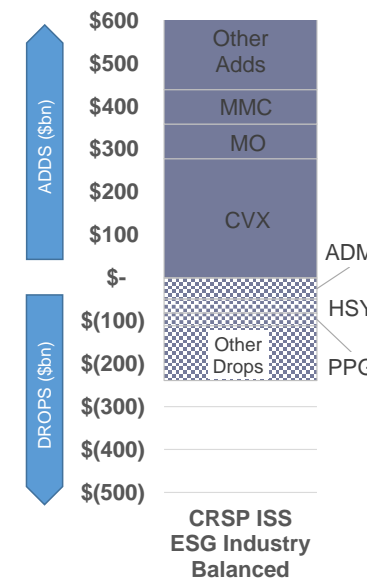
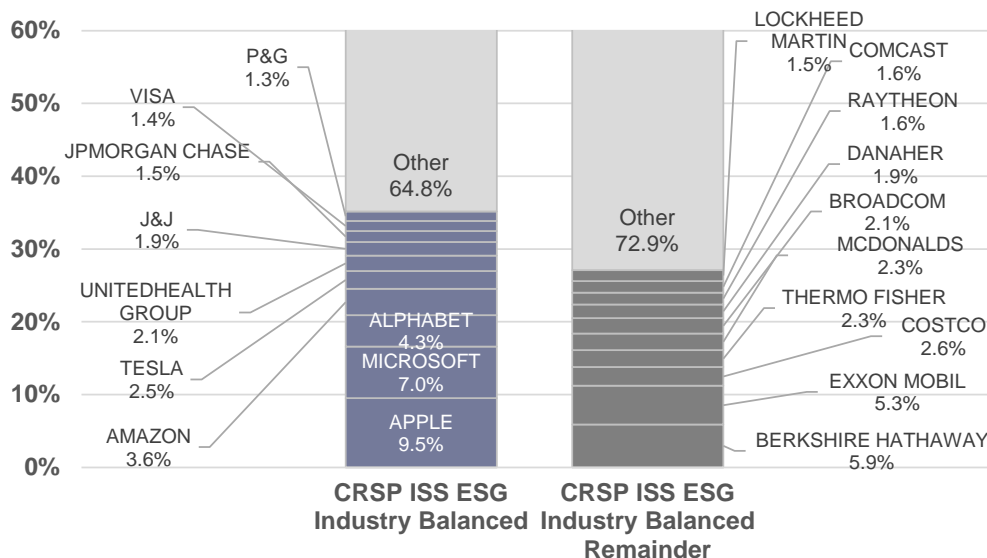
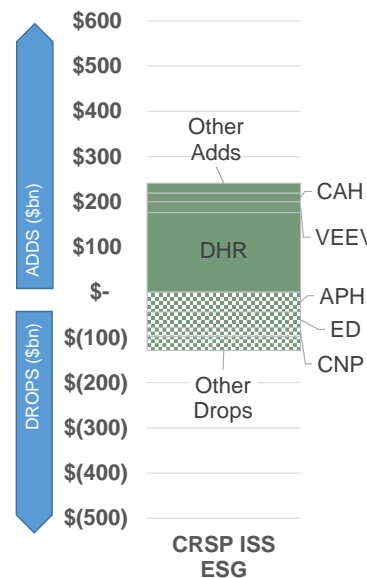
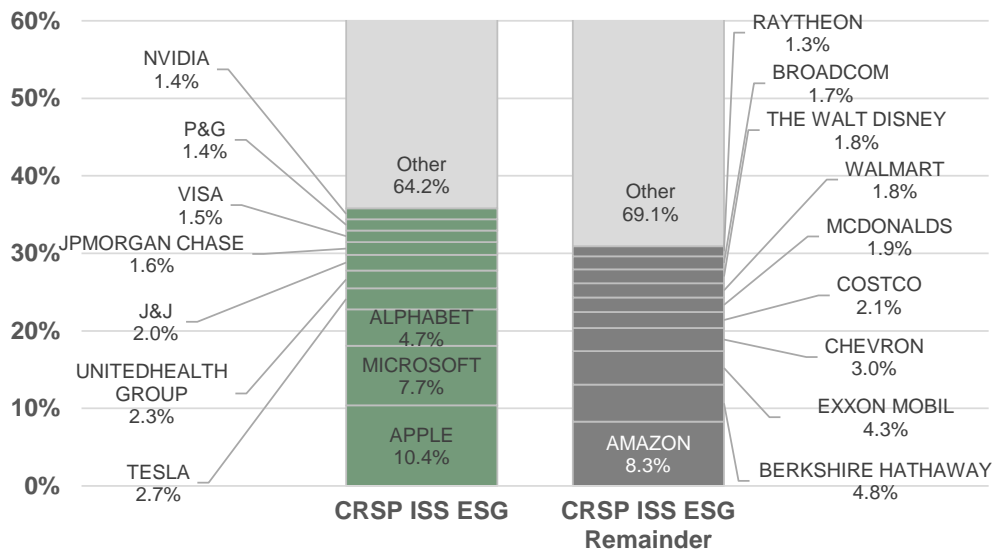
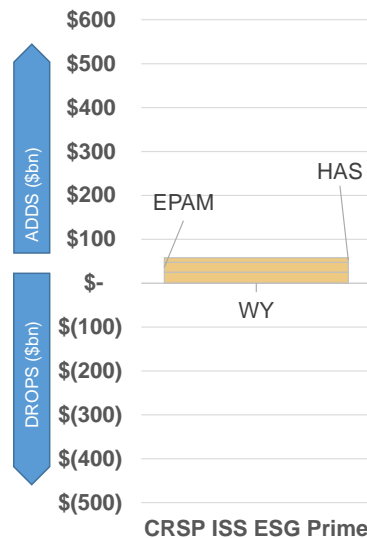
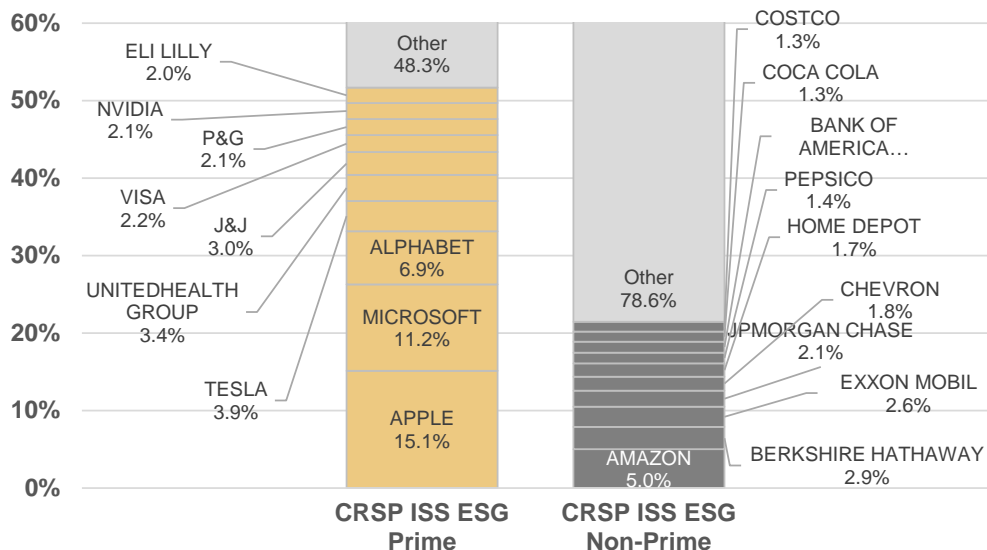


CRSP ISS ESG INDEXES OCTOBER 2022 UPDATE

Top 10 Constituents By Index Pairs

Adds/Drops September 2022 Ranking



Note: Data as of 10/31/2022; the changes to portfolio are from ranking on 9/2/2022

CRSP ESG INDEXES OCTOBER 2022 DEVELOPMENTS

To learn more about the CRSP ISS ESG Indexes Suite visit our webpage: <https://www.crsp.org/crsp-iss-esg-indexes>

To get the monthly CRSP US Market Update, follow us on LinkedIn: [CRSP LinkedIn](#)

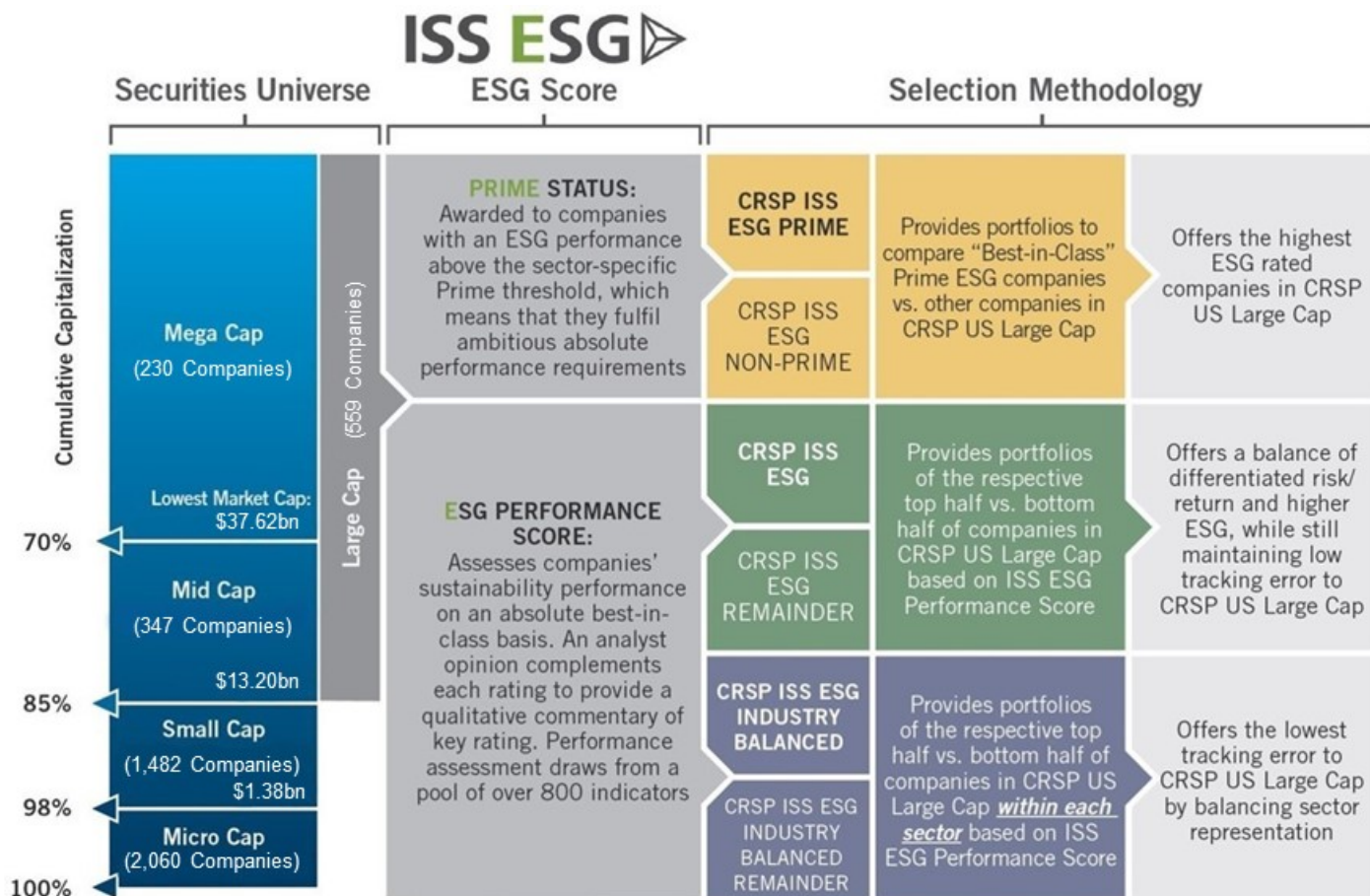
For additional information please e-mail: indexes@crsp.org

CRSP ESG APPROACH

- CRSP views the goal of incorporation of ESG Score in the portfolio construction to systematically incorporate material ESG data to alter the portfolio's risk-return profile. Since ESG term has been used to describe a broad variety of approaches, below are the definitions of the most commonly used investing approaches under the ESG umbrella:

