Catholic Values Strategy

2022



Overview

The US Conference of Catholic Bishops (USCCB) is a national organization that unifies and promotes Catholic activities in the US. The organization maintains Socially Responsible Investment Guidelines, which emphasize three core methods for implementation:

- 1. Avoid Doing Harm (exclusions).
- 2. Promote the Common Good (scoring), and
- 3. Actively Work for Change (active ownership).

Aperio's Catholic Values Strategies use the USCCB guidelines as the basis for building social profiles.

We have used available data elements that we believe best capture the mission and values of the USCCB. This mapping of portfolio characteristics to the USCCB mission is highlighted in the subsequent tables using language from USCCB ("USCCB Rationale") as examples of rationales that may be appropriate.

Investors can further customize the strategy to reflect:

- Additional ESG/SRI values, including climate change as highlighted in Pope Francis's May 2015 encyclical, Laudato Si': On Care for Our Common Home;*
- Harvesting of losses or gains for tax benefits; and
- Tilting the portfolio toward factors such as value, quality, low volatility, or momentum.

Note: Aperio offers two Catholic Values strategies: Exclusions Only and Exclusions & Scoring ("Catholic Values"). The scoring component of this deck is relevant only to the latter strategy.

*Full letter can be found here.

USCCB guideline themes

The USCCB's investment policies cover five major categories. Aperio references these issue area categories to shape the strategy's evaluation framework.

- I. Protecting Human Life
- **II. Promoting Human Dignity**
- III. Enhancing the Common Good
- IV. Pursuing Economic Justice
- V. Saving Our Global Home

In November 2021, the USCCB released a revised version of their *Socially Responsible Investment Guidelines*. The updated guidelines prohibit several additional issue areas from Catholic portfolios, including companies flagged for involvement in:

- Very severe environmental controversies;
- Production and/or retail of cannabis for recreational use; and
- Companies that generate 10% or more of revenue from Gambling, Cannabis, or Tobacco.

The revised guidelines also remove Conventional Weapons as an exclusionary component.

Since the exclusions for Gambling, Cannabis, and Tobacco are not at a first-dollar-of-revenue threshold, Aperio also scores companies lower for revenues in these areas that do not trigger an exclusion.

Exclusions: avoid doing harm

MISSION GOAL	APERIO EXCLUSION	USCCB RATIONALE
Protecting Human Life	 Abortion Contraception Human Embryonic Stem Cell and Fetal Tissue Research Cloning of Embryonic Stem Cells 	 Human life is a precious gift from God; laws and social institutions must protect and nurture human life at every stage of its existence. Even noble objectives, such as a foreseeable advantage to science, to other human beings, or to society, do not justify experimentation on living human embryos or fetuses.
Promoting Human Dignity & Curbing Pornography	PornographyUN Global Compact AssessmentsHuman Rights Controversies	 Women deserve rights befitting a human person in both domestic and public life. Pornography denies the dignity of each human being and blocks the moral and emotional development of those lured into its use. Forms of social or cultural discrimination in basic personal rights must be curbed and eradicated as incompatible with God's design.
Enhancing the Common Good: Reducing Arms Production	Biological WeaponsNuclear WeaponsLand MinesCivilian Firearm Production	 Limit the distortions in the US and global economies resulting from disproportionate military spending. The arms race is a treacherous trap for humanity and disproportionately injures the poor.
Enhancing the Common Good: Avoiding Addictive Materials or Harmful Habitual Behaviors	GamblingCannabisTobacco	 The passion for gambling risks becoming an enslavement. Humanity benefits from avoidance of every kind of excess.
Saving Our Global Home	Environmental Controversies	 Our duties toward the environment are linked to our duties toward the human person. The earth's resources are also being plundered because of shortsighted approaches to the economy, commerce, and production.

