BARCLAYS

The Barclays Global Quality Index

The Index aims to provide stable returns through a dynamic portfolio (3 regions – US, Europe, Japan) that provides exposure to 3 building blocks across 3 regions:

Global Equities	Global Bonds	Commodities
UK*	US: 5Y, 10Y	An index that provides exposure to the 10 most in demand commodities from a universe of 23 commodities
Eurozone*	Japan*: 10Y	
US	Eurozone*: 5Y, 10Y	
Japan		

*Non U.S. Dollar denominated assets have their profits and losses converted to U.S. Dollars on a daily basis.

Portfolio Construction

1. Should Bonds be part of the index?
2. Combine the Building Blocks using Modern Portfolio Theory
3. Tilt by 10% if detecting short-term trends
4. Apply a 5% Volatility Overlay

Quality stocks are stocks which exhibit stable earnings, profits and real cashflows as opposed to accruals.

The stocks tend to be less well known, benefiting from fewer narratives. And yet academic research supports outperformance in the long-term. The index selects 50 US stocks, 30 stocks from the UK, 30 from the Eurozone and 30 from Japan, on a monthly basis.

On each business day, the Index aims to determine an optimal combination of the index components by using a 3-step process.

Step 1 – Every day, the Index will evaluate (1) central bank actions with respect to short-term rates; (2) inflation; (3) the level of investor risk aversion to detect a negative trend for bonds. Should a negative trend be detected, the Index will have no exposure to bonds in that region.

Step 2 - Portfolio Construction Based on Modern Portfolio Theory: This step is a process known as mean variance optimization and is based upon the principles of Modern Portfolio Theory. Incorporating historical volatilities and correlations of the index components, the mean variance optimization process eliminates combinations with an estimated volatility greater than 5%, and selects the remaining combination with the highest estimated return potential by assuming a direct relationship between risk and return. This is known as the “base combination”.

Step 3 - 10% Momentum Tilt: This steps seeks to address short term trends. The index may tilt the base combination by up to 10% in total to either increase or reduce exposure to index components with stronger or weaker recent performance. This is called the “optimal combination”.

Step 4 - the Index seeks to maintain the 5% volatility target and may decrease or increase exposure to the optimal combination, by potentially allowing 225% maximum exposure.

140 US and International Stocks selected on stable earnings, profits and cashflows

Global Bonds from the US, Japan and the Eurozone

Duration Management

Modern Portfolio Theory

Short-Term Tilt

Potential daily Rebalance

Dividends Reinvested

Indices.Barclays/GlobalQuality

See resources below for futher information:

1. Sloan (1996), “Do stock prices fully reflect information in accruals and cash flow about future earnings?”, The Accounting review 71.
2. Piotroski(2000), “Value Investing: The Use of Historical Financial Statement Information to Separate Winners from Losers”, Journal of accounting research, 38.
3. Novy-marx (2013), “The Other Side of Value: The Gross Profitability Premium”, Journal of Financial Economics.
4. Fama and French (2013), “A Five-Factor Asset Pricing Model”, Working paper.
5. Assness et al (2013), “Quality minus Junk”, Working paper.

The Barclays Global Quality Index

Risk factors

An investment in the Index also involves fees, costs and risks. The following is a summary of these fees and costs and certain risks associated with the Index. You should consider the following, and consult with your advisers and read any product documentation carefully, before investing in any financial product based on the performance of the Index.

The strategy reflected in the Index may be unsuccessful. Historical volatility may prove to be a poor measure of predicting future returns and future volatility and, if it is, the Index portfolio may not be optimized and may perform poorly. Similarly, recent performance momentum may be a poor measure of predicting future returns. If either of the above is true, the allocation of underlying index components in the Index may not be optimized and the Index may perform poorly.

The volatility control mechanism may not achieve its intended goal, and the Index may not achieve its target volatility of 5%. In addition, the Index may assign up to 225% of total exposure to its underlying assets, because relevant exposure levels determined by daily optimization and volatility control can both be up to 150%. When The Index's exposure to its underlying index components is greater than 100%, any negative performance of the underlying assets will be magnified and the level of the Index may decrease significantly. In addition, the allocation between the components reflected in the Index at any time may not be optimized and may underperform a different allocation between the three asset classes.

The index includes deductions ranging from 0.20% and 0.50% per annum depending on the component. Additionally, a rebalancing cost ranging from 0.02% to 0.05% depending on the component is applicable to the change in notional exposure to the component as a result of portfolio rebalancing as well as volatility control, and is deducted on the relevant trading day. These deductions will be included in the daily calculation of the Index level and will reduce performance of the Index, and the Index will underperform similar portfolios from which these fees and costs are not deducted.

The Index is subject to risks associated with rolling futures contracts, including the risk that its underlying indices will replace expiring contracts with higher-priced contracts, which may cause the index values to fall even if the spot levels of the bonds or commodities underlying the relevant futures contracts are stable or increasing in value.

The Index may at any time be invested in only one or a small number of underlying assets, which produce lower returns than an investment in a more diversified pool of assets.

Any weight in the portfolio which is not invested will earn no return. In addition, if the volatility control mechanism causes exposure to the Index Portfolio to be less than 100%, the difference will not be invested and will earn no return.

There is a risk that the optimizer software, which is designed to select an optimal portfolio allocation of assets to achieve a target volatility of 5%, might not be able to create a portfolio that meets the 5% target volatility. Additionally, it is possible that the optimizer software may not generate the same solution when operated on different computers.

Disclaimer

Barclays Bank PLC is the owner of the intellectual property and licensing rights relating to the Index. The Index is operated by Barclays Index Administration, an independent index administration function within Barclays Bank PLC. Barclays Bank PLC may terminate the appointment of, and replace, the Index Sponsor with a successor index sponsor. Following the termination of the appointment of the Index Sponsor, Barclays Bank PLC will publish an announcement of that termination and the identity of the successor index sponsor on indices.barclays.com (or any successor website) as soon as reasonably practicable.

Barclays does not guarantee the accuracy and/or completeness any Index, any data included herein, or any data from which it is based, and Barclays shall not have any liability for any errors, omissions, or interruptions therein. Barclays does not make any warranty, express or implied, as to the results to be obtained from the use of an Index. Barclays expressly disclaims all warranties of merchantability or fitness for a particular purpose or use with respect to an Index or any data included therein. Without limiting any of the foregoing, in no event shall Barclays have liability for any special, punitive, indirect or consequential damages, lost profits, loss of opportunity or other financial loss, even if notified of the possibility of such damages.

None of Barclays, any of its affiliates or subsidiaries nor any of its directors, officers, employees, representatives, delegates or agents shall have any responsibility to any person (whether as a result of negligence or otherwise) for any determination made or anything done (or omitted to be determined or done) in respect of any Index or publication of the levels of any Index and any use to which any person may put any Index or the levels of any Index. In addition, although Barclays reserves the right to make adjustments to correct previously incorrectly published information, including but not limited to the levels of any Index, Barclays is under no obligation to do so and Barclays shall have no liability in respect of any errors or omissions.

Nothing in any of the disclaimers set forth above will exclude or limit liability to the extent such exclusion or limitation is not permitted by law.