Investing Style	Definition	Example
Negative Screens/SRI	Negative screens avoid investing in certain companies based on industry, products, practices that are deemed to have negative societal and/or environmental impacts under certain frameworks, like UN Global Compact	Excluding tobacco, alcohol, or weapons manufacturers from portfolios
Thematic/Impact Investing	Impact investing is marked by an intentional desire to contribute to measurable social or environmental benefit. Impact investors aim to solve problems and address opportunities	Provides capital to address the world's most pressing challenges in sectors such as sustainable agriculture, renewable energy, accessible basic services, etc.
ESG Investing	Constructing portfolios using ESG score that evaluates companies on material environmental, social and governance issues	Using an ESG score to select companies into a portfolio similar to other factors like Size, Value/Growth, Profitability, etc.

- CRSP employs Objective Standards, Unbiased Perspective, and Clear and Straightforward Methodology to give investors a transparent set of benchmarks to connect ESG Score to the resulting risk/return behavior. To learn more about our approach read our [white paper](#).

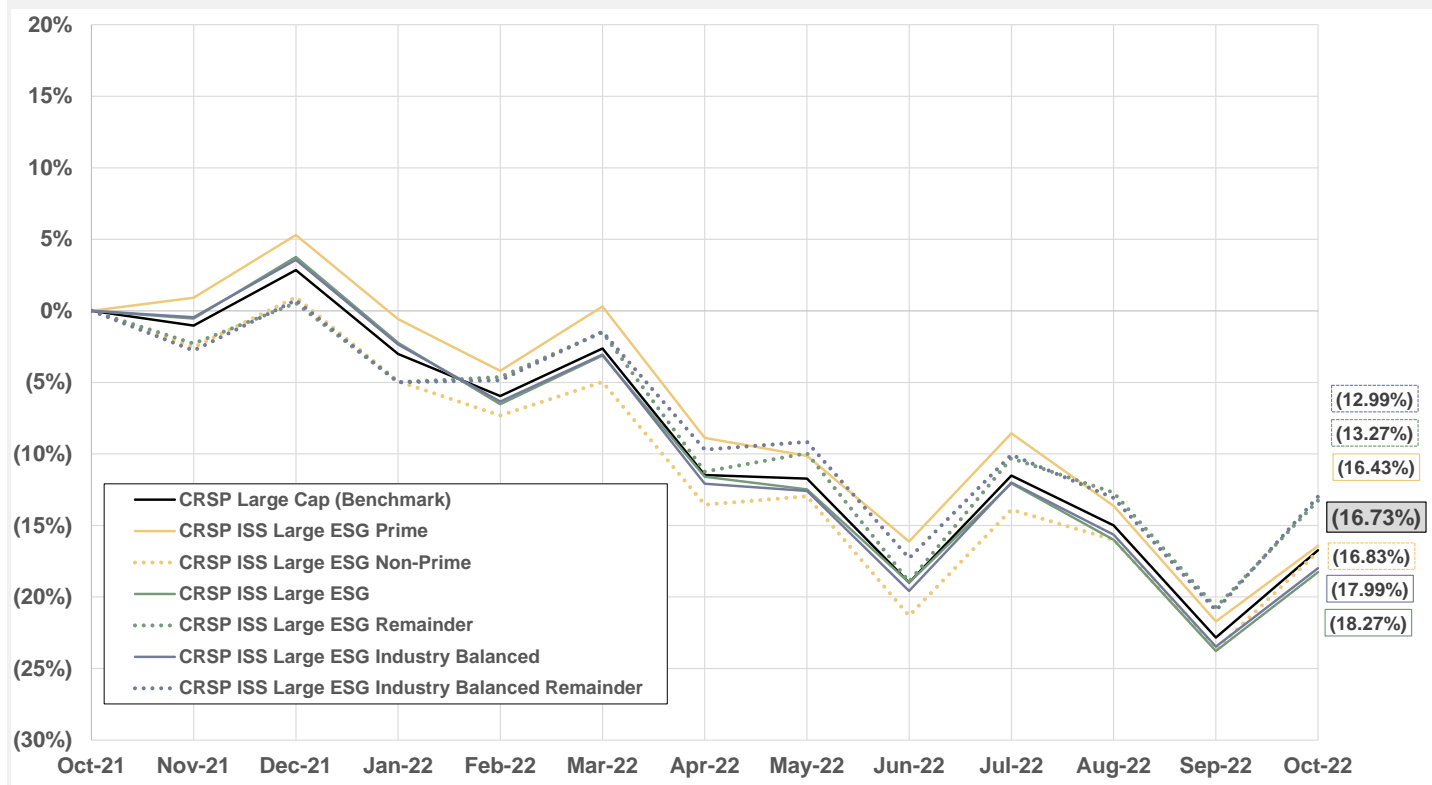


Note: Data as of 10/31/2022

CRSP ISS ESG INDEXES PERFORMANCE – OCTOBER 2022

- Year-to-Date in 2022, the CRSP ISS ESG-qualifying indexes continue to underperform their non-ESG remainder paired indexes as well as the CRSP Large Cap benchmark.
- Notably distinct, however, is that the CRSP ISS ESG Prime Index has nevertheless outperformed both the CRSP Large Cap benchmark and the non-ESG Remainder index for the past 12 months, demonstrating the ongoing utility of the Prime designation versus other qualifiers

Cumulative Performance For CRSP ISS ESG Indexes – Past 12 Months



CRSP ISS U.S. Large Cap ESG Indexes Performance

Category	Index Name	Count	Float-Adjusted Market Cap (\$M)	Return for					
				1 Month	3 Months	YTD	1 Year	3 Years	5 Years
	CRSP US Large Cap Index	559	\$33,240,240	7.91%	(5.89%)	(19.04%)	(16.73%)	9.96%	10.27%
Prime	CRSP ISS US Large Cap ESG Prime Index	129	\$15,494,384	6.74%	(8.61%)	(20.63%)	(16.43%)	15.60%	15.14%
	CRSP ISS US Large Cap ESG Non-Prime Index	430	\$17,745,855	8.95%	(3.40%)	(17.62%)	(16.83%)	6.92%	7.89%
ESG	CRSP ISS US Large Cap ESG Index	279	\$22,533,081	7.21%	(7.07%)	(21.24%)	(18.27%)	9.96%	10.38%
	CRSP ISS US Large Cap ESG Remainder Index	280	\$10,707,158	9.42%	(3.31%)	(13.74%)	(13.27%)	9.77%	9.88%
ESG Industry Balanced	CRSP ISS US Large Cap ESG Industry Balanced Index	283	\$24,560,653	7.17%	(6.79%)	(20.81%)	(17.99%)	9.47%	10.06%
	CRSP ISS US Large Cap ESG Industry Balanced Remainder Index	276	\$8,679,586	10.06%	(3.26%)	(13.63%)	(12.99%)	11.32%	10.87%