Scoring: promote the common good

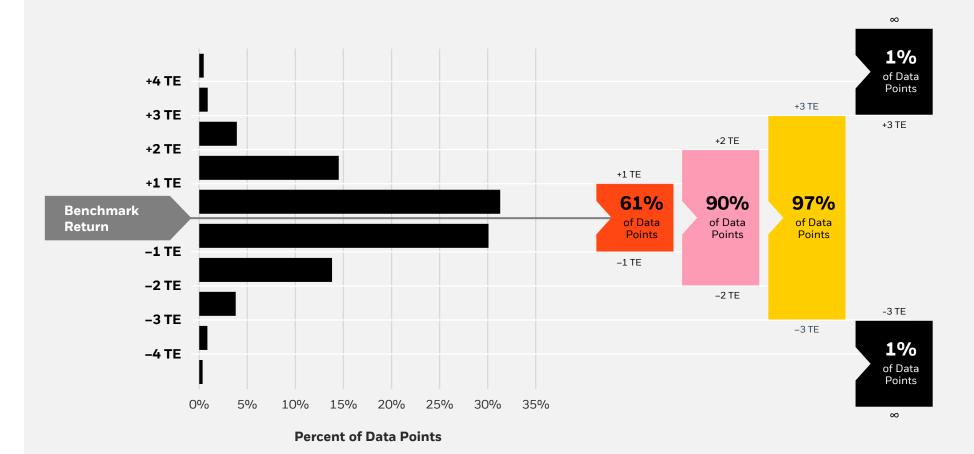
MISSION GOAL	APERIO SCORING COMPONENT	USCCB RATIONALE
Promoting Human Dignity & Curbing Pornography	 Human Rights Policy Human Rights Controversies Diversity Policy & Management Diversity Performance Diversity Controversies Pornography 	 Racism is a sin that divides the human family, blots out the image of God, and violates the fundamental human dignity of those called to be children of the same Father. Forms of social or cultural discrimination in basic personal rights must be curbed and eradicated as incompatible with God's design. Peace and the progress of authentic democracy in the world will require enhancing the priority of human rights, especially for the poor, women, and vulnerable children.
Enhancing the Common Good	Limit exposure to: • Military Weapons • Tobacco • Gambling • Cannabis	 The arms race is a treacherous trap for humanity and disproportionately injures the poor. The passion for gambling risks becoming an enslavement. Humanity benefits from avoidance of every kind of excess.
Pursuing Economic Justice	 Workforce Relations Community Reinvestment Act Organized Labor Labor Rights Controversies 	 Lack of opportunity has forced low- and middle-income families to become confined to neighborhoods without adequate services, minimal safety, or necessary community life. The basic rights of workers must be respected—the right to productive work, to decent and fair wages, to organize and join unions, to private property, and to economic initiative.
Saving Our Global Home	 Environmental Management Environmental Performance (various) Environmental Controversies 	 Policies and decisions should reflect respect for human life and dignity and promote peace and preservation of the earth. Preserve the planet's ecological heritage. Redirect development in terms of quality rather than quantity in the industrial world.

Tracking error

The **differences** between a portfolio return and its benchmark return over time can be described as similar to a normal distribution with fatter tails.

Forecast tracking error can be used as a guide to understand the magnitude of underperformance risk.

Forecast tracking error is a risk calculation as of a given date. Any changes in underlying assumptions, such as volatility, will alter these numbers, potentially significantly. See Important Notes.



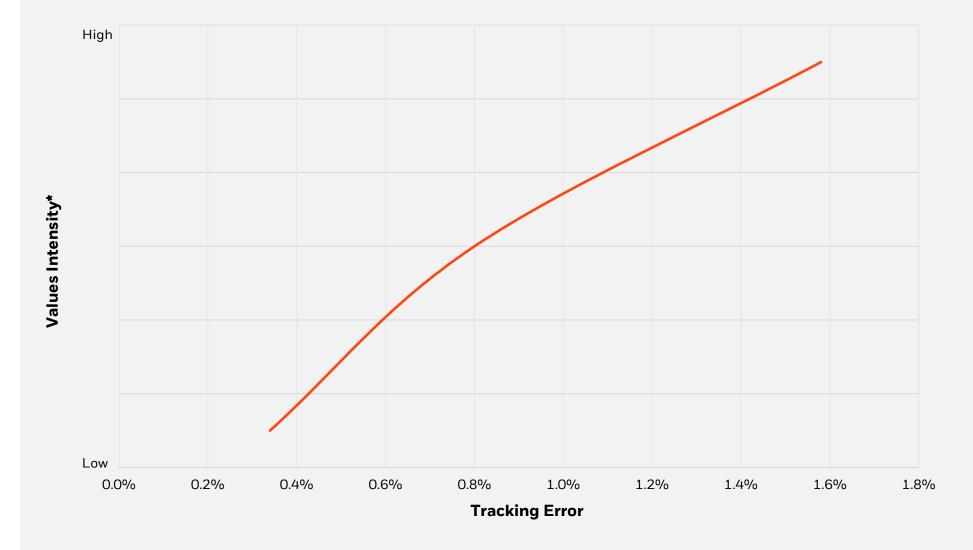
The above chart reflects 375,638 data points covering every Aperio account, filtered for forecast tracking error between 0.10% and 10.00%, for every month between 9/30/2004 and 12/31/2020 from Aperio's historical database. Aperio calculated each account's one-month return (before fees and net of transaction costs) minus each account's associated client-specified reporting benchmark's one-month return (using the benchmark associated with that account for that month), then divided that result by the deannualized forecast tracking error at the beginning of each month. Please note that the data point percentages may not sum to 100% due to rounding.

Sources: Internal data and MSCI.

The Social Efficient Frontier

The Social Efficient Frontier represents the trade-off between risk and values. For each increase in values intensity, the corresponding tracking error also increases. If we plot these incremental increases on a graph, a curve much like the one at right can be traced. This curve represents the Social Efficient Frontier.

This graph is a stylized representation of the concept and is not based on actual data for any particular set of issues (values) or holdings. Its intent is to demonstrate that in most instances, the addition of values (or an increased intensity of values) will increase at some level the tracking error associated for a portfolio. The actual Social Efficient Frontier will be different for each client's combination of values criteria, benchmark, tax situation, additional factor considerations, and timing of running the analysis.



*Values intensity refers to the number and level of exclusions and tilts added to a portfolio strategy. Added tilts and exclusions result in higher values intensity.

Reference: James Picerno, "The Final Frontier: Social Investing," June 2008.

Catholic Values Strategy portfolio characteristics

¹The S&P 500 is provided as an example of an index which Aperio has selected, after consultation with the client, as the most appropriate measurement index for portfolio performance. Aperio refers to this selection as a portfolio's "comparison index/benchmark."

²The weighted-average Social Score at right, 66, is specific to the S&P 500 and may adjust slightly per comparison index.

*Forecast data. Not intended to provide any assurance as to performance or limit on losses. These are measures of potential risk based on sample portfolio and benchmark holdings, and risk model calculations as of the date of this document. Any changes in underlying assumptions, such as volatility, will alter these numbers, potentially significantly.

**Details on Aperio's optimizer can be found in the Disclosure pages under the heading "Optimizer."

The information in this table is shown as of 03/31/2022 and is for illustrative purposes only. The sample portfolios are not based on actual Aperio portfolios. It should not be assumed that clients who actually invest in an Aperio portfolio will have the same results reflected above. Aperio has the benefit of hindsight when putting together a sample portfolio, and there is no guarantee that the firm will make the same selections when putting together a similar portfolio for a client.

Sources: Internal data and MSCI.

Sample Portfolio	S&P 500°1	Sample Aperio Large- Cap SMA: All Cash	Sample Aperio Catholic Exclusions Only	Sample Aperio Catholic Values Portfolio
Forecast Tracking Error (%)*	0.00	0.21	0.53	0.95
Forecast Beta*	1.00	0.99	0.99	0.99
Forecast Volatility (%)*	17.65	17.65	17.65	17.68
Number of Stocks	506	350	350	223
Dividend Yield (%)	1.38	1.38	1.34	1.43
Aperio Social Score	55	55	54	66²
Aperio Social Score Tilt (%)		+0%	-1%	+20%

Notes on portfolio construction:

The optimizer**
determines the lowest
possible tracking error
given a beta of 1.00
and a Social Score of
66, as well as the
number of holdings.

A sample portfolio identical to the index.

Note that the tracking error is 0.00%.

A sample Aperio Large-Cap SMA portfolio with no SRI constraints.

Note the incremental tracking error resulting from not holding the full universe of securities.

A sample Aperio Catholic Values Exclusions Only portfolio.

Note the incremental tracking error versus the other two scenarios.

A sample Aperio Catholic Values Strategy portfolio adding scoring to the exclusions.

Note the incremental tracking error versus the other three scenarios.

Proxy voting: ethical responsibility

Shareholders can vote in annual meetings, weighing in on the board of directors, executive compensation, and shareholder resolutions. Proxy voting offers an opportunity for shareholders to shape the companies in which they invest.

Aperio uses the Institutional Shareholder Services (ISS) Catholic Proxy Voting Guidelines as the default choice for the Catholic Values Strategy.

For more information, please see the <u>Aperio SRI Proxy Voting</u> info sheet.

Principles that support the USCCB mission:¹

- Vote for board diversity: at least 40% underrepresented genders and at least 20% racial and ethnic minorities;
- · Vote against excessive executive compensation;
- Vote for shareholder resolutions addressing significant environmental, social, and governance issues with longterm value; and
- Vote in a manner consistent with the teachings of the Catholic Church on shareholder proposals that address right to life issues.

USCCB rationale



As part owners, [investors] must cooperate in shaping the policies of those companies through dialogue with management, through votes at corporate meetings, through the introduction of resolutions and through participation in investment decisions."

-Economic Justice for All, No. 354

Examples

In May 2021

The ISS Catholic Proxy Voting Guidelines recommended a vote in favor of a shareholder resolution with Abbott Laboratories asking the company to report on its plan to promote racial justice.

38.9% of Abbott shares voted FOR.

¹Excerpts from the 2022 ISS Catholic Proxy Voting Guidelines.

In May 2021

The ISS Catholic Proxy Voting Guidelines recommended a vote in favor of a shareholder resolution with FedEx asking the company to disclose its lobbying payments and policies.

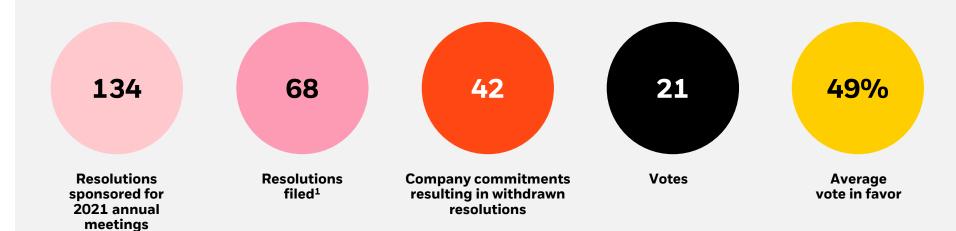
62.4% of FedEx shares voted FOR.

Shareholder resolution sponsorship

To facilitate our clients' engagement with companies, Aperio partners with several shareholder advocacy groups including As You Sow, The Shareholder Commons, OpenMIC, Proxy Impact, and Whistle Stop Capital.

Aperio clients can support shareholder resolutions to change corporate practices. These resolutions often result in company commitments or shareholder votes.

Aperio has supported the work of As You Sow through charitable donations made to the organization.



Examples of company commitments resulting in withdrawn resolutions

Environment

Aperio clients sponsored a resolution with Walmart asking the retailer to report on its strategy for measuring and reducing use of plastic packaging. The company agreed to set a virgin plastic reduction target for its store-brand packaging. Seven months later, the company followed up on its commitment and announced a goal to reduce total virgin plastic use by 15% by 2025.

Racial Justice

Aperio clients sponsored a resolution with Monster Beverage asking the company to report on its plan to promote racial justice. Monster agreed to disclose diversity data for its workforce and directors and to begin collecting broader data on recruitment, retention, and promotion rates. The company committed to electing a board member from an underrepresented community and to incorporate racial justice and DEI (diversity, equity, and inclusion) education and trainings into its corporate framework by mid-2022.

¹Many shareholder resolutions are written and sponsored but do not end up being filed. Often, this is because the shareholder advocacy group held dialogues with the company that resolved their concerns before the deadline to file a resolution.



Appendix

I. Protecting Human Life

"The fundamental human right, the presupposition of every other right, is the right to life itself. This is true of life from the moment of conception until its natural end."

MISSION GOAL	APERIO EXCLUSION	USCCB RATIONALE
Exclusions	 Abortion Contraception Human Embryonic Stem Cell and Fetal Tissue Research Cloning of Embryonic Stem Cells 	 Human life is a precious gift from God; laws and social institutions must protect and nurture human life at every stage of its existence. Contraceptive intercourse separates the procreative or life-giving meaning of intercourse. Even noble objectives, such as a foreseeable advantage to science, to other human beings, or to society, do not justify experimentation on living human embryos or fetuses.

II. Promoting Human Dignity & Curbing Pornography

"Society as a whole, acting through public and private institutions, has the moral responsibility to enhance human dignity and protect human rights."

MISSION GOAL	APERIO EXCLUSION	USCCB RATIONALE
Exclusions	Pornography UN Global Compact Assessments Human Rights Controversies	 Women should continue becoming ever more conscious of their human dignity and not tolerate being treated as mere material instruments. Women deserve rights befitting a human person in both domestic and public life. Pornography denies the dignity of each human being. This kind of entertainment blocks the moral and emotional development of those who are lured into its use. The rights and duties of human beings are universal and inviolable, and therefore altogether inalienable.
Scoring	Human Rights Policy Human Rights Controversies Diversity Policy & Management Diversity Performance Diversity Controversies Pornography	 Forms of social or cultural discrimination in basic personal rights must be curbed and eradicated as incompatible with God's design. Discrimination based on the accidental fact of race or color cannot be reconciled with the truth that God has created all men and women with equal rights and equal dignity. Racism is a sin that divides the human family, blots out the image of God, and violates the fundamental human dignity of those called to be children of the same Father. Promotion of the full complement of human rights and religious liberty is a central priority of the Church. Peace and the progress of authentic democracy in the world will require enhancing the priority of human rights, especially for the poor, women, and vulnerable children.

III. Enhancing the Common Good

"Vatican II defines the common good as 'the sum of those conditions of social life which allow social groups and their individual members relatively thorough and ready access to their own fulfillment."

MISSION GOAL	APERIO EXCLUSION	USCCB RATIONALE
Exclusions: Reducing Arms Production	Biological Weapons Nuclear Weapons Land Mines Civilian Firearm Production	 Discourage nuclear and conventional arms race. Limit the distortions in the US and global economies resulting from disproportionate military spending. The arms race is a treacherous trap for humanity and dispressed in the large state in the large state.
Exclusions: Avoiding Addictive Materials or Harmful Habitual Behaviors	Gambling Cannabis Tobacco	 disproportionately injures the poor. Disagreements between nations are inflicting multiple miseries and infecting global society. Games of chance or wagers are not in themselves contrary to justice but become morally unacceptable when they deprive someone of what is necessary to provide for his needs and
Scoring	Limit exposure to: Military Weapons Tobacco Gambling Cannabis	 those of others. The passion for gambling risks becoming an enslavement. Humanity benefits from avoidance of every kind of excess. Arms companies have a moral obligation to avoid sales that will probably be used for illegitimate purposes or that will threaten stability and peace.

IV. Pursuing Economic Justice

"[A]II economic institutions must support the bonds of community and solidarity that are essential to the dignity of persons. Wherever our economic arrangements fail to conform to the demands of human dignity lived in community, they must be questioned and transformed."

MISSION GOAL	APERIO EXCLUSION	USCCB RATIONALE
Scoring	Workforce Relations Community Reinvestment Act Organized Labor Labor Rights Controversies	 Discrimination based on geography is as destructive as other forms of discrimination. Everyone must have fair and equal access to available financial resources. Lack of opportunity has forced low- and middle-income families to become confined to neighborhoods without adequate services, minimal safety, or necessary community life. The basic rights of workers must be respected—the right to productive work, to decent and fair wages, to organize and join unions, to private property, and to economic initiative. Respect for the objective rights of every kind of worker—manual or intellectual, industrial or agricultural, etc.—must constitute a fundamental criterion for the whole economy and individual society.

V. Saving Our Global Home

"Our duties towards the environment are linked to our duties towards the human person ..."

MISSION GOAL	APERIO EXCLUSION	USCCB RATIONALE
Exclusions	Environmental Controversies	 The right of some to free enterprise or market freedom cannot supersede the rights of peoples and the dignity of the poor. Our duties toward the environment are linked to our duties toward the human person. The earth's resources are also being plundered because of shortsighted approaches to the economy, commerce, and production.
Scoring	Environmental Management Environmental Performance (various) Environmental Controversies	 Policies and decisions should reflect respect for human life and dignity and promote peace and preservation of the earth. While economic returns are important, they should not take precedence over the rights of workers or protection of the environment. Preserve the planet's ecological heritage. Redirect development in terms of quality rather than quantity in the industrial world. Create environmentally sensitive technologies.

Top holdings: Aperio Catholic Values applied to the S&P 500

The table reflects a sampling list of securities in the S&P 500 Index as of 03/31/2022 and the corresponding weight of these holdings in an Aperio Catholic Values sample portfolio. The securities do not represent current holdings in an Aperio portfolio and were selected based on securities within the data provider's universe in order to give examples of what an Aperio Catholic Values portfolio applied to the S&P 500 might produce. This information is provided for illustrative purposes only and should not be considered investment advice or a recommendation to buy or sell the securities listed. Please refer to the end of this presentation for important notes.

Sources: Internal data and MSCI.

Top Holdings in S&P 500	Sector	Weight in S&P 500	Weight in Sample Catholic Values Portfolio	Reason(s) for Exclusion*
Apple Inc	Information Technology	7.07%	7.49%	
Microsoft Corp	Information Technology	6.04%	7.06%	
Amazon Inc	Consumer Discretionary	3.73%	3.96%	
Tesla Inc	Consumer Discretionary	2.36%	2.26%	
Alphabet Inc	Communication Services	2.18%	3.92%	
Alphabet Inc	Communication Services	2.03%	3.92%	
Nvidia Corp	Information Technology	1.78%	1.75%	
Berkshire Hathaway Inc	Financials	1.69%	0.28%	
Meta Platforms Inc	Communication Services	1.34%	1.15%	
UnitedHealth Group Inc	Health Care	1.25%	Excluded	Owning or operating one or more acute care hospitals or surgical centers that provide general medical services, which may include abortions
Johnson & Johnson	Health Care	1.22%	Excluded	Owning or operating one or more acute care hospitals or surgical centers that provide general medical services, which may include abortions
JPMorgan Chase & Co	Financials	1.05%	1.05%	
Visa Inc	Information Technology	0.96%	1.12%	
Procter & Gamble Co	Consumer Staples	0.96%	0.60%	
Exxon Mobil Corp	Energy	0.91%	1.59%	
Chevron Corp	Energy	0.82%	1.12%	
Home Depot Inc	Consumer Discretionary	0.82%	0.65%	
Mastercard Inc	Information Technology	0.81%	1.04%	
Bank of America Inc	Financials	0.77%	1.37%	
Pfizer Inc	Health Care	0.76%	Excluded	Owning or operating one or more acute care hospitals or surgical centers that provide general medical services, which may include abortions

