



CDS BENCHMARK (TOTAL, EXCESS RETURN AND STRATEGY) INDICES – BENCHMARK STATEMENT

1. General Disclosures	
Benchmark family name	CDS Benchmark (Total, Excess Return and Strategy) Indices
Benchmark administrator	IHS Markit Benchmark Administration Ltd. (IMBA UK)
Date of initial publication of this document	9 July 2018
Date of last update to this document	8 June 2021
ISIN (where available)	There are presently no ISINs available or accessible for the benchmarks covered by this Benchmark Statement.
Determination by contributions of input data	<p>The administrator receives contributions of “input data” (as defined by the BMR) in relation to this family of benchmarks.</p> <p>The CDS Benchmark (Total, Excess Return and Strategy) Indices utilