reflects the fair value method of accounting for share-based payments under ASC Subtopic 718-10, "*Compensation—Stock Compensation*."

Stock-based compensation awards include restricted stock units ("RSUs"), performance stock units ("PSUs") and performance stock options ("PSOs"). PSUs are subject to market conditions based on the achievement of multi-year total shareholder return targets and PSOs are subject to performance conditions based on the cumulative results of financial targets.

The fair value of RSUs at grant date is measured using the price of MSCI's common stock. The fair value of PSUs at grant date is determined using a Monte Carlo simulation model that creates a normal distribution of future stock prices, which is then used to value the awards based on their individual terms. The fair value of PSOs at grant date is determined using the Black-Scholes option pricing model. For PSOs, the grant-date fair value is adjusted for any changes in the probability of achievement of (i) a cumulative revenue performance goal and (ii) a cumulative adjusted EPS performance goal (each weighted at 50%).

Research and Development

The Company accounts for research and development costs in accordance with several accounting pronouncements, including ASC Subtopic 730-10, "*Research and Development*." ASC Subtopic 730-10 requires that research and development costs generally be expensed as incurred. The majority of the Company's research and development costs are incurred in developing, reviewing and enhancing the methodologies and data models offered within its product portfolio by monitoring investment trends and drivers globally, as well as analyzing product-specific needs in areas such as capitalization-weighted, factor and specialized indexes, and instrument valuation, risk modeling, portfolio construction, asset allocation and value-at-risk simulation.

Internal Use Software

The Company applies the provisions of ASC Subtopic 350-40, "*Internal Use Software*," and accounts for the cost of computer software developed for internal use by capitalizing qualifying costs, which are substantially incurred during the application development stage. The amounts capitalized are included in Intangible Assets on the Consolidated Statement of Financial Condition and include external direct costs of services used in developing internal-use software and payroll and payroll-related costs of employees directly associated with the development activities. Additionally, costs incurred relating to upgrades and enhancements to the software are capitalized if it is determined that these upgrades or enhancements provide additional functionality to the software.

Capitalized software development costs are typically amortized on a straight-line basis over the estimated useful life of the related product, which is typically three to five years, beginning with the date the software is placed into service.

Costs incurred in the preliminary and post-implementation stages of MSCI's products are expensed as incurred.

Income Taxes

Provision for income taxes is provided for using the asset and liability method, under which deferred tax assets and deferred tax liabilities are determined based on the temporary differences between the financial statement and income tax bases of assets and liabilities using currently enacted tax rates. The Company elects to account for Global Intangible Low-Taxed Income ("GILTI") in the year the tax is incurred. The Company recognizes interest and penalties related to income tax matters within "Provision for income taxes" in the Consolidated Statement of Income.

The Company regularly evaluates the likelihood of additional assessments in each of the taxing jurisdictions in which it is required to file income tax returns. The Company has recorded additional tax expense related to open tax years, which the Company's management believes is adequate in relation to the potential for assessments. These amounts have been recorded in "Other non-current liabilities" on the Consolidated Statement of Financial Condition. The Company's management believes the resolution of tax matters will not have a material effect on the Company's consolidated financial condition. However, to the extent the Company is required to pay amounts in excess of its reserves, a resolution could have a material impact on its Consolidated Statement of Income for a particular future period. In addition, an unfavorable tax settlement could require use of cash and result in an increase in the effective tax rate in the period in which such resolution occurs.

Deferred Revenue

Deferred revenues represent both cash received and the amounts billed to clients for products and services in advance of satisfying performance obligations. Deferred revenue generally results in ratable recognition of operating revenues over the license or subscription period, as the performance obligations are satisfied.

Accounts Receivable and Allowance for Credit Losses

The Company's clients generally pay subscription fees annually in advance. MSCI's policy is to record to a receivable when a client is billed. For products and services that are provided in advance of billing, such as for our asset-based fee products, unbilled revenue is included in Accounts Receivable on the Company's Consolidated Statement of Financial Condition.

The Company recognizes an allowance for credit losses at the time invoices are sent to clients by applying an estimate of the uncollectable amount based on client profiles, credit considerations and historical write-offs. The Company does not require collateral from clients to mitigate credit risk.

Changes in the allowance for credit losses from December 31, 2019 to December 31, 2022 were as follows:

(in thousands)	Amount
Balance as of December 31, 2019	\$ 1,715
Addition (reduction) to credit loss expense	1,712
Write-offs, net of recoveries	(1,844)
Balance as of December 31, 2020	\$ 1,583
Addition (reduction) to credit loss expense	1,210
Adjustments and write-offs, net of recoveries	(456)
Balance as of December 31, 2021	\$ 2,337
Addition (reduction) to credit loss expense	910
Adjustments and write-offs, net of recoveries	(595)
Balance as of December 31, 2022	<u>\$ 2,652</u>

Goodwill

Goodwill is recorded as part of the Company's acquisitions of businesses when the purchase price exceeds the fair value of the net tangible and separately identifiable intangible assets acquired. The Company's goodwill is not amortized, but rather is subject to an impairment test each year, or more often if conditions indicate impairment may have occurred, pursuant to ASC Subtopic 350-10, "*Intangibles—Goodwill and Other*."

The Company tests goodwill for impairment on an annual basis on July 1st and on an interim basis when certain events and circumstances exist. The test for impairment is performed at the reporting unit level. Goodwill impairment is determined by comparing the fair value of a reporting unit with its carrying value. If the estimated fair value exceeds the carrying value, goodwill at the reporting unit level is not deemed to be impaired. If the estimated fair value is below carrying value, an impairment charge will be recorded up to, but not more than, the total amount of goodwill allocated to the reporting unit.

The Company completed its annual goodwill impairment test as of July 1, 2022 on its Index, Analytics, ESG and Climate, and Real Assets reporting units, which are also the Company's operating segments, and no impairments were noted. The Company performed a qualitative test for impairment and determined that it was not more likely than not that the fair value of its reporting units is less than their respective carrying values. See Note 13, "Segment Information," for further descriptions of the operating segments.

Based on the results of the annual goodwill impairment testing performed and given there were no impairment triggers identified as part of interim assessments, no impairment of goodwill was recorded during the years ended December 31, 2022, 2021 and 2020.

Intangible Assets

The Company amortizes definite-lived intangible assets over their estimated useful lives. Definite-lived intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of the asset may not be recoverable. The Company also reviews the useful lives on a quarterly basis to determine if the period of economic benefit has changed. If the carrying value of an intangible asset exceeds its fair value, an impairment charge would be recognized in an amount equal to the amount by which the carrying value of the intangible asset exceeds its fair value. There were no events or changes in circumstances that would indicate that the carrying value of the definite-lived intangible assets may not be recoverable during the years ended December 31, 2022 and 2021.

The Company had no indefinite-lived intangible assets during the years ended December 31, 2022 and 2021.

Foreign Currency Translation

Assets and liabilities of operations having non-U.S. dollar functional currencies are translated at year-end exchange rates, and income statement accounts are translated at weighted average exchange rates for the year. Gains or losses resulting from translating foreign currency financial statements, net of any related tax effects, are reflected in accumulated other comprehensive loss, a separate component of shareholders' equity (deficit). Gains or losses resulting from foreign currency transactions incurred in currencies other than the local functional currency are included in non-operating "Other expense (income)" on the Consolidated Statement of Income.

Leases

MSCI leases office space, data centers and certain equipment under non-cancellable operating lease agreements and determines if an arrangement is a lease at inception. The Company does not currently have any financing lease arrangements.

Right of use assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. Right of use assets are recognized on the commencement date based on the present value of lease payments over the lease term adjusted for initial direct costs and lease incentives received or deemed probable of being received. MSCI uses its incremental borrowing rate based on the information available on the commencement date in determining the present value of lease payments. The lease terms include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option.

Right of use assets and associated leasehold improvements are tested for impairment when there is a trigger for impairment testing at the appropriate asset group level. When a trigger exists, the asset group is tested for recoverability by comparing the estimated undiscounted cash flows to the asset group's carrying value. If the asset group fails the recoverability test, the Company will measure impairment loss as the difference between the fair value and carrying value of the asset group.

Lease expense is recognized on a straight-line basis over the lease term and is included in "Operating expenses" in the Consolidated Statement of Income. In situations where a right of use asset has been impaired, the subsequent amortization of the right of use asset is then recorded on a straight-line basis over the remaining lease term and is combined with accretion expense on the lease liability to result in single operating lease cost.

Some of the Company's lease agreements include rental payments adjusted periodically for inflation which are accounted for as variable lease amounts but are not reflected as a component of the Company's lease liability. Certain leases also require the Company to pay real estate taxes, insurance, maintenance and other operating expenses associated with the leased premises or equipment which are also not reflected as a component of the Company's lease liability. The Company also subleases a small portion of its leased office space to third parties and thereby applies sublessor accounting. Sublease income is presented in "Operating expenses" as an offset.

Property, Equipment and Leasehold Improvements

Property, equipment and leasehold improvements are stated at cost less accumulated depreciation and amortization. Depreciation and amortization of furniture and fixtures, and computer and communications equipment are accounted for using the straight-line method over the estimated useful life, and for leasehold improvements, over the shorter of the estimated useful life or the lease term.

Treasury Stock

The Company holds repurchased shares of common stock as treasury stock. The Company accounts for treasury stock under the cost method and includes treasury stock as a component of shareholders' equity (deficit).

Accrued Compensation

A significant portion of the Company's employee incentive compensation programs are discretionary. The Company makes significant estimates in determining its accrued compensation and benefits expenses. Accrued cash incentive estimates reflect an assessment of performance versus targets and other key performance indicators at the Company, operating segment and employee level. The Company also reviews compensation and benefits expenses throughout the year to determine how overall performance compares to management's expectations. These and other factors, including historical performance, are taken into account in accruing discretionary cash compensation estimates quarterly.

Concentrations

For the years ended December 31, 2022, 2021 and 2020, BlackRock, Inc. accounted for 10.3%, 12.7%, and 11.0% of the Company's consolidated operating revenues, respectively. For the years ended December 31, 2022, 2021 and 2020, BlackRock, Inc. accounted for 17.4%, 20.4% and 18.0% of the Index segment's operating revenues, respectively. No single customer accounted for 10.0% or more of operating revenues within the Analytics, ESG and Climate and All Other – Private Assets segments for the years ended December 31, 2022, 2021 and 2020.

2. RECENT ACCOUNTING STANDARDS UPDATES

There are no pending accounting standards updates that are currently expected to have a material impact on the Company's consolidated financial statements.

3. REVENUE RECOGNITION

MSCI's operating revenues are reported by product type, which generally reflects the timing of recognition. The Company's operating revenues types are recurring subscriptions, asset-based fees and non-recurring revenues. The Company also disaggregates operating revenues by segment.