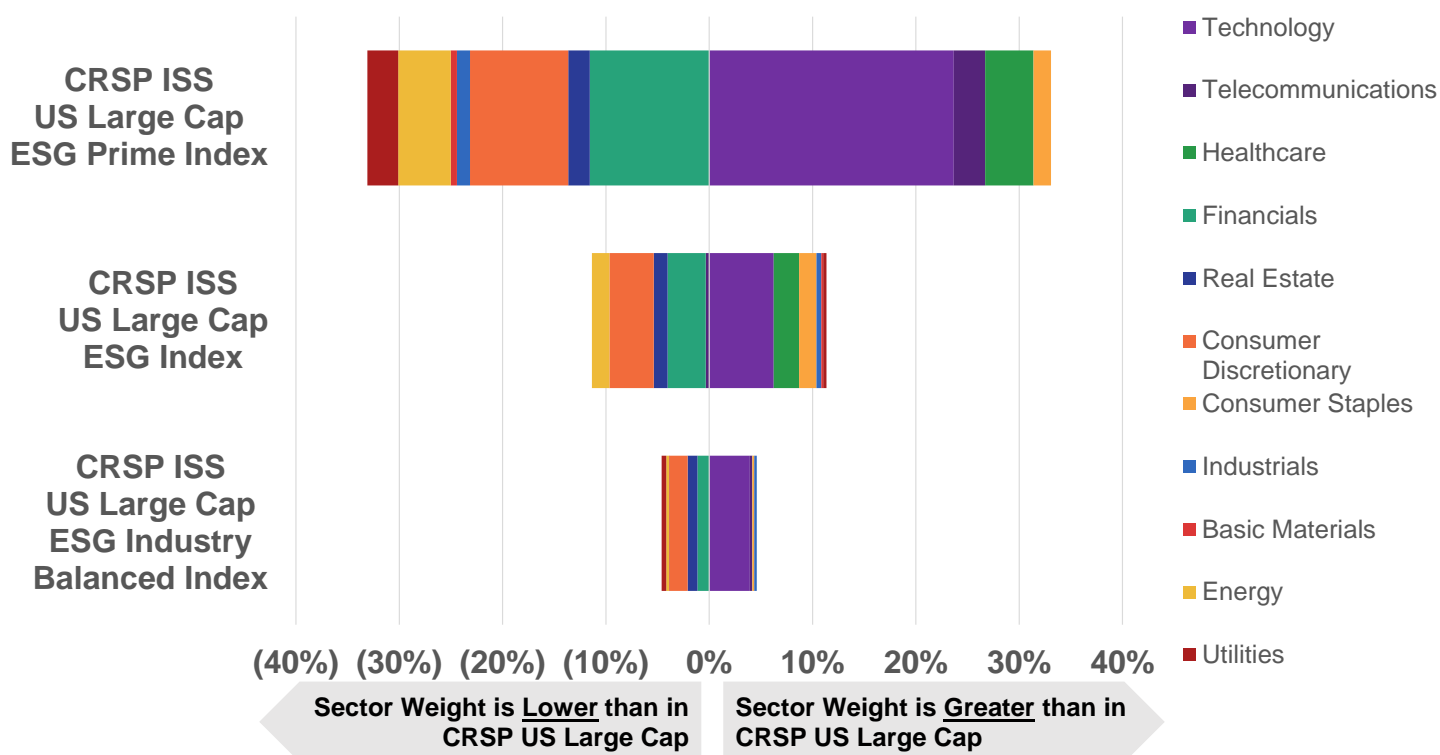
Note: Data as of 10/31/2022; returns computation is based on total returns; data for 1-, 3-, and 5-years is annualized; Prior to 9/7/2021 the CRSP ISS ESG Indexes return series is based on a backtest

ESG SCORES AND INDEX PROPERTIES

The concentration on companies with higher ESG Scores results in portfolios that vary from the market, and, as such, investors need to consider:

- Changes to Risk/Return Profiles relative to CRSP US Large Cap (Check our [August ESG Update](#))
- Tracking Error relative to the market, i.e. CRSP US Large Cap (Check our [August ESG Update](#))
- Changes in Sector Weights and Risk Factors (See below)

CRSP ISS ESG Indexes Sector Allocation vs. CRSP US Large Cap Average Sector Differences



CRSP ISS ESG Indexes Fama-French 5 Factors

Category	Index Name	Intercept	MKT	SMB	HML	RMW	CMA
Prime	CRSP ISS US Large Cap ESG Prime Index	0.27%	0.97	(0.24)	(0.22)	0.18	0.14
	CRSP ISS US Large Cap ESG Non-Prime Index	(0.03%)	1.01	(0.06)	0.12	(0.04)	(0.05)
ESG	CRSP ISS US Large Cap ESG Index	0.08%	0.98	(0.14)	(0.05)	0.13	0.07
	CRSP ISS US Large Cap ESG Remainder Index	0.02%	1.02	(0.02)	0.10	(0.14)	(0.05)
ESG Industry Balanced	CRSP ISS US Large Cap ESG Industry Balanced Index	0.07%	1.01	(0.12)	(0.02)	0.10	0.05
	CRSP ISS US Large Cap ESG Industry Balanced Remainder Index	0.06%	0.96	(0.07)	0.01	(0.05)	0.00

Note: Data as of 10/31/2022; CRSP bases its sectors on Enhanced FTSE ICB® methodology; Average EICB sector weights for the analysis period 1/1/2015 – 10/31/2022 are used in computation; weights are based on float-adjusted market capitalization; Prior to 9/7/2021 the CRSP ISS ESG Indexes return series is based on a backtest; monthly total returns are used in robust regression; bold font indicates coefficients statistically significant at alpha 10%

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