SEG RESEARCH

ACTIVE EQUITY INDICES

US Defensive Equity Index

Index Construction Methodology

A rules-based US equity index built to own quality businesses at attractive valuations — and to emphasise resilience when markets fall.

Index name	US Defensive Equity Index
Index code	USEQ50DEF
Inception	31 May 2023
Holdings	50–60 US-listed equities
Weighting	Equal-weighted on inclusion; 8% max position
Reconstitution	Quarterly (Feb / May / Aug / Nov)
Approach	Rules-based, defensive, value-anchored

Contents

1. Overview

The US Defensive Equity Index ("the Index") is a proprietary, rules-based active equity index maintained by SEG Research. It selects a concentrated portfolio of US-listed equities ranking most favourably on a combination of defensive and quality-oriented factors. The Index aims to provide equity exposure that emphasises attractive valuation, downside resilience, and financial strength relative to the broad market.

Construction is fully systematic. Each quarter, securities in the eligible universe are scored on a set of complementary factors and combined into a single defensive ranking. The strongest-ranked names form the portfolio, subject to a hold buffer that limits turnover by retaining existing constituents unless their standing materially deteriorates. There is no discretionary stock selection at any stage.

1.1 Design principles

- **Valuation discipline.** The primary input is a proprietary valuation measure that favours securities trading at more attractive valuations.
- **Defensive orientation.** Selection favours securities that have historically exhibited favourable behaviour in down markets relative to up markets.
- **Quality and financial health.** Selection rewards profitability, balance-sheet strength, and stable revenue generation.
- **Rules-based and repeatable.** Every step — universe definition, scoring, ranking, and reconstitution — follows fixed, documented rules with no discretionary security selection.
- **Turnover control.** A hold buffer retains incumbents whose ranking remains acceptable, reducing unnecessary trading and associated costs.
- **Concentration.** The Index targets a focused portfolio of 50 to 60 holdings.

1.2 Benchmark independence

The Index is constructed entirely bottom-up from its own factor-driven ranking from the universe of US traded equity securities. The Index does not target the benchmark's weights, sectors, or constituents, applies no tracking-error constraint, and may differ substantially from the benchmark in composition and behaviour at any time.

1.3 Risk characteristics

By design, the factor set tilts the Index toward lower-volatility, financially resilient securities with favourable down-market behaviour. The Index is therefore intended to exhibit lower market sensitivity (beta) than the broad market and to mitigate the depth of drawdowns, prioritising downside resilience over maximal upside participation. As a direct consequence of this defensive orientation and its benchmark independence, the Index will diverge from the broad market — typically participating less in strong, rising markets and aiming to decline less in falling markets. These are design characteristics of the methodology, not forecasts or guarantees of performance.

2. Construction Process at a Glance

The Index is rebuilt through the same five-step sequence each quarter. Each step is described in detail in the sections that follow.

#	Stage	What happens
1	**Universe & data intake**	Define the eligible US equity universe (US-traded; ADRs excluded; valuation screen applied) and load the period's standardised factor data.
2	**Defensive factor scoring**	Score each eligible security across the defensive factor model — valuation, revenue stability, up/down-market behaviour, financial health, and low-volatility positioning.
3	**Defensive ranking**	Combine the factors into a single ranking that orders the eligible universe from strongest to weakest defensive standing.
4	**Candidate selection**	Identify the strongest-ranked names as the target portfolio of 50–60 holdings, with a 8% cap on any single position.
5	**Reconstitution & weighting**	Reconcile against current holdings using the hold buffer; add new names equal-weighted from available cash; finalise and publish.

3. Eligible Universe and Data Inputs

3.1 Source data

Construction begins from SEG Research's US Factor Model, which produces a periodic dataset covering the modelled equity universe. For each security, the dataset provides identifying information (such as ticker, security name, sector, and industry classification) together with a set of pre-computed factor measures. Each factor is expressed on a standardised cross-sectional basis, so that a security's value on any factor reflects its standing relative to the rest of the universe at that point in time.

3.2 Eligibility screen

The modelled universe is reduced to the eligible universe through two criteria, both of which a security must satisfy to be eligible for inclusion:

- **US-traded securities.** The universe is limited to securities traded on US exchanges; American Depositary Receipts (ADRs) are excluded, restricting the Index to direct US-listed equities.
- **Valuation screen.** A security must pass SEG Research's proprietary valuation model as undervalued. Only securities the model identifies as attractively valued advance to scoring and ranking; securities that do not pass are excluded from the eligible universe regardless

of their other characteristics. The construction of the valuation model is proprietary to SEG Research and is not disclosed.

3.3 Missing-data handling

Where a factor value is unavailable for an eligible security, it is set to the universe-average standing for that factor. This neutral treatment ensures that a security is neither rewarded nor penalised on a factor for which data is missing, so that incomplete data does not distort the ranking.

4. The Defensive Factor Model

Security selection is driven by a set of complementary factors. Each captures a distinct dimension of defensive quality, and they are designed to work together: a security must show broad-based strength rather than excelling on any single measure to rank highly. The factors fall into three groups — valuation and stability, market participation, and quality and financial health.

Factor	Captures	What it measures
Valuation	*Proprietary valuation*	How attractively a company is priced — and the basis of the undervalued screen. Not built on simple ratios: a higher-priced company can register as undervalued when its price is justified by genuine growth, durability, and quality.
Volatility-Adjusted Revenue	*Revenue growth stability*	A five-year measure of revenue growth scaled for volatility — rewarding stable, consistent revenue generation.
Asymmetric Capture	*Up/down markets capture*	Participation in rising versus falling markets relative to peers, overweighting securities that have fallen less than they have risen.
Financial Health	*Balance-sheet strength*	Overall financial resilience, favouring companies better positioned to withstand adverse conditions.
Minimum Variance	*Minimise volatility*	Overweights securities in industries that have historically minimised portfolio variance.

Valuation is the Index’s primary input, complemented by the stability, asymmetry, and financial-health measures. Specific factor definitions, look-back windows, and relative emphasis are proprietary to SEG Research.

4.1 Valuation

The same proprietary valuation model that defines the undervalued eligibility screen (Section 3.2) also serves as the Index’s primary ranking input: valuation first gates the universe to undervalued securities, then differentiates among them by degree of undervaluation. Because the model is fundamentals-relative rather than based on simple multiples, a higher-priced company can still register as attractively valued when its price is justified by genuine growth, durability, and quality. Its construction is proprietary to SEG Research and is not disclosed.

4.2 Volatility-Adjusted Revenue

A five-year measure of revenue growth scaled for its volatility. It rewards companies with stable, consistent revenue generation and penalises erratic revenue, treating revenue stability as a marker of business durability.

4.3 Asymmetric Capture

A composite summarising how a security has participated in rising versus falling markets relative to its peers. Securities exhibiting favourable asymmetry — fuller participation in gains than in declines — are overweighted, producing a defensive participation profile.

4.4 Financial Health

Assesses balance-sheet strength and overall financial resilience, favouring companies better positioned to withstand adverse conditions.

4.5 Minimum Variance

Overweights securities in industries that have historically minimised portfolio variance, reinforcing the Index's defensive character on an industry-relative basis.

5. Defensive Ranking

The factors are combined into a single composite that orders the eligible universe from strongest to weakest defensive standing. Because every factor is expressed on the same standardised, universe-relative basis, the factors are directly comparable and combine into a coherent overall score. The strongest-ranked security is the most defensively attractive name for that period.

This ordering is the basis for both candidate selection (Section 6) and the reconstitution buffer (Section 7). The precise combination of factors and their relative emphasis is proprietary to SEG Research.

6. Candidate Selection

The target portfolio is formed from the strongest-ranked securities in the defensive ranking. Each period, the highest-ranked names are identified as the candidate set for inclusion in the Index, drawn from the top of the ranking so that selected securities represent the most defensively attractive candidates available.

The Index targets a concentrated portfolio of 50 to 60 holdings. The candidate set is sized to support this target while providing a modest cushion, so that incoming names during reconstitution are drawn from the strongest available candidates.

Sector composition

The Index applies no sector or industry constraints. Sector composition is a result of the bottom-up, factor-driven ranking rather than a construction input, and no sector cap or floor is imposed. The sector profile may be reviewed as a diagnostic, but it does not alter selection.

7. Reconstitution, Hold Buffer & Weighting

The Index is reconstituted quarterly, effective in February, May, August, and November. At each reconstitution, the new candidate set is reconciled against current holdings to determine which constituents are retained, which are replaced, and how new names are introduced. This buffered, cash-funded approach is what controls turnover and governs portfolio weighting over time.

7.1 The hold buffer

There is no fixed rank cutoff for selling. Instead, the sell discipline combines two reinforcing features designed to keep turnover low while still rotating out genuinely weakened names.

Adaptive threshold. The point at which a holding becomes a sale candidate adjusts period to period to moderate turnover, widening the band of acceptable ranks when broad selling would otherwise be triggered — so the Index avoids replacing a large number of names at once.

Relative-rank displacement. Within that band, an incumbent is sold only when a stronger candidate not currently held outranks it. Securities are sold as they rank lower — displaced by a better-ranked alternative rather than removed against an absolute line. A name is also replaced if it ceases to qualify (for example, because it no longer passes the eligibility screen).

Together these features make a holding easy to retain and hard to be forced out of, which is the primary mechanism by which the Index suppresses turnover and the associated trading costs.

7.2 Replacements

Each sale opens a portfolio slot, which is filled by the highest-ranked security not already held — the same better-ranked candidate whose strength displaced the outgoing name. Replacements are admitted in rank order, so weaker incumbents are rotated out in favour of the strongest available new candidates, while the broader set of acceptable incumbents is left undisturbed.

7.3 Weighting and cash funding

New constituents are added on an equal-weighted basis, funded by the cash freed when holdings are sold. Additions are therefore sized by the cash released through replacements rather than by a fixed target weight, and the portfolio’s weighting evolves period to period as names rotate in and out.

Retained positions are left to drift with performance rather than being rebalanced, so a name’s weight reflects its performance since it was added. Any residual cash after the equal-weighted additions is rebalanced across the portfolio. A **maximum position weight of 8%** applies to any single constituent; a position reaching the cap is trimmed and the freed weight redistributed, bounding single-name concentration even as individual positions appreciate between reconstitutions.

8. Publication and Quality Controls

Once holdings are finalised, the Index is published as a dated constituent record and subjected to integrity checks before distribution.

8.1 Published record

The published record identifies each constituent (name, ticker, and identifier) together with its weight, labelled with the Index name and the effective as-of date. This standardised record is the authoritative description of the Index for the period and the basis for downstream distribution.

8.2 Quality controls

- **Delisting check.** Constituents are screened for any scheduled delisting; affected names are surfaced for review before publication.
- **Reconciliation.** The published record is reconciled against the finalised holdings to confirm that the distributed record matches the constructed portfolio exactly.

9. Glossary of Terms

Term	Definition
Defensive ranking	The ordering of the eligible universe from strongest to weakest defensive standing, produced by combining the factors.
Valuation screen	Proprietary valuation-model gate; only securities identified as undervalued enter the eligible universe.
Valuation (primary input)	Proprietary, fundamentals-relative measure of how attractively a company is priced; the Index's primary ranking input and the basis of the undervalued screen. Construction not disclosed.
Asymmetric Capture	Composite of up- versus down-market participation relative to peers; favourable falling-market asymmetry is overweighted.
Volatility-Adjusted Revenue	Five-year revenue growth scaled for volatility — rewards stable, consistent revenue generation.
Minimum Variance	Overweights securities in industries that have historically minimised portfolio variance.
Hold buffer	The sell discipline that limits turnover: an adaptive threshold plus relative-rank displacement, so incumbents are sold only as they rank lower and are bettered by stronger candidates.
Reconstitution	The quarterly process (February, May, August, November) of reconciling the candidate set against current holdings.
Maximum position weight	The 8% cap on any single constituent; positions reaching the cap are trimmed and the weight redistributed.
Benchmark independence	The Index is built bottom-up and is not benchmark-aware; the Russell 3000 is used for comparison only.
ADR	American Depositary Receipt — excluded from the eligible universe.

Important Disclosures

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