The tables that follow present the disaggregated operating revenues for the periods indicated:

For the Year Ended December 31, 2022					
(in thousands)	Segments				Total
	Index	Analytics	ESG and Climate	All Other - Private Assets	
Operating Revenues Types					
Recurring subscriptions	\$ 729,710	\$ 567,004	\$ 223,160	\$ 139,649	\$ 1,659,523
Asset-based fees	528,127	—	—	—	528,127
Non-recurring	45,372	9,103	5,151	1,322	60,948
Total	\$ 1,303,209	\$ 576,107	\$ 228,311	\$ 140,971	\$ 2,248,598

For the Year Ended December 31, 2021					
(in thousands)	Segments				Total
	Index	Analytics	ESG and Climate	All Other - Private Assets	
Operating Revenues Types					
Recurring subscriptions	\$ 650,629	\$ 533,178	\$ 162,609	\$ 79,624	\$ 1,426,040
Asset-based fees	553,991	—	—	—	553,991
Non-recurring	47,144	11,121	3,583	1,665	63,513
Total	\$ 1,251,764	\$ 544,299	\$ 166,192	\$ 81,289	\$ 2,043,544

For the Year Ended December 31, 2020					
(in thousands)	Segments				Total
	Index	Analytics	ESG and Climate	All Other - Private Assets	
Operating Revenues Types					
Recurring subscriptions	\$ 580,393	\$ 506,301	\$ 109,945	\$ 51,536	\$ 1,248,175
Asset-based fees	399,771	—	—	—	399,771
Non-recurring	36,331	7,507	1,419	2,187	47,444
Total	\$ 1,016,495	\$ 513,808	\$ 111,364	\$ 53,723	\$ 1,695,390

The table that follows presents the change in accounts receivable, net of allowances and deferred revenue between the dates indicated:

(in thousands)	Accounts receivable, net of allowances	Deferred revenue
Opening (December 31, 2021)	\$ 664,511	\$ 824,912
Closing (December 31, 2022)	663,236	882,886
Increase/(decrease)	\$ (1,275)	\$ 57,974

(in thousands)	Accounts receivable, net of allowances	Deferred revenue
Opening (December 31, 2020)	\$ 558,569	\$ 675,870
Closing (December 31, 2021)	664,511	824,912
Increase/(decrease)	\$ 105,942	\$ 149,042

The amount of revenue recognized in the period that was included in the opening current deferred revenue, which reflects the contract liability amounts, was \$819.9 million, \$672.5 million and \$555.8 million for the years ended December 31, 2022, 2021 and 2020 respectively. The difference between the opening and closing balances of the Company's deferred revenue was primarily driven by an increase in billings, partially offset by an increase in amortization of deferred revenue to operating revenues. As of December 31, 2022, 2021 and 2020, the Company carried a long-term deferred revenue balance of \$29.4 million, \$23.4 million and \$7.1 million, respectively, in "Other non-current liabilities" on the Consolidated Statement of Financial Condition.

For contracts that have a duration of one year or less, the Company has not disclosed either the remaining performance obligation as of the end of the reporting period or when the Company expects to recognize the revenue. The remaining performance obligations for contracts that have a duration of greater than one year and the periods in which they are expected to be recognized are as follows:

(in thousands)	As of December 31, 2022
First 12-month period	\$ 629,912
Second 12-month period	373,832
Third 12-month period	169,341
Periods thereafter	124,869
Total	\$ 1,297,954

4. EARNINGS PER COMMON SHARE

Basic earnings per share ("EPS") is computed by dividing net income by the weighted average number of common shares outstanding during the period. Diluted EPS reflects the assumed conversion of all dilutive securities, including, when applicable, RSUs, PSUs and PSOs.

The following table presents the computation of basic and diluted EPS:

(in thousands, except per share data)	Years Ended		
	December 31, 2022	December 31, 2021	December 31, 2020
Net income	\$ 870,573	\$ 725,983	\$ 601,822
Basic weighted average common shares outstanding	80,746	82,508	83,716
Effect of dilutive securities:			
PSUs, RSUs, and PSOs	469	971	801
Diluted weighted average common shares outstanding	81,215	83,479	84,517
Earnings per common share:			
Basic	\$ 10.78	\$ 8.80	\$ 7.19
Diluted	\$ 10.72	\$ 8.70	\$ 7.12

5. ACQUISITIONS

On September 13, 2021, MSCI acquired all of the issued and outstanding preferred and common shares of Real Capital Analytics, Inc (“RCA”) for an aggregate cash purchase price of \$949.0 million. This acquisition expands MSCI’s suite of real estate solutions, providing the real estate industry with data, analytics and support tools to manage investments and understand performance and risk, including climate risk, within their portfolios. RCA has been accounted for as a business combination using the acquisition method of accounting and has been integrated into the All Other – Private Assets reportable segment, as a component of the Real Assets operating segment. A portion of RCA’s client agreements do not have automatic renewal clauses at the end of the subscription period. Due to the historically high retention rate and expectation that a substantial portion of the client agreements will be renewed, the associated revenue is recorded as recurring subscription revenue.

The table below represents the final purchase price allocation to total assets acquired and liabilities assumed and the associated estimated useful lives as of the acquisition date. In the fourth quarter of 2021, the Company early adopted ASU 2021-08, which resulted in an increase to deferred revenue and goodwill and a decrease in deferred tax liabilities recorded as of the opening balance sheet date.

(in thousands)	Estimated Useful Life	Fair Value
Accounts receivable		\$ 9,700
Other current assets		3,721
Property, equipment and leasehold improvements, net		1,204
Right of use assets		6,441
Other non-current assets		3,398
Deferred revenue		(35,194)
Other current liabilities		(15,525)
Long-term operating lease liabilities		(4,849)
Deferred tax liabilities		(83,737)
Other non-current liabilities		(223)
Intangible assets:		
Proprietary data	11 years	185,500
Customer relationships	20 years	175,800
Acquired technology and software	9 years	31,500
Trademarks	2 years	890
Goodwill		670,333
Purchase price, net of cash acquired		\$ 948,959

The recorded goodwill is primarily attributable to the utilization of the acquired data as well as expanded market opportunities. Goodwill attributable to the acquisition is not deductible for income tax purposes.

The weighted average amortization period for the acquired intangible assets approximates the estimated useful life.

Revenue of RCA recognized within the consolidated financial statements was \$79.7 million and \$22.1 million for the years ended December 31, 2022 and 2021, respectively.

6. COMMITMENTS AND CONTINGENCIES

As of December 31, 2022, the Company had outstanding an aggregate of \$4,200.0 million in senior unsecured notes (collectively, the “Senior Notes”) and an aggregate of \$347.8 million in senior unsecured tranche A term loans (the “Tranche A Term Loans”) under the term loan A facility (the “TLA Facility”), as presented in the table below:

(in thousands)	Maturity Date	Principal amount outstanding at December 31, 2022	Carrying value at December 31, 2022	Carrying value at December 31, 2021	Fair Value at December 31, 2022	Fair Value at December 31, 2021
Debt						
4.000% senior unsecured notes due 2029	November 15, 2029	\$ 1,000,000	\$ 992,546	\$ 991,455	\$ 876,240	\$ 1,047,950
3.625% senior unsecured notes due 2030	September 1, 2030	900,000	894,925	894,263	751,113	924,777
3.875% senior unsecured notes due 2031	February 15, 2031	1,000,000	991,067	989,973	833,130	1,046,620
3.625% senior unsecured notes due 2031	November 1, 2031	600,000	594,195	593,538	500,880	625,536
3.250% senior unsecured notes due 2033	August 15, 2033	700,000	692,862	692,193	542,696	710,906
Variable rate Tranche A Term Loans due 2027	February 16, 2027	347,813	346,352	—	346,073	—
Total debt ⁽¹⁾		<u>\$ 4,547,813</u>	<u>\$ 4,511,947</u>	<u>\$ 4,161,422</u>	<u>\$ 3,850,132</u>	<u>\$ 4,355,789</u>

⁽¹⁾ Includes \$8.7 million of current-portion of long-term debt.

Maturities of the Company’s principal debt payments as of December 31, 2022 are as follows:

Maturity of Principal Debt Payments (in thousands)	Amounts
2023	\$ 8,750
2024	10,938
2025	19,688
2026	26,250
2027	282,187
Thereafter	4,200,000
Total debt	<u>\$ 4,547,813</u>

Interest payments attributable to the Company’s outstanding indebtedness are due as presented in the following table:

	Interest payment frequency	First interest payment date
Senior Notes and Tranche A Term Loans		
4.000% senior unsecured notes due 2029	Semi-Annual	May 15
3.625% senior unsecured notes due 2030	Semi-Annual	March 1
3.875% senior unsecured notes due 2031	Semi-Annual	June 1
3.625% senior unsecured notes due 2031	Semi-Annual	May 1
3.250% senior unsecured notes due 2033	Semi-Annual	February 15
Variable rate Tranche A Term Loans due 2027 ⁽¹⁾	Variable	July 11

⁽¹⁾ The first payment occurred on July 11, 2022.

The fair market value of the Company’s debt obligations represent Level 2 valuations. The Company utilizes the market approach and obtains security pricing from a vendor who uses broker quotes and third-party pricing services to determine fair values.

Senior Notes. The \$1,000.0 million aggregate principal amount of 4.000% senior unsecured notes due 2029 (the “2029 Senior Notes”) are scheduled to mature on November 15, 2029. At any time prior to November 15, 2024, the Company may redeem all or part of the 2029 Senior Notes at a redemption price equal to the sum of (i) 100% of the principal amount thereof, plus (ii) a make-whole premium as of the date of redemption, plus (iii) accrued and unpaid interest and additional interest, if any, thereon, to the date of redemption. In addition, the Company may redeem all or part of the 2029 Senior Notes, together with accrued and unpaid interest, on or after November 15, 2024, at redemption prices set forth in the indenture governing the 2029 Senior Notes. At any time prior to November 15, 2022, the Company may use the proceeds of certain equity offerings to redeem up to 35% of the aggregate principal amount of the 2029 Senior Notes, including any permitted additional notes, at a redemption price equal to 104.000% of the principal amount plus accrued and unpaid interest, if any, to the redemption date.

The \$900.0 million aggregate principal amount of 3.625% senior unsecured notes due 2030 (the “2030 Senior Notes”) are scheduled to mature on September 1, 2030. At any time prior to March 1, 2025, the Company may redeem all or part of the 2030 Senior Notes at a redemption price equal to the sum of (i) 100% of the principal amount thereof, plus (ii) a make-whole premium as of the date of redemption, plus (iii) accrued and unpaid interest and additional interest, if any, thereon, to the date of redemption. In addition, the Company may redeem all or part of the 2030 Senior Notes, together with accrued and unpaid interest, on or after March 1, 2025, at redemption prices set forth in the indenture governing the 2030 Senior Notes. At any time prior to March 1, 2023, the Company may use the proceeds of certain equity offerings to redeem up to 35% of the aggregate principal amount of the 2030 Senior Notes, including any permitted additional notes, at a redemption price equal to 103.625% of the principal amount plus accrued and unpaid interest, if any, to the redemption date.

The \$1,000.0 million aggregate principal amount of 3.875% senior unsecured notes due 2031 (the “2031A Senior Notes”) are scheduled to mature on February 15, 2031. At any time prior to June 1, 2025, the Company may redeem all or part of the 2031A Senior Notes at a redemption price equal to the sum of (i) 100% of the principal amount thereof, plus (ii) a make-whole premium as of the date of redemption, plus (iii) accrued and unpaid interest, if any, to, but excluding, the redemption date. In addition, the Company may redeem all or part of the 2031A Senior Notes, together with accrued and unpaid interest, on or after June 1, 2025, at redemption prices set forth in the indenture governing the 2031A Senior Notes. At any time prior to June 1, 2023, the Company may use the proceeds of certain equity offerings to redeem up to 35% of the aggregate principal amount of the 2031A Senior Notes, including any permitted additional notes, at a redemption price equal to 103.875% of the principal amount plus accrued and unpaid interest, if any, to, but excluding, the redemption date.

The \$600.0 million aggregate principal amount of 3.625% Senior Unsecured Notes due 2031 (the “2031B Senior Notes”) are scheduled to mature on November 1, 2031. At any time prior to November 1, 2026, the Company may redeem all or part of the 2031B Senior Notes at a redemption price equal to the sum of (i) 100% of the principal amount thereof, plus (ii) a make-whole premium as of the date of redemption, plus (iii) accrued and unpaid interest, if any, thereon, to the date of redemption. In addition, the Company may redeem all or part of the 2031B Senior Notes, together with accrued and unpaid interest, on or after November 1, 2026, at redemption prices set forth in the indenture governing the 2031B Senior Notes. At any time prior to November 1, 2024, the Company may use the proceeds of certain equity offerings to redeem up to 35% of the aggregate principal amount of the 2031B Senior Notes, including any permitted additional notes, at a redemption price equal to 103.625% of the principal amount plus accrued and unpaid interest, if any, to the redemption date.

The \$700.0 million aggregate principal amount of 3.250% Senior Unsecured Notes due 2033 (the “2033 Senior Notes”) are scheduled to mature on August 15, 2033. At any time prior to August 15, 2027, the Company may redeem all or part of the 2033 Senior Notes at a redemption price equal to the sum of (i) 100% of the principal amount thereof, plus (ii) a make-whole premium as of the date of redemption, plus (iii) accrued and unpaid interest and additional interest, if any, thereon, to the date of redemption. In addition, the Company may redeem all or part of the 2033 Senior Notes, together with accrued and unpaid interest, on or after August 15, 2027, at redemption prices set forth in the indenture governing the 2033 Senior Notes. At any time prior to August 15, 2024, the Company may use the proceeds of certain equity offerings to redeem up to 35% of the aggregate principal amount of the 2033 Senior Notes, including any permitted additional notes, at a redemption price equal to 103.250% of the principal amount plus accrued and unpaid interest, if any, to the redemption date.

Credit Agreement. Since November 20, 2014, the Company has maintained a revolving credit agreement with a syndicate of banks. On June 9, 2022, the Company, the guarantors party thereto and the lenders and agents party thereto, entered into an Amended and Restated Credit Agreement (the “Credit Agreement”), amending and restating in its entirety the Company’s prior revolving credit agreement (the “Prior Revolving Credit Agreement”). The Credit Agreement makes available to the Company an aggregate of \$500.0 million of revolving loan commitments, which may be drawn until February 16, 2027, and the TLA Facility. At December 31, 2022, the revolving loan commitments were undrawn. As noted above, at December 31, 2022, the commitments under the TLA Facility were drawn in full, and the resulting Tranche A Term Loans mature on February 16, 2027. The obligations under the Credit Agreement are general unsecured obligations of the Company and the guarantors.

Interest on the Tranche A Term Loans under the TLA Facility accrues, at a variable rate, based on the secured overnight funding rate (“SOFR”) or the alternate base rate (“Base Rate”), plus, in each case, an applicable margin and will be due on each Interest Payment Date (as defined in the Credit Agreement). The applicable margin is calculated by reference to the Company’s Consolidated Leverage Ratio (as defined in the Credit Agreement) and ranges between 1.50% to 2.00% for SOFR loans, and 0.50% to 1.00% for Base Rate loans. At December 31, 2022, the interest rate on the TLA Facility was 6.42%.

In connection with the closings of the Senior Notes offerings, entry into the Prior Revolving Credit Agreement and the subsequent amendments thereto and entry into the Credit Agreement, the Company paid certain financing fees which, together with the existing fees related to prior credit facilities, are being amortized over their related lives. At December 31, 2022, \$38.0 million of the deferred financing fees and premium remain unamortized, \$0.6 million of which is included in “Prepaid and other assets,” \$1.6 million of which is included in “Other non-current assets” and \$35.8 million of which is included in “Long-term debt” on the Consolidated Statement of Financial Condition.

7. LEASES

The Company recognized \$29.7 million, \$30.6 million and \$32.8 million of operating lease expenses for the years ended December 31, 2022, 2021 and 2020, respectively. The amounts associated with variable lease costs, short-term lease costs and sublease income were not material for any of the years ended December 31, 2022, 2021 and 2020.

The Company’s leases have remaining lease terms of up to approximately 10 years. Some of these leases have options to extend which, if exercised, would extend the maximum remaining term to approximately 24 years. Some of the leases also provide for early termination, the exercise of which would shorten the term of those leases by up to 5 years.

The Company recorded pre-tax impairment charges for the year ended December 31, 2021 of \$8.4 million associated with right of use assets. The impairment charges are included in General and administrative expenses within the consolidated statements of income.

Maturities of the Company’s operating lease liabilities, interest and other relevant line items in the Consolidated Statement of Financial Condition as of December 31, 2022 are as follows:

Maturity of Lease Liabilities (in thousands)	Operating Leases
2023	\$ 28,063
2024	23,890
2025	22,673
2026	21,142
2027	16,708
Thereafter	65,758
Total lease payments	\$ 178,234
Less: Interest	(23,413)
Present value of lease liabilities	\$ 154,821
Other accrued liabilities	\$ 23,246
Long-term operating lease liabilities	\$ 131,575

Weighted-average remaining lease term and discount rate for the Company’s operating leases are as follows:

Lease Term and Discount Rate	As of	
	December 31, 2022	December 31, 2021
Weighted-average remaining lease term (years)	7.86	8.16
Weighted-average discount rate	3.40 %	3.09 %

Other information related to the Company's operating leases are as follows:

Other Information (in thousands)	Years Ended		
	December 31, 2022	December 31, 2021	December 31, 2020
Operating cash flows used for operating leases	\$ 29,385	\$ 30,972	\$ 30,061
Right of use assets obtained in exchange for new operating lease liabilities	\$ 15,979	\$ 26,004	\$ 11,472

8. PROPERTY, EQUIPMENT AND LEASEHOLD IMPROVEMENTS, NET

Property, equipment and leasehold improvements, net at December 31, 2022 and 2021 consisted of the following:

(in thousands)	As of		
	Estimated Useful Lives	December 31, 2022	December 31, 2021
Computer & related equipment	2 to 5 years	\$ 181,710	\$ 179,557
Furniture & fixtures	7 years	14,078	14,194
Leasehold improvements	1 to 21 years	54,040	56,308
Work-in-process	—	2,373	2,699
Subtotal		252,201	252,758
Accumulated depreciation and amortization		(198,348)	(186,043)
Property, equipment and leasehold improvements, net		\$ 53,853	\$ 66,715

Depreciation and amortization expense of property, equipment and leasehold improvements was \$26.9 million, \$28.9 million and \$29.8 million for the years ended December 31, 2022, 2021 and 2020, respectively.

9. GOODWILL AND INTANGIBLE ASSETS, NET

Goodwill

The following table presents goodwill by reportable segment:

(in thousands)	Index	Analytics	ESG and Climate	All Other - Private Assets	Total
Goodwill at December 31, 2020	\$ 1,205,758	\$ 290,976	\$ 48,047	\$ 21,241	\$ 1,566,022
Acquisitions ⁽¹⁾	—	—	—	670,874	670,874
Foreign exchange translation adjustment	(315)	—	—	(195)	(510)
Goodwill at December 31, 2021	\$ 1,205,443	\$ 290,976	\$ 48,047	\$ 691,920	\$ 2,236,386
Acquisitions ⁽¹⁾	—	—	—	(541)	(541)
Foreign exchange translation adjustment	(3,821)	—	—	(2,354)	(6,175)
Goodwill at December 31, 2022	\$ 1,201,622	\$ 290,976	\$ 48,047	\$ 689,025	\$ 2,229,670

(1) Reflects the impact of the acquisition of RCA.

Intangible Assets, Net

The following table presents the amount of amortization expense related to intangible assets by category for the periods indicated:

(in thousands)	Years Ended		
	December 31, 2022	December 31, 2021	December 31, 2020
Amortization expense of acquired intangible assets	\$ 63,370	\$ 42,242	\$ 34,049
Amortization expense of internally developed capitalized software	27,709	22,337	22,892
Write-off of internally developed capitalized software	—	16,013	—
Total amortization of intangible assets expense	<u>\$ 91,079</u>	<u>\$ 80,592</u>	<u>\$ 56,941</u>

Following management's decision to discontinue development and cease related sales activities of certain Analytics segment products and transition existing customers to other product offerings, the Company wrote off \$16.0 million of certain internally developed capitalized software intangible assets (consisting of \$46.3 million of gross intangible assets less \$30.3 million of accumulated amortization) during the year ended December 31, 2021. The non-cash charge is recorded as a component of "Amortization of intangible assets" on the Consolidated Statement of Income.