^{*}The optimizer reweights the non-excluded companies in order to manage portfolio risk.

Sample Aperio Catholic Values scenarios vs. S&P 500

The information in this table is shown as of 03/31/2022. The "Sample Scenarios" are not based on an actual Aperio portfolio and are being shown for illustrative purposes only. It should not be assumed that clients who actually invest in an Aperio Catholic Values portfolio will have the same results reflected above. The sample scenarios consist of securities that were selected by Aperio's optimizer based on the benchmark indicated in the column headings. Aperio has the benefit of hindsight when putting together the sample portfolios, and there is no guarantee that the firm will make the same selections when putting together a similar portfolio for a client.

Sample Scenarios	S&P 500	CATHOLIC VALUES STRATEGIES	
Sample Scenarios	3&F 300	Sample Exclusions Only	Sample Exclusions & Scoring
Aperio Social Score	55	54	66
Aperio Social Score Tilt (%)		-1%	+20%
Forecast Tracking Error (%)	0.00	0.53	0.95
Forecast Beta	1.00	1.00	1.00
Forecast Volatility (%)	17.65	17.65	17.68
Number of Stocks	506	350	223
Dividend Yield (%)	1.38	1.34	1.43
Weighted-Avg. Market Cap	\$597B	\$593B	\$618B
Price to Book	6.94	7.94	10.59
Price to Earnings (TTM)	33.69	33.53	31.60
SAMPLE SECTOR EXPOSURES (%)			
Communication Services	9.4	9.5	8.1
Consumer Discretionary	12.0	11.5	12.0
Consumer Staples	6.1	6.8	8.6
Energy	3.9	4.1	4.3
Financials	11.1	11.7	10.6
Health Care	13.6	12.7	11.4
Industrials	7.9	7.4	6.7
Information Technology	28.0	28.2	29.6
Materials	2.60	2.8	3.4
Real Estate	2.70	2.7	2.3
Utilities	2.70	2.8	2.8

How scoring works: data elements and weighting

The Aperio Catholic Values Strategy reflects these issue areas in a portfolio Aperio Social Score at an Aperio-set weighting. The Aperio Social Score for each company is calculated based on data sourced from third-party ESG (environmental, social, and governance) data providers. Issue area scores are calculated based on the Data Elements selected to be part of the scoring criteria.

These area scores are then combined at the assigned weights to determine the aggregate company score. Company scores will range from 0 to 100. These company Aperio Social Scores are then an input into the portfolio construction process. During the multi-factor optimization, the portfolio manager targets a specific weighted-average portfolio Aperio Social Score, which the optimizer generates while mimicking the risk factor attributes of the underlying index as closely as possible.

*Full Data Element definitions and attributes can be provided upon request.

APERIO SRI INCLUDED ISSUE AREA (% weight in the strategy)	APERIO SCORING COMPONENT	WEIGHT OF THE COMPONENT AS % OF TOTAL STRATEGY
	Environmental Management	7.00%
	GHG Management	10.00%
	Toxic Emissions Management	2.00%
Saving Our Global Home	Energy Management	2.00%
(30%)	Water Management	6.00%
	Climate Change Controversies	1.00%
	Environmental Controversies	1.00%
	Environmental Supply Chain Controversies	1.00%
	Community Reinvestment Act	5.00%
Pursuing Economic Justice	Workforce Relations	9.00%
(20%)	Organized Labor	4.50%
	Labor Rights Controversies	1.50%
	Human Rights Policy	17.00%
	Human Rights Controversies	1.00%
	Human Rights Supply Chain Controversies	1.00%
Promoting Human Dignity (40%)	Diversity Policy & Management	8.50%
(1070)	Diversity Performance	8.50%
	Diversity Controversies	2.00%
	Pornography Scoring	2.00%
	Military Weapons Scoring	2.50%
Enhancing the Common Good	Tobacco Scoring	2.50%
(10%)	Gambling Scoring	2.50%
	Cannabis Scoring	2.50%

Controversies

Controversies are negative events in which companies are involved. Data is initially collected by MSCI ESG Research through media scraping and natural language processing technologies and then reviewed by analysts to determine the severity of the event. In addition, events are categorized by issue area.

Examples of such events could include, but are not limited to, environmental fines, oil spills, and lawsuits.

Aperio has grouped certain ESG issue areas into categories to create meaningful Scoring Components. Scores within the components are then calculated by tallying the number of events and their severity.

The Catholic Values Strategy makes use of the following Controversy Components:

- Human Rights Controversies
- Human Rights Supply Chain Controversies
- Environmental Supply Chain Controversies
- Environmental Controversies
- Climate Change Controversies
- Labor Rights Controversies
- Diversity Controversies

Portfolio construction: values and Aperio Social Scores

APERIO SOCIAL SCORE

An Aperio Social Score provides a means of translating an investor's values profile into a single quantitative score that is used in the portfolio construction process to tilt toward companies with desirable ESG characteristics while optimizing for risk.

Aperio values-aligned strategies seek to consistently achieve a weighted-average Aperio Social Score higher than that of the index selected by the client as the most appropriate benchmark for portfolio performance.

- The target weighted-average score does not set a minimum or cutoff score for a company to be included in the portfolio.
- There are many reasons a company might score relatively well:
 - If a company has high levels of voluntary disclosure, it may have a higher Aperio Social Score than other companies in the same industry.
 - If the scoring profile doesn't include specific issues where the company performs poorly, or if the available data doesn't reflect a recent controversy, the company may score better than anticipated.

SCORES VS. EXCLUSIONS

An Aperio Social Score is relative and does not explicitly exclude a company from a portfolio. A poorly scoring company may be included in the portfolio if it, relative to the other portfolio holdings, helps the portfolio track its benchmark index with similar risk-return characteristics. If an investor does not want to hold a particular company or type of a company, that preference should be listed in the SRI/ESG Menu as an exclusion.

DIRECTIONAL NOT ABSOLUTE

An Aperio Social Score should be considered a directional reflection of a company's relative performance on one or more issues.

Data notes

Data sourced from MSCI ESG Research, ISS ESG, and Bloomberg.

Key Notes

All scoring data is not collected for all companies

When our data vendor does not collect data in an industry but Aperio believes it is relevant, Aperio assigns the company an average score.

Disclosure limitations affect scoring

Companies that do not disclose data determined by the data vendor to be relevant within their industry are given the lowest Aperio Social Score (0), penalizing a company for not disclosing.

Data management/updating can create a lag

The timing of disclosures by a company, the research workflow and update process used by our data vendors, and Aperio's workflow and update process may create a difference between the status of a company and the data currently being used to evaluate that company.



Annual score updates and rebalance

Changes during the year will not be immediately reflected in the Aperio Social Scores. Original source data becomes available to our ESG vendors throughout the year and requires processing time before the vendor makes it available to Aperio. Aperio does not override its third-party ESG vendors.

Aperio rescores benchmarks, resets the relative scores, and rebalances portfolios to the new score annually.

Trade-offs among tracking error, values, and taxes (when applicable) are reviewed on each rebalance.

Technical definitions

Forecast Tracking Error

A measure of how a portfolio might perform in comparison to a benchmark as of a certain date given various risk factors. The calculation is based on data related to portfolio holdings, benchmark holdings, and risk models, and will change as underlying factors (such as volatility) change. The measure on one date could significantly differ from a measure on another date.

Beta

Measure of the returns volatility of a security or a portfolio relative to the returns volatility of the market as a whole.

Volatility

Standard deviation of returns: measures the amount of dispersion in portfolio realized returns from the expected return.

Dividend Yield

Ratio of a company's annual dividend to its share price.

Price to Earnings

Ratio of a company's share price to its earnings per share. Inverse of the earnings yield.

Price to Book

Ratio of a company's share price to its book value per share. Book value is defined as the company's total assets minus total liabilities.

Important notes

Aperio Group, LLC, provides this presentation for informational purposes only and for the sole use of the recipient. The information contained herein is provided with the understanding that we are not engaged in rendering legal, accounting, or tax services. We recommend that all investors seek out the services of competent professionals in these areas. The strategies and/or investments referenced may not be suitable for all investors, because the appropriateness of a particular investment or strategy will depend on an investor's individual circumstances and objectives. None of the examples should be considered advice tailored to the needs of any specific investor or a recommendation to buy or sell any securities.

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You should not assume that investment decisions we make in the future will be profitable or will equal the investment performance of the past. With respect to the description of any investment strategies, simulations, or investment recommendations, we cannot provide any assurances that they will perform as expected and as described in our materials. Past performance is not indicative of future results.

Sources of Research

Mandatory Disclosure: In certain cases, companies must comply with regulatory requirements for the disclosure of information. This kind of information can range from financial information to information the US Environmental Protection Agency requires company facilities to disclose. The advantage of this information is that it is comprehensive across the universe of companies. Unfortunately, in many issue areas, no mandatory disclosure applies.

Voluntary Disclosure: Much of the information available is voluntarily disclosed by companies, often in corporate sustainability reports or in sustainability or responsibility sections of their websites. This information can be more difficult to incorporate into evaluations and ratings. First, since it is voluntary, many companies disclose information only about some issue areas. Second, even when information is disclosed, the definitions and structure of what is disclosed may be different from company to company. NOTE: For Data Elements involving disclosure, a company will receive a score of 0 for each issue area where it has not provided any data. Aperio's methodology weights disclosure and the associated transparency as an important criterion in its ESG evaluation, and companies that do not disclose data are scored more poorly than the worst-performing-but-disclosing company in that issue area.

Third-Party Information/Evaluation of Companies: Other pieces of information that are available to Aperio do not fit cleanly into either of these categories or may be a hybrid of the two. For instance, there is mandatory disclosure of certain kinds of international operations, including registered subsidiaries. When this information is combined with evaluations of countries' political and civil liberties provided by a nongovernmental organization (NGO), we have a hybrid Data Element. In another example, we use ratings by the Human Rights Campaign (HRC) as an indication of a company's approach to sexual-orientation issues. HRC gathers information from companies, including by conducting surveys (voluntary disclosure), and then scores the companies. So, this is a combination of voluntary disclosure and evaluation.

Aperio data is gathered from sources including MSCI ESG Research, ISS ESG, Bloomberg, other data providers as relevant, and industry classifications. In addition, for certain Data Elements, Aperio will gather data from advocacy organizations that it deems to be reasonable and credible based on feedback from the industry and those interested in the specific issue area. In these cases, the advocacy group will be identified and the investor should review the provider to ensure that the organization's views align with the investor's views.

Data Frequency & Updates

Aperio updates its ESG data for the SRI/ESG Menu periodically on a preset schedule. Data Elements are updated during the year as our data providers receive new data from either the company or publicly available sources. Aperio updates all exclusions and scoring profiles annually at the beginning of each calendar year. As accounts are rebalanced, the updated data will be incorporated. NOTE: Because the data sets are not updated in real time, there may be a lag between a change at the company and when the change flows into the data set, and again when it flows into the portfolio during a rebalance. Aperio handles all updates consistently and does not override the approved data sets.



Important notes

Index Definitions

The S&P 500® Index is an equity benchmark for US stock performance. It is a capitalization-weighted index covering 500 large US companies chosen by Standard & Poor's for market size, liquidity, and industry group representation.

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Optimizer

The optimization process used in tax-loss harvesting by Aperio relies upon an optimization model built and designed by MSCI Barra. The model utilizes a mathematical objective function that seeks to minimize the combination of active risk (i.e., forecast tracking error) and the tax liability on realized gains, all while also meeting the conditions presented by a series of simultaneous equations, the values of which are, in part, populated by data based upon the securities being analyzed. With respect to measuring potential equity risk in the process of tax-loss harvesting and portfolio analysis, Aperio also uses and relies upon MSCI Barra risk models. You should note that such use and reliance of the MSCI Barra models in the optimization and equity risk analysis presents model risk, which is defined as the potential for adverse consequences from decisions based on incorrect or misused model outputs and reports. Model risk can lead to financial loss.

The model may have fundamental errors and may produce inaccurate outputs when viewed against the design objective and intended business uses. The mathematical calculation and quantification exercise underlying any model generally involves application of theory, choice of sample design and numerical routines, selection of inputs and estimation, and implementation in information systems. Errors can occur at any point from design through implementation. In addition, shortcuts, simplifications, or approximations used to manage complicated problems could compromise the integrity and reliability of outputs from those calculations. Finally, the quality of model outputs depends on the quality of input data and assumptions, and errors in inputs or incorrect assumptions will lead to inaccurate outputs. The model may be used incorrectly or inappropriately. Even a fundamentally sound model producing accurate outputs consistent with the design objective of the model may exhibit high model risk if it is misapplied or misused. Models by their nature are simplifications of reality, and real-world events may prove those simplifications inappropriate.

Thank you.

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Contact us



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