The gross carrying and accumulated amortization amounts related to the Company's intangible assets were as follows:

		As of	
(in thousands)	Estimated Useful Lives	December 31, 2022	December 31, 2021
Gross intangible assets:			
Customer relationships	13 to 21 years	\$ 532,500	\$ 532,400
Proprietary data	11 to 13 years	220,778	220,639
Acquired technology and software	8 to 9 years	209,220	209,220
Trademarks	2 to 21.5 years	208,190	208,190
Internally developed capitalized software	3 to 5 years	165,928	106,181
Subtotal		1,336,616	1,276,630
Foreign exchange translation adjustment		(13,214)	(5,782)
Total gross intangible assets		\$ 1,323,402	\$ 1,270,848
Accumulated amortization:			
Customer relationships		\$ (308,437)	\$ (277,865)
Proprietary data		(41,783)	(22,678)
Acquired technology and software		(179,833)	(175,718)
Trademarks		(162,044)	(152,468)
Internally developed capitalized software		(77,259)	(49,394)
Subtotal		(769,356)	(678,123)
Foreign exchange translation adjustment		4,471	616
Total accumulated amortization		\$ (764,885)	\$ (677,507)
Net intangible assets:			
Customer relationships		\$ 224,063	\$ 254,535
Proprietary data		178,995	197,961
Acquired technology and software		29,387	33,502
Trademarks		46,146	55,722
Internally developed capitalized software		88,670	56,787
Subtotal		567,260	598,507
Foreign exchange translation adjustment		(8,743)	(5,166)
Total net intangible assets		\$ 558,517	\$ 593,341

Estimated amortization expense for succeeding years is presented below:

Years Ending December 31, (in thousands)	Amortization Expense
2023	\$ 99,520
2024	92,091
2025	66,765
2026	37,944
2027	36,012
Thereafter	226,185
Total	<u>\$ 558,517</u>

10. EMPLOYEE BENEFITS

The Company sponsors a 401(k) plan for eligible U.S. employees and defined contribution and defined benefit pension plans that cover substantially all of its non-U.S. employees. Eligible employees may participate in the MSCI 401(k) plan (or any other regional defined contribution plan sponsored by MSCI) immediately upon hire. Eligible employees receive 401(k) and other defined contribution plan matching contributions, which are subject to vesting and certain other limitations.

The following table reflects the employee benefits expense by cost, type and location in the Statement of Income for the periods indicated:

(in thousands)	Years Ended		
	December 31, 2022	December 31, 2021	December 31, 2020
Employee benefit cost type			
401(k) and other defined contribution plans	30,263	25,740	21,804
Pension related net period benefit expense	6,241	5,785	4,671
Total	<u>\$ 36,504</u>	<u>\$ 31,525</u>	<u>\$ 26,475</u>
Location in the Statement of Income			
Cost of revenues	\$ 14,269	\$ 12,231	\$ 9,913
Selling and marketing	10,775	9,489	7,910
Research and development	7,453	6,271	5,328
General and administrative	3,027	2,620	2,289
Other expense (income)	980	914	1,035
Total	<u>\$ 36,504</u>	<u>\$ 31,525</u>	<u>\$ 26,475</u>

The Company uses a measurement date of December 31st to calculate obligations under its pension and postretirement plans. As of December 31, 2022 and 2021, the Company carried a net liability of \$20.1 million and \$34.5 million, respectively, in “Other non-current liabilities” on the Consolidated Statement of Financial Condition related to its future pension obligations. The fair value of the defined benefit plan assets was \$29.8 million and \$30.2 million at December 31, 2022 and 2021, respectively.

The Company’s retiree benefit plans include defined benefit plans for employees in Switzerland, as well as other countries where MSCI maintains an operating presence.

Our Switzerland plans are government-mandated retirement funds that provide employees with a minimum investment return, which is determined annually by the Swiss government and was 1.0% in the years ended December 31, 2022, 2021 and 2020. Under the Switzerland plans, the Company and our employees are required to make contributions into a fund managed by an independent investment fiduciary. Employer contributions must be in an amount at least equal to the employee’s contribution. Employee contributions are based on the respective employee’s age, salary and chosen contribution scale. As of December 31, 2022 and 2021, the Switzerland defined benefit plans had a gross pension liability of \$26.5 million and \$34.0 million, respectively, and plan assets that totaled \$26.3 million and \$26.1 million, respectively. In the years ended December 31, 2022, 2021 and 2020, we recognized net periodic benefit expense of \$0.4 million, \$0.3 million and \$0.5 million, respectively, related to our Switzerland plans. The discount rate for the Switzerland defined benefit pension plan was 2.40% and 0.30%, respectively, as of December 31, 2022 and 2021.

The investment strategies of the non-U.S. defined benefit plans vary according to the plan provisions and local laws. The majority of the assets in the non-U.S. plans are in the Switzerland plans. The Switzerland plans are associated with an insured collective retirement foundation, whereby assets are held in trust and the assets are comingled with those of other participating companies. Investment decisions are made by a board of the collective retirement foundation, comprised of participating company representatives and representatives from the insurer. The overall strategy is to manage risk while maximizing total returns.

11. SHAREHOLDERS' EQUITY (DEFICIT)

This note reflects the share repurchases and related activity as well as share-based compensation activity recognized by the Company, for all periods referenced.

Return of capital

On July 28, 2022, the Board of Directors authorized a stock repurchase program (the "2022 Repurchase Program") for the purchase of up to \$1,000.0 million worth of shares of MSCI's common stock in addition to the \$539.1 million of authorization then remaining under a previously existing share repurchase program that was replaced by, and incorporated into, the 2022 Repurchase Program for a total of \$1,539.1 million of stock repurchase authorization.

Share repurchases made pursuant to the 2022 Repurchase Program may take place in the open market or in privately negotiated transactions from time to time based on market and other conditions. This authorization may be modified, suspended or terminated by the Board of Directors at any time without prior notice. As of December 31, 2022, there was \$1,304.4 million of available authorization remaining under the 2022 Repurchase Program.

The following table provides information with respect to repurchases of the Company's common stock made on the open market:

Year Ended (in thousands, except per share data)	Average Price Paid Per Share	Total Number of Shares Repurchased	Dollar Value of Shares Repurchased
December 31, 2022	\$ 470.68	2,730	\$ 1,284,825
December 31, 2021	\$ 412.25	339	\$ 139,580
December 31, 2020	\$ 291.76	2,493	\$ 727,344

The following table presents dividends declared per common share as well as total amounts declared, distributed and deferred for the periods indicated

(in thousands, except per share data)	Dividends			
	Per Share	Declared	Distributed	(Released)/ Deferred
2022				
Three Months Ended March 31,	\$ 1.04	\$ 87,280	\$ 87,846	\$ (566)
Three Months Ended June 30,	1.04	84,593	84,189	404
Three Months Ended September 30,	1.25	101,354	100,849	505
Three Months Ended December 31,	1.25	100,671	100,192	479
Year Ended December 31,	<u>\$ 4.58</u>	<u>\$ 373,898</u>	<u>\$ 373,076</u>	<u>\$ 822</u>
2021				
Three Months Ended March 31,	\$ 0.78	\$ 65,947	\$ 66,153	\$ (206)
Three Months Ended June 30,	0.78	64,863	64,489	374
Three Months Ended September 30,	1.04	86,476	85,961	515
Three Months Ended December 31,	1.04	86,475	85,973	502
Year Ended December 31,	<u>\$ 3.64</u>	<u>\$ 303,761</u>	<u>\$ 302,576</u>	<u>\$ 1,185</u>
2020				
Three Months Ended March 31,	\$ 0.68	\$ 59,233	\$ 59,455	\$ (222)
Three Months Ended June 30,	0.68	57,360	57,068	292
Three Months Ended September 30,	0.78	65,830	65,454	376
Three Months Ended December 31,	0.78	65,029	64,653	376
Year Ended December 31,	<u>\$ 2.92</u>	<u>\$ 247,452</u>	<u>\$ 246,630</u>	<u>\$ 822</u>

Common Stock

The following table presents activity related to shares of common stock issued and repurchased for the periods indicated:

	Common Stock Issued	Treasury Stock	Common Stock Outstanding
Balance At December 31, 2019	132,419,412	(47,624,482)	84,794,930
Dividend payable/paid	553	(337)	216
Common stock issued and exercise of stock options	406,960	—	406,960
Shares withheld for tax withholding	—	(165,239)	(165,239)
Shares repurchased under stock repurchase programs	—	(2,492,994)	(2,492,994)
Shares issued to Directors	2,250	27,284	29,534
Balance At December 31, 2020	<u>132,829,175</u>	<u>(50,255,768)</u>	<u>82,573,407</u>
Dividend payable/paid	268	(156)	112
Common stock issued	331,427	—	331,427
Shares withheld for tax withholding	—	(133,431)	(133,431)
Shares repurchased under stock repurchase programs	—	(338,577)	(338,577)
Shares issued to Directors	1,308	5,203	6,511
Balance At December 31, 2021	<u>133,162,178</u>	<u>(50,722,729)</u>	<u>82,439,449</u>
Dividend payable/paid	124	—	124
Common stock issued	456,425	—	456,425
Shares withheld for tax withholding	—	(209,492)	(209,492)
Shares repurchased under stock repurchase programs	—	(2,729,715)	(2,729,715)
Shares issued to Directors	4,278	(1,080)	3,198
Balance At December 31, 2022	<u>133,623,005</u>	<u>(53,663,016)</u>	<u>79,959,989</u>

Share-based Compensation

The Company regularly issues share-based compensation to its employees and directors who are not employees of the Company. The accounting guidance for share-based compensation requires measurement of compensation cost for share-based awards at fair value and recognition of compensation cost over the service period, net of estimated forfeitures. In connection with awards under its equity-based compensation and benefit plans, the Company is authorized to use newly issued shares or certain shares of common stock held in treasury.

In February 2023, the Company granted a portion of its employees awards in the form of RSUs, PSUs and PSOs. The total number of units and options granted was 228,488. The aggregate fair value of the awards was \$89.2 million. The RSUs granted in 2023 vest at the end of a three-year service period. The PSUs granted in 2023 vest at the end of a three-year service period, are subject to a one-year sale restriction and are also subject to the achievement of an absolute total shareholder return compounded annual growth rate, measured over a three-year period. The PSOs granted in 2023 vest and become exercisable at the end of a three-year service period and are subject to a performance condition based on the combined level of achievement of a cumulative revenue performance goal and a cumulative adjusted EPS performance goal, measured over a three-year period. All of these awards are subject to forfeiture under specific criteria set in the award agreements.

The following table presents the amount of share-based compensation expense by category for the periods indicated:

(in thousands)	Years Ended		
	December 31, 2022	December 31, 2021	December 31, 2020
Cost of revenues	\$ 15,404	\$ 17,285	\$ 14,523
Selling and marketing	14,218	14,411	13,545
Research and development	6,857	7,913	7,344
General and administrative	20,826	17,463	19,826
Other expense (income)	738	1,416	379
Total share-based compensation expense	<u>\$ 58,043</u>	<u>\$ 58,488</u>	<u>\$ 55,617</u>

The windfall tax benefits for share-based compensation expense related to RSUs and PSUs (together, the “Share-based Awards”) granted to Company employees and to directors who are not employees of the Company were \$28.4 million, \$22.3 million and \$20.9 million for the years ended December 31, 2022, 2021 and 2020, respectively.

As of December 31, 2022, \$59.8 million of compensation cost related to MSCI unvested share-based awards granted to the Company’s employees and to directors who are not employees of the Company had not yet been recognized. The unrecognized compensation cost relating to unvested stock-based awards expected to vest will be recognized primarily over the next one to four years.

In connection with awards under its equity-based compensation and benefit plans, the Company is authorized to issue shares of common stock. As of December 31, 2022, 3.4 million shares of common stock were available for future grants under these plans.

Share-based Awards

Certain Company employees have been granted Share-based Awards pursuant to a share-based compensation plan. Outstanding Share-based Awards include RSUs and PSUs. Recipients of Share-based Awards generally have rights to receive dividend equivalents that are subject to vesting.

The Company reports the target number of PSUs granted unless it has determined, based on the actual achievement of performance measures, that an employee will receive a different amount of shares underlying the PSUs, in which case the Company reports the amount of shares employees are likely to receive.

The fair value of the PSUs on the award dates were estimated under the Monte Carlo method using the following weighted average assumptions:

	Years Ended		
	December 31, 2022	December 31, 2021	December 31, 2020
Risk free interest rate	1.42 %	0.33 %	1.28 %
Historical stock price volatility	37.29 %	34.13 %	25.42 %
Term (in years)	3.0	4.0	3.8
Discount of Lack of Marketability	8.0 %	4.0 %	0.0 %

The risk-free interest rate was determined based on the yields available on U.S. Constant Maturity Treasury yield curve as of the valuation dates with a maturity commensurate with the terms. The expected stock price volatility was determined using historical volatility. Since the PSU awards are dividend-protected, the assumed dividend yield applied in the valuation was 0.0%.

The following table presents activity concerning the Company's vested and unvested Share-based Awards applicable to its employees (share data in thousands) for the period indicated:

For the Year Ended December 31, 2022 (in thousands, except fair value data)	Number of Shares	Weighted Average Grant Date Fair Value
Vested and unvested Share-based Awards at December 31, 2021	697	\$ 217.05
Granted	349	\$ 271.43
Conversion to common stock	(465)	\$ 169.52
Canceled	(27)	\$ 373.71
Vested and unvested Share-based Awards at December 31, 2022	<u>554</u>	<u>\$ 283.66</u>
Vested and unvested Share-based Awards expected to vest	<u>527</u>	<u>\$ 279.31</u>

The total fair value of Share-based Awards held by the Company's employees that converted to MSCI common stock during the years ended December 31, 2022, 2021 and 2020 was \$250.4 million, \$152.6 million and \$133.6 million, respectively.

Stock Option Awards

Certain Company employees have also been granted stock option awards in the form of PSOs. The fair value of PSOs on the award dates were estimated under the Black-Scholes pricing model using the following weighted average assumptions:

	Year Ended
	December 31, 2022
Risk-free interest rate	1.71 %
Expected stock volatility	30.37 %
Expected life (in years)	6.5
Expected dividend yield	0.76 %

The risk-free interest rate was determined based on the yields available on the U.S. Constant Maturity Treasury yield curve as of the valuation dates with a term commensurate with the expected life of the stock option award. The expected stock price volatility was calculated using historical volatility. As we do not have sufficient historical data, we utilized the simplified method provided by the SEC to calculate the expected life as the average of the contractual term and vesting period. The expected dividend yield was calculated by annualizing the most recent cash dividend declared by the Company's Board of Directors at grant date and dividing by the closing stock price on the grant date.

The following table presents activity concerning the Company's unvested PSOs related to its employees (share data in thousands):

For the Year Ended December 31, 2022 (in thousands, except fair value data)	Number of Option Awards	Weighted Average Exercise Price	Weighted Average Remaining Life (Years)	Aggregate Intrinsic Value ⁽¹⁾
Vested and unvested stock option awards at December 31, 2021	—	\$ —		
Granted	122	\$ 549.83		
Conversion to stock options	—	\$ —		
Canceled	(3)	\$ 549.83		
Vested and unvested stock option awards at December 31, 2022	<u>119</u>	\$ 549.83	9.1	\$ —
Unvested stock option awards expected to vest	<u>111</u>	\$ 549.83	9.1	\$ —

(1) Calculated using the closing stock price on the last trading day of fiscal 2022, less the option exercise price, multiplied by the number of PSOs multiplied by expected payout %.

There were no stock option awards issued or outstanding for the years ended December 31, 2021 and 2020. Additionally, there were no stock options outstanding that could be exercised during any of the years ended December 31, 2022, 2021 or 2020.

12. INCOME TAXES

The provision for income taxes (benefits) by taxing jurisdiction consisted of:

(in thousands)	Years Ended		
	December 31, 2022	December 31, 2021	December 31, 2020
Current			
U.S. federal	\$ 53,517	\$ 133,281	\$ 39,665
U.S. state and local	15,300	49,475	29,942
Non U.S.	68,015	60,766	70,441
	<u>136,832</u>	<u>243,522</u>	<u>140,048</u>
Deferred			
U.S. federal	25,878	(79,812)	(44,507)
U.S. state and local	14,634	(25,981)	(8,911)
Non U.S.	(4,076)	(5,576)	(2,227)
	<u>36,436</u>	<u>(111,369)</u>	<u>(55,645)</u>
Provision for income taxes	<u>\$ 173,268</u>	<u>\$ 132,153</u>	<u>\$ 84,403</u>

The following table reconciles the U.S. federal statutory income tax rate to the effective income tax rate:

	Years Ended		
	December 31, 2022	December 31, 2021	December 31, 2020
U.S. federal statutory income tax rate	21.00 %	21.00 %	21.00 %
U.S. state and local income taxes, net of U.S. federal income tax benefits	2.71 %	2.90 %	3.14 %
Change in tax rates applicable to non-U.S. earnings	(3.96%)	(5.09%)	(3.30%)
Foreign Derived Intangible Income (FDII), net of GILTI ⁽¹⁾	(0.50%)	(1.09%)	(3.84%)
Domestic tax credits and incentives	(0.46%)	(0.59%)	(0.59%)
Valuation allowance	—%	—%	—%
Excess share-based compensation	(2.72%)	(2.65%)	(3.24%)
Other	0.53%	0.92%	(0.87%)
Effective income tax rate	16.60%	15.40%	12.30%

- (1) The year ended December 31, 2020 includes (3.00)% released during the year related to the favorable impact on prior years from final regulations clarifying certain provisions of the Tax Cuts and Jobs Act (“Tax Reform”).

Deferred income taxes reflect the net tax effects of temporary differences between the financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when such differences are expected to reverse. Significant components of the Company’s deferred tax assets and liabilities as of December 31, 2022 and 2021, were as follows:

(in thousands)	As of	
	December 31, 2022	December 31, 2021
Deferred tax assets:		
Capitalized expenses	\$ 41,176	\$ 94,265
Unearned revenue	54,263	56,810
Lease liabilities	35,425	39,507
Employee compensation and benefit plans	24,318	20,216
Loss carryforwards	13,128	18,173
Interest expense carryforwards	11,283	11,215
Pension	—	2,229
Other	18	3,509
Subtotal	179,611	245,924
Less: valuation allowance	(31)	(36)
Total deferred tax assets	\$ 179,580	\$ 245,888
Deferred tax liabilities:		
Intangible assets	\$ (132,705)	\$ (147,118)
Right of use assets	(28,213)	(32,106)
Property, equipment and leasehold improvements, net	(15,169)	(27,136)
Unremitted foreign earnings	(2,162)	(3,059)
Pension	(1,222)	—
Total deferred tax liabilities	\$ (179,471)	\$ (209,419)
Net deferred tax assets	\$ 109	\$ 36,469

As presented in the table above, the Company has certain loss and interest carryforward items. The tax value of the U.S. portion of the interest carryforward was zero as of December 31, 2022 and December 31, 2021. The tax value of the non-U.S. portion of the interest carryforward was \$11.3 million and \$11.2 million as of December 31, 2022 and December 31, 2021, respectively. This carryforward is subject to an annual limitation on utilization over an indefinite life.

Net operating loss carryforwards in the U.S. were \$48.7 million with a tax value of \$10.9 million and \$69.7 million with a tax value of \$17.9 million as of December 31, 2022 and December 31, 2021, respectively. These carryforwards are subject to annual limitations and will begin to expire in 2026. The tax value of the non-U.S. portion of the net operating loss was \$2.2 million and \$0.3 million as of December 31, 2022 and December 31, 2021 respectively. These carryforwards are subject to annual limitations and will begin to expire in 2025.

The Company believes the majority of the deferred tax assets at December 31, 2022 are more likely than not to be realized based on expectations as to future taxable income in the jurisdictions in which it operates with the exception of a loss carryforward in one jurisdiction where it has established a valuation allowance of \$0.03 million.

The following table presents changes in the Company's deferred tax asset valuation allowance for the periods indicated:

(in thousands)	Years Ended		
	December 31, 2022	December 31, 2021	December 31, 2020
Beginning balance	\$ 36	\$ —	\$ —
Additions charged to cost and expenses	—	36	—
Deductions	(5)	—	—
Ending balance	<u>\$ 31</u>	<u>\$ 36</u>	<u>\$ —</u>

The following table presents the components of income before provision for income taxes generated by domestic or foreign operations for the periods indicated:

(in thousands)	Years Ended		
	December 31, 2022	December 31, 2021	December 31, 2020
Domestic	\$ 525,328	\$ 417,679	\$ 353,049
Foreign ⁽¹⁾	518,513	440,457	333,176
Total income before provision for income taxes	<u>\$ 1,043,841</u>	<u>\$ 858,136</u>	<u>\$ 686,225</u>

- (1) Foreign income before provision for income taxes is defined as income generated from operations located outside the U.S., which includes income from foreign branches of U.S. companies.

As of December 31, 2022, the Company has provided for applicable state income and foreign withholding taxes on all undistributed earnings of its foreign subsidiaries.

The Company regularly assesses the likelihood of additional assessments in each of the taxing jurisdictions in which it files income tax returns. The Company has established unrecognized tax benefits that the Company believes are adequate in relation to the potential for additional assessments. Once established, the Company adjusts unrecognized tax benefits only when more information is available or when an event occurs necessitating a change. Based on the current status of income tax audits, the Company believes it is reasonably possible that the total amount of unrecognized benefits may decrease by approximately \$27.9 million in the next twelve months as a result of the resolution of tax examinations.

The Company believes the resolution of tax matters will not have a material effect on the Consolidated Statement of Financial Condition of the Company, although a resolution could have a material impact on the Company's Consolidated Statement of Income for a particular future period and on the Company's effective tax rate for any period in which such resolution occurs.

The following table presents a reconciliation of the beginning and ending amount of the gross unrecognized tax benefits, excluding interest and penalties, for the years ended December 31, 2022, 2021 and 2020:

Gross unrecognized tax benefits (in thousands)	Years Ended		
	December 31, 2022	December 31, 2021	December 31, 2020
Beginning balance	\$ 33,039	\$ 16,621	\$ 15,841
Increases based on tax positions related to the current period	640	511	292
Increases based on tax positions related to prior periods	3,807	20,321	2,099
Decreases based on tax positions related to prior periods	(597)	—	—
Decreases related to settlements with taxing authorities	(4,366)	—	—
Decreases related to a lapse of applicable statute of limitations	—	(4,414)	(1,611)
Ending balance	<u>\$ 32,523</u>	<u>\$ 33,039</u>	<u>\$ 16,621</u>

The total amount of unrecognized tax benefits was \$32.5 million, \$33.0 million and \$16.6 million as of December 31, 2022, 2021 and 2020, respectively, which, if recognized, would favorably affect the effective tax rate in future periods. The Company recognizes the accrual of interest and penalties related to unrecognized tax benefits in the “Provision for income taxes” in the Consolidated Statement of Income. For the year ended December 31, 2022, the Company recognized \$(0.5) million and for the years ended December 31, 2021 and 2020, the Company recognized zero interest in the Consolidated Statement of Income with respect to unrecognized tax benefits. Penalties of \$(0.3) million, \$0.3 million and \$0.4 million were recognized in the Consolidated Statement of Income and the Consolidated Statement of Financial Position for the years ended December 31, 2022, 2021 and 2020, respectively. The amount of accrued interest, which includes interest related to uncertain tax positions and accrued income tax expense, recorded on the Consolidated Statement of Financial Condition as of December 31, 2022 was \$0.4 million and for the years ended December 31, 2021 and 2020 was \$0.9 million.

The Company is under examination by tax authorities in certain jurisdictions, including foreign jurisdictions, such as the United Kingdom, Switzerland and India, and states in the U.S. in which the Company has significant operations, such as New York and California. The tax years currently under examination vary by jurisdiction but include years ranging from 2008 onwards.

The Inflation Reduction Act of 2022 (“IRA”), enacted on August 16, 2022, is not currently anticipated to have a material impact on the Company’s provision for income taxes.

13. SEGMENT INFORMATION

ASC Subtopic 280-10, “*Segment Reporting*,” establishes standards for reporting information about operating segments. Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision maker (“CODM”), in deciding how to allocate resources and assess performance. MSCI’s Chief Executive Officer and its President and Chief Operating Officer, who are together considered to be its CODM, review financial information presented on an operating segment basis for purposes of making operating decisions and assessing financial performance.

The CODM measures and evaluates reportable segments based on segment operating revenues as well as Adjusted EBITDA and other measures. The Company excludes the following items from segment Adjusted EBITDA: provision for income taxes, other expense (income), net, depreciation and amortization of property, equipment and leasehold improvements, amortization of intangible assets and, at times, certain other transactions or adjustments, including impairment related to sublease of leased property and certain non-recurring acquisition-related integration and transaction costs, that the CODM does not consider for the purposes of making decisions to allocate resources among segments or to assess segment performance. Although these amounts are excluded from segment Adjusted EBITDA, they are included in reported consolidated net income and are included in the reconciliation that follows.

The Company’s computation of segment Adjusted EBITDA may not be comparable to other similarly-titled measures computed by other companies because all companies do not calculate segment Adjusted EBITDA in the same fashion.

Operating revenues and expenses directly associated with each segment are included in determining its operating results. Other expenses that are not directly attributable to a particular segment are based upon allocation methodologies, including time estimates, revenue, headcount, sales targets, data center consumption and other relevant usage measures. Due to the integrated structure of MSCI’s business, certain costs incurred by one segment may benefit other segments. A segment may use the content and data produced by another segment without incurring an arm’s-length intersegment charge.

The CODM does not review any information regarding total assets on an operating segment basis. Operating segments do not record intersegment revenues, and, accordingly, there is none to be reported. The accounting policies for segment reporting are the same as for MSCI as a whole.

The Company has five operating segments: Index, Analytics, ESG and Climate, Real Assets and Burgiss, which are presented as the following four reportable segments: Index, Analytics, ESG and Climate and All Other – Private Assets. During the year ended December 31, 2022, the Company renamed the Real Estate operating segment to Real Assets.

Effective January 1, 2021, the Company began presenting four reportable segments with the ESG and Climate operating segment being presented as a separate reportable segment. Prior period amounts have been recast to reflect the current presentation. The operating segments of Real Assets and Burgiss do not individually meet the segment reporting thresholds and have been combined and presented as part of All Other – Private Assets reportable segment. The Company's ownership interest in Burgiss is classified as an equity-method investment. Therefore, the All Other – Private Assets segment does not include the Company's proportionate share of operating revenues and Adjusted EBITDA related to Burgiss. The Company's proportionate share of the income or loss from its equity-method investment in Burgiss is not a component of Adjusted EBITDA as it is reported as a component of other (expense) income, net.

The Index operating segment offers equity and fixed income indexes. The indexes are used in many areas of the investment process, including for developing indexed financial products (e.g., ETFs, mutual funds, annuities, futures, options, structured products, over-the-counter derivatives), performance benchmarking, portfolio construction and rebalancing, and asset allocation.

The Analytics operating segment offers risk management, performance attribution and portfolio management content, applications and services that provide clients with an integrated view of risk and return and tools for analyzing market, credit, liquidity, counterparty and climate risk across all major asset classes, spanning short-, medium- and long-term time horizons. Clients access Analytics tools and content through MSCI's proprietary applications and application programming interfaces, third-party applications or directly through their own platforms. Additionally, the Analytics operating segment also provides various managed services to help clients operate more efficiently, including consolidation of client portfolio data from various sources, review and reconciliation of input data and results, and customized reporting.

The ESG and Climate operating segment offers products and services that help institutional investors understand how ESG and climate considerations can impact the long-term risk and return of their portfolio and individual security-level investments. In addition, the ESG and Climate operating segment provides data, ratings, research and tools to help investors navigate increasing regulation, meet new client demands and better integrate ESG and climate elements into their investment processes.

The Real Assets operating segment offers data, benchmarks, return-analytics, climate assessments and market insights for tangible assets such as real estate and infrastructure. In addition, Real Assets performance and risk analytics range from enterprise-wide to property-specific analysis. The Real Assets operating segment also provides business intelligence products to real estate owners, managers, developers and brokers worldwide.

The Burgiss operating segment represents the Company's equity method investment in Burgiss, a global provider of investment decision support tools for private capital.

The change in reportable segments referred to above did not result in any changes to MSCI's CODM or the basis for segment profitability. The CODM continues to measure and evaluate reportable segments based on segment operating revenues as well as Adjusted EBITDA and other measures.

The following table presents operating revenues by reportable segment for the periods indicated:

(in thousands)	Years Ended		
	December 31, 2022	December 31, 2021	December 31, 2020
Operating revenues			
Index	\$ 1,303,209	\$ 1,251,764	\$ 1,016,495
Analytics	576,107	544,299	513,808
ESG and Climate	228,311	166,192	111,364
All Other - Private Assets	140,971	81,289	53,723
Total	\$ 2,248,598	\$ 2,043,544	\$ 1,695,390

The following table presents segment profitability and a reconciliation to net income for the periods indicated:

(in thousands)	Years Ended		
	December 31, 2022	December 31, 2021	December 31, 2020
Index Adjusted EBITDA	\$ 985,407	\$ 951,312	\$ 766,493
Analytics Adjusted EBITDA	247,895	198,799	172,924
ESG and Climate Adjusted EBITDA	61,094	29,748	22,851
All Other - Private Assets Adjusted EBITDA	35,275	16,931	9,242
Total operating segment profitability	1,329,671	1,196,790	971,510
Amortization of intangible assets	91,079	80,592	56,941
Depreciation and amortization of property, equipment and leasehold improvements	26,893	28,901	29,805
Impairment related to sublease of leased property	—	7,702	—
Acquisition-related integration and transaction costs ⁽¹⁾	4,059	6,870	—
Operating income	1,207,640	1,072,725	884,764
Other expense (income), net	163,799	214,589	198,539
Provision for income taxes	173,268	132,153	84,403
Net income	\$ 870,573	\$ 725,983	\$ 601,822

- (1) Incremental and non-recurring costs attributable to acquisitions directly related to the execution of the transaction and integration of the acquired business that have occurred no later than 12 months after the close of the transaction.

Operating revenues by geography are primarily based on the shipping address of the ultimate customer utilizing the product. The following table presents revenue by geographic area for the periods indicated:

(in thousands)	Years Ended		
	December 31, 2022	December 31, 2021	December 31, 2020
Operating revenues			
Americas:			
United States	\$ 934,462	\$ 836,880	\$ 723,962
Other	96,023	85,744	71,408
Total Americas	1,030,485	922,624	795,370
Europe, the Middle East and Africa (“EMEA”):			
United Kingdom	351,225	344,976	262,188
Other	512,018	454,239	364,547
Total EMEA	863,243	799,215	626,735
Asia & Australia:			
Japan	91,263	91,419	80,591
Other	263,607	230,286	192,694
Total Asia & Australia	354,870	321,705	273,285
Total	\$ 2,248,598	\$ 2,043,544	\$ 1,695,390

Long-lived assets consist of property, equipment and leasehold improvements, right of use assets and internally developed capitalized software, net of accumulated depreciation and amortization. The following table presents long-lived assets by geographic area on the dates indicated:

(in thousands)	As of	
	December 31, 2022	December 31, 2021
Long-lived assets		
Americas:		
United States	\$ 179,453	\$ 167,870
Other	11,971	13,480
Total Americas	191,424	181,350
EMEA:		
United Kingdom	19,674	19,563
Other	23,099	34,240
Total EMEA	42,773	53,803
Asia & Australia:		
Japan	652	1,150
Other	32,962	31,873
Total Asia & Australia	33,614	33,023
Total	\$ 267,811	\$ 268,176

14. SUBSEQUENT EVENTS

On January 30, 2023, the Board of Directors of the Company declared a quarterly dividend of \$1.38 per share of common stock to be paid on February 28, 2023 to shareholders of record as of the close of trading on February 17, 2023.

Item 9. *Changes in and Disagreements With Accountants on Accounting and Financial Disclosure*

None.

Item 9A. *Controls and Procedures*

(a). Evaluation of Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed in the Company's reports under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to management, including our Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO") as appropriate, to allow timely decisions regarding required disclosure.

Management of the Company, with the participation of its CEO and CFO, evaluated the effectiveness of the Company's disclosure controls and procedures. Based on their evaluation, as of December 31, 2022, the end of the period covered by this Annual Report on Form 10-K, the Company's CEO and CFO have concluded that the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) were effective.

(b). Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) promulgated under the Exchange Act as a process designed by, or under the supervision of, our principal executive and principal financial officers or persons performing similar functions and effected by the Company's Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP and includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect our transactions and dispositions of our assets,
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of our financial statements in accordance with GAAP, and that our receipts and expenditures are being made only in accordance with authorizations of management and directors of the Company, and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2022 based on the criteria described in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Based on this assessment, management, including the Company's CEO and CFO, concluded that, as of December 31, 2022, our internal control over financial reporting was effective in providing reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

PricewaterhouseCoopers LLP, our independent registered public accounting firm, has audited and issued a report on the effectiveness of our internal control over financial reporting as of December 31, 2022, which appears on page 56 of this Annual Report on Form 10-K.

(c). Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the fiscal quarter ended December 31, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. *Other Information*

None.

Item 9C. *Disclosure Regarding Foreign Jurisdiction that Prevent Inspections*

None.

PART III

Item 10. *Directors, Executive Officers and Corporate Governance*

Except for the information relating to our Executive Officers set forth in Part I of this Annual Report on Form 10-K, we incorporate by reference the information responsive to this Item appearing in our Proxy Statement, which will be filed no later than 120 days after December 31, 2022.

Information regarding our Code of Ethics and Business Conduct and Corporate Governance Policies is incorporated herein by reference from our Proxy Statement, which will be filed no later than 120 days after December 31, 2022. Any amendments to, or waivers from, a provision of our Code of Ethics that apply to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and that relates to any element of the Code of Ethics enumerated in paragraph (b) of Item 406 of Regulation S-K shall be disclosed by posting such information on our website at www.msci.com. Information contained on our website is not deemed part of or incorporated by reference into this Annual Report on Form 10-K or any other report filed with the SEC.

Item 11. *Executive Compensation*

We incorporate by reference the information responsive to this Item appearing in our Proxy Statement, which will be filed no later than 120 days after December 31, 2022.

Item 12. *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters*

We incorporate by reference the additional information responsive to this Item appearing in our Proxy Statement, which will be filed no later than 120 days after December 31, 2022.

Equity Compensation Plans

On February 18, 2016, the Board of Directors, upon the recommendation of the Compensation & Talent Management Committee of the Board of Directors (the “Compensation Committee”), approved the MSCI Inc. 2016 Non-Employee Directors Compensation Plan (the “Directors Plan”), a cash and equity incentive compensation plan that was approved by shareholders at the Company’s 2016 annual meeting of shareholders. The Directors Plan replaced the Company’s then existing non-employee director compensation plan, the MSCI Inc. Independent Directors’ Equity Compensation Plan (the “2011 Plan”). The total number of shares authorized to be awarded under the Directors Plan is 352,460, which is equal to the number of shares that remained available for issuance under the 2011 Plan. Under the MSCI Inc. Non-Employee Directors Deferral Plan, directors may elect to defer receipt of all or any portion of any shares of our common stock issuable upon conversion of any stock unit or any retainer elected to be paid in shares of our common stock until (i) 60 days following separation of service or (ii) the earlier of a specified date or 60 days following separation of service.

On February 18, 2016, the Board of Directors, upon the recommendation of the Compensation Committee, approved the MSCI Inc. 2016 Omnibus Plan (“Omnibus Plan”), an equity incentive compensation plan that was approved by shareholders at the Company’s 2016 annual meeting of shareholders. The Omnibus Plan replaced the Company’s then existing equity compensation plan, the MSCI Inc. Amended and Restated 2007 Equity Incentive Compensation Plan (as amended, the “2007 Plan”). Compensation paid to the Company’s executive officers historically complied with the performance-based compensation exception under 162(m) of the IRC (“162(m)”) by being granted pursuant to the MSCI Inc. Performance Formula and Incentive Plan (the “Performance Plan”). Shareholder approval of the Omnibus Plan constituted approval of the material terms of the performance goals under the Omnibus Plan for purposes of 162(m). In light of the final Section 162(m) regulations published in December 2020, which, among other things, eliminated the performance-based compensation exception under Section 162(m), the Compensation Committee determined to cease awarding compensation to the Company’s executive officers under the Performance Plan starting with calendar year 2021.

Pursuant to the Omnibus Plan, the Company reserved 7,565,483 shares of common stock for issuance; plus any additional shares which become available due to forfeiture, expiration or cancellation of outstanding awards, which were registered under the Securities Act following approval by the Company’s shareholders. This is in addition to currently outstanding awards under the 2007 Plan. The Omnibus Plan permits the Compensation Committee to make grants of a variety of equity-based awards (such as stock options, stock appreciation rights, restricted stock units, restricted stock, performance awards and other stock-based awards) totaling up to 7,565,483 and other cash-based awards to eligible recipients, including employees and consultants. No awards will be granted under the Omnibus Plan after the earliest to occur of (i) April 28, 2026, (ii) the maximum number of shares available for issuance having been issued and (iii) the Board of Directors terminating the Omnibus Plan in accordance with its terms.

The following table presents certain information with respect to our equity compensation plans at December 31, 2022:

	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b) (3)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column(a)) (c)
<i>Equity Compensation Plans Approved by Security Holders</i>			
MSCI Inc. 2016 Omnibus Plan			
Restricted Stock Units (“RSUs”)	151,659	N/A	
Performance Stock Units (“PSUs”) ⁽¹⁾	930,912	N/A	
Performance Stock Options (“PSOs”) ⁽²⁾	235,528	549.83	
Total MSCI Inc. 2016 Omnibus Plan	1,318,099	N/A	3,163,384
MSCI Inc. 2016 Non-Employee Directors Compensation Plan (RSUs)	4,451	N/A	273,488
<i>Equity Compensation Plans Not Approved by Security Holders</i>	—	N/A	—
Total	1,322,550	N/A	3,436,872

- (1) The numbers included for PSUs in column (a) reflect the maximum payout. Assuming target number payout, the number of securities to be issued upon vesting of PSUs is 397,588.
- (2) The numbers included for PSOs in column (a) reflect options at the maximum payout. Assuming target number payout, the number of securities to be issued upon vesting of PSOs is 117,764.
- (3) Does not reflect the unvested RSUs or PSUs included in column (a) because these awards have no exercise price.

Item 13. *Certain Relationships and Related Transactions, and Director Independence*

We incorporate by reference the information responsive to this Item appearing in our Proxy Statement, which will be filed no later than 120 days after December 31, 2022.

Item 14. *Principal Accountant Fees and Services*

We incorporate by reference the information responsive to this Item appearing in our Proxy Statement, which will be filed no later than 120 days after December 31, 2022.

PART IV

Item 15. *Exhibit and Financial Statement Schedules*

(a)(1) *Financial Statements*

The financial statements are provided under Part II, Item 8. “Financial Statements and Supplementary Data” of this Annual Report on Form 10-K.

(a)(2) *Financial Statement Schedules*

No financial statement schedules are provided because the information called for is not applicable or not required or is included in the consolidated financial statements or the notes thereto provided under Part II, Item 8. “Financial Statements and Supplementary Data” of this Annual Report on Form 10-K.

(a)(3) *Exhibits*

The information required by this Item is set forth below.

EXHIBIT INDEX

Exhibit Number	Description	Form	File No.	Exhibit No.	Filing Date
3.1	Third Amended and Restated Certificate of Incorporation	10-Q	001-33812	3.1	5/4/2012
3.2	Amended and Restated By-laws	8-K/A	001-33812	3.1	1/11/2021
4.1	Form of Senior Indenture	S-3	333-206232	4.1	8/7/2015
4.2	Form of Subordinated Indenture	S-3	333-206232	4.2	8/7/2015
4.3	Form of Common Stock Certificate	10-Q	001-33812	4.1	5/4/2012
4.4	Indenture, dated as of November 7, 2019, among MSCI Inc., each of the subsidiary guarantors party thereto and Wells Fargo Bank, National Association, as Trustee	8-K	001-33812	4.1	11/7/2019
4.5	Form of Note for MSCI Inc. 4.000% Senior Notes due November 15, 2029 (included in Exhibit 4.4)	8-K	001-33812	4.2	11/7/2019
4.6	Indenture, dated as of March 4, 2020, among MSCI Inc., each of the subsidiary guarantors party thereto and Wells Fargo Bank, National Association, as Trustee.	8-K	001-33812	4.1	3/04/2020
4.7	Form of Note for MSCI Inc. 3.625% Senior Notes due September 1, 2030 (included in Exhibit 4.6).	8-K	001-33812	4.2	3/04/2020
4.8	Indenture, dated as of May 26, 2020, among MSCI Inc., each of the subsidiary guarantors party thereto and Wells Fargo Bank, National Association, as Trustee.	8-K	001-33812	4.1	5/26/2020
4.9	Form of Note for MSCI Inc. 3.875% Senior Notes due February 15, 2031 (included in Exhibit 4.8).	8-K	001-33812	4.2	5/26/2020
4.10	Indenture, dated as of May 14, 2021, among MSCI Inc., each of the subsidiary guarantors party thereto and Wells Fargo Bank, National Association, as Trustee.	8-K	001-33812	4.1	5/14/2021
4.11	Form of Note for MSCI Inc. 3.625% Senior Notes due November 1, 2031 (included in Exhibit 4.10).	8-K	001-33812	4.2	5/14/2021
4.12	Indenture, dated as of August 17, 2021, among MSCI Inc., each of the subsidiary guarantors party thereto and Wells Fargo Bank, National Association, as Trustee.	8-K	001-33812	4.1	8/17/2021

Exhibit Number	Description	Form	File No.	Exhibit No.	Filing Date
4.13	Form of Note for MSCI Inc. 3.250% Senior Notes due August 15, 2033 (included in Exhibit 4.12).	8-K	001-33812	4.2	8/17/2021
4.14	Description of Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934	10-K	001-33812	4.1	2/11/2022
10.1*	Summary of Non-Employee Director Compensation		Filed Herewith		
10.2*	Non-Employee Director Stock Ownership Guidelines		Filed Herewith		
10.3*	MSCI Inc. 2016 Non-Employee Directors Compensation Plan, as amended	10-Q	001-33812	10.3	5/5/2017
10.4*	MSCI Inc. Non-Employee Director Deferral Plan, as amended	10-Q	001-33812	10.9	4/29/2016
10.5*	MSCI Inc. Change in Control Severance Plan, adopted May 28, 2015	10-K	001-33812	10.109	2/24/2017
10.6*	MSCI Inc. Performance Formula and Incentive Plan	Proxy	001-33812	Annex C	2/28/2008
10.7*	MSCI Inc. Executive Committee Stock Ownership Guidelines	10-K	001-33812	10.7	2/11/2022
10.8*	MSCI Inc. Clawback Policy	10-K	001-33812	10.189	2/22/2019
10.9*	MSCI Inc. 2016 Omnibus Incentive Plan	S-8	333-210987	99.1	04/28/2016
10.10*	MSCI Inc. Annual Incentive Plan	10-Q	001-33812	10.2	7/26/2022
10.11*	Form of 2019 Annual Performance Award Agreement for Performance Stock Units for Managing Directors Under the MSCI Inc. Omnibus Incentive Plan	10-K	001-33812	10.187	2/22/2019
10.12*	Form of 2020 Award Agreement for Restricted Stock Units for Employees Under the MSCI Inc. 2016 Omnibus Incentive Plan	10-K	001-33812	10.216	2/18/2020
10.13*	Form of 2020 Annual Performance Award Agreement for Performance Stock Units for Managing Directors Under the MSCI Inc. 2016 Omnibus Incentive Plan	10-K	001-33812	10.217	2/18/2020
10.14*	Form of 2020 Annual Performance Award Agreement for Performance Stock Units for Managing Directors Under the MSCI Inc. 2016 Omnibus Incentive Plan	10-K	001-33812	10.218	2/18/2020
10.15*	Form of 2021 Award Agreement for Restricted Stock Units for Employees Under the MSCI Inc. 2016 Omnibus Incentive Plan	10-K	001-33812	10.232	2/12/2021
10.16*	Form of 2021 Annual Performance Award Agreement for Performance Stock Units for Managing Directors Under the MSCI Inc. 2016 Omnibus Incentive Plan	10-K	001-33812	10.233	2/12/2021
10.17*	Form of 2021 Annual Performance Award Agreement for Performance Stock Units for Managing Directors Under the MSCI Inc. 2016 Omnibus Incentive Plan	10-K	001-33812	10.234	2/12/2021
10.18*	Form of 2022 Award Agreement for Restricted Stock Units for Employees Under the MSCI Inc. 2016 Omnibus Incentive Plan	10-K	001-33812	10.24	2/11/2022
10.19*	Form of 2022 Annual Performance Award Agreement for Performance Stock Units for Managing Directors Under the MSCI Inc. 2016 Omnibus Incentive Plan	10-K	001-33812	10.25	2/11/2022

Exhibit Number	Description	Form	File No.	Exhibit No.	Filing Date
10.20*	Form of 2022 Non-Qualified Performance Stock Option Award Agreement Under the MSCI Inc. 2016 Omnibus Incentive Plan	10-K	001-33812	10.26	2/11/2022
10.21*	Form of 2022 Award Agreement for Restricted Stock Units for Directors Under the MSCI Inc. 2016 Non-Employee Directors Compensation Plan	10-Q	001-33812	10.1	7/26/2022
10.22*	Form of 2023 Award Agreement for Restricted Stock Units for Employees Under the MSCI Inc. 2016 Omnibus Incentive Plan		Filed Herewith		
10.23*	Form of 2023 Annual Performance Award Agreement for Performance Stock Units for Managing Directors Under the MSCI Inc. 2016 Omnibus Incentive Plan		Filed Herewith		
10.24*	Form of 2023 Non-Qualified Performance Stock Option Award Agreement Under the MSCI Inc. 2016 Omnibus Incentive Plan		Filed Herewith		
10.25*	Offer Letter, executed March 11, 2014, by and between MSCI Inc. and Scott Crum	10-Q	001-33812	10.1	5/4/2018
10.26*	Offer Letter, executed September 24, 2020, between MSCI Inc. and Andrew C. Wiechmann	8-K	001-33812	10.1	9/25/2020
10.27*	Employment Letter, entered into on April 27, 2021, between MSCI Inc. and C.D. Baer Pettit.	10-Q	001-33812	10.2	4/28/2021
10.28	Amended and Restated Credit Agreement, dated as of June 9, 2022, among MSCI Inc., each of the subsidiary guarantors party thereto, JPMorgan Chase Bank, N.A., as Administrative Agent and L/C Issuer and the other lenders party thereto.	8-K	001-33812	10.1	6/14/2022
10.29	Agreement of Lease dated September 16, 2011, by and between 7 World Trade Center, LLC and MSCI Inc.	8-K	001-33812	10.1	9/22/2011
10.30†#	Index License Agreement for Exchange Traded Funds, dated as of October 1, 2022, between MSCI Inc., MSCI Limited and BlackRock Fund Advisors	10-Q	001-33812	10.1	10/25/2022
21.1	Subsidiaries of the Registrant		Filed Herewith		
23.1	Consent of PricewaterhouseCoopers LLP		Filed Herewith		
24.1	Powers of Attorney (included as part of Signature Page)		Filed Herewith		
31.1	Rule 13a-14(a) Certification of Chief Executive Officer		Filed Herewith		
31.2	Rule 13a-14(a) Certification of Chief Financial Officer		Filed Herewith		
32.1	Section 1350 Certification of Chief Executive Officer and Chief Financial Officer		Furnished Herewith		
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.		Filed Herewith		
101.SCH	XBRL Taxonomy Extension Schema Document.		Filed Herewith		
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.		Filed Herewith		
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.		Filed Herewith		
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.		Filed Herewith		

Exhibit Number	Description	Form	File No.	Exhibit No.	Filing Date
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.			Filed Herewith	
104.DEF	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)			Filed Herewith	

* Indicates a management compensation plan, contract or arrangement.

† Certain confidential portions of this Exhibit have been omitted pursuant to Item 601(b) of Regulation S-K because the identified confidential portions (i) are not material and (ii) are of the type that the Company treats as private or confidential.

The Company agrees to furnish an unredacted copy of this exhibit to the Securities and Exchange Commission upon its request.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

MSCI INC.

By: /S/ HENRY A. FERNANDEZ

Name: Henry A. Fernandez

Title: Chairman and Chief Executive Officer

Date: February 10, 2023

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Andrew C. Wiechmann, Robert J. Gutowski and Cecilia Aza, and each or any one of them, his or her true and lawful attorneys-in-fact and agents, with full powers of substitution and resubstitution, for him or her and in his or her name, place and stead, in the capacities indicated below, to sign any and all amendments to this Annual Report on Form 10-K and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming his or her signatures as they may be signed by his or her said attorneys-in-fact and agents, or their substitute or substitutes, to any and all amendments to this Annual Report on Form 10-K.

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
<u>/S/ HENRY A. FERNANDEZ</u> Henry A. Fernandez	Chairman and Chief Executive Officer (principal executive officer)	February 10, 2023
<u>/S/ ANDREW C. WIECHMANN</u> Andrew C. Wiechmann	Chief Financial Officer (principal financial officer)	February 10, 2023
<u>/S/ JENNIFER MAK</u> Jennifer Mak	Global Controller and Head of Finance Operations (principal accounting officer)	February 10, 2023
<u>/S/ ROBERT G. ASHE</u> Robert G. Ashe	Director	February 10, 2023
<u>/S/ WAYNE EDMUNDS</u> Wayne Edmunds	Director	February 10, 2023
<u>/S/ CATHERINE R. KINNEY</u> Catherine R. Kinney	Director	February 10, 2023
<u>/S/ ROBIN MATLOCK</u> Robin Matlock	Director	February 10, 2023
<u>/S/ JACQUES P. PEROLD</u> Jacques P. Perold	Director	February 10, 2023
<u>/S/ C.D. BAER PETTIT</u> C.D. Baer Pettit	Director, President and Chief Operating Officer	February 10, 2023
<u>/S/ SANDY C. RATTRAY</u> Sandy C. Rattray	Director	February 10, 2023
<u>/S/ LINDA H. RIEFLER</u> Linda H. Riefler	Director	February 10, 2023
<u>/S/ MARCUS L. SMITH</u> Marcus L. Smith	Director	February 10, 2023
<u>/S/ RAJAT TANEJA</u> Rajat Taneja	Director	February 10, 2023
<u>/S/ PAULA VOLENT</u> Paula Volent	Director	February 10, 2023

Subsidiaries of MSCI Inc.

The following is a list of the subsidiaries of MSCI Inc., excluding those subsidiaries that, considered in the aggregate as a single subsidiary, do not constitute a significant subsidiary as of December 31, 2022.

<u>Name</u>	<u>Jurisdiction of Incorporation/ Organization</u>
Barra, LLC	Delaware, U.S.A.
Investment Property Databank Limited	United Kingdom
MSCI Barra (Suisse) Sàrl	Switzerland
MSCI ESG Research (UK) Limited	United Kingdom
MSCI ESG Research LLC	Delaware, U.S.A.
MSCI G.K.	Japan
MSCI Limited	United Kingdom
Real Capital Analytics, Inc.	New York, U.S.A.
RiskMetrics Solutions, LLC	Delaware, U.S.A.

SECTION 302 CERTIFICATION

I, Henry A. Fernandez, certify that:

1. I have reviewed this Annual Report on Form 10-K of MSCI Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 10, 2023

/s/ Henry A. Fernandez

Henry A. Fernandez

Chairman and Chief Executive Officer

(Principal Executive Officer)

SECTION 302 CERTIFICATION

I, Andrew C. Wiechmann, certify that:

1. I have reviewed this Annual Report on Form 10-K of MSCI Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 10, 2023

/s/ Andrew C. Wiechmann

Andrew C. Wiechmann

Chief Financial Officer

(Principal Financial Officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In accordance with 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, Henry A. Fernandez, Chairman and Chief Executive Officer of MSCI Inc. (the “Registrant”) and Andrew C. Wiechmann, Chief Financial Officer of the Registrant, each hereby certifies that, to the best of his/her knowledge:

1. The Registrant’s Annual Report on Form 10-K for the period ended December 31, 2022 (the “Periodic Report”), to which this Certification is attached as Exhibit 32.1, fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Periodic Report fairly presents, in all material respects, the financial condition of the Registrant at the end of the period covered by the Periodic Report and results of operations of the Registrant for the periods covered by the Periodic Report.

Date: February 10, 2023

/s/ Henry A. Fernandez

Henry A. Fernandez

Chairman and Chief Executive Officer

(Principal Executive Officer)

/s/ Andrew C. Wiechmann

Andrew C. Wiechmann

Chief Financial Officer

(Principal Financial Officer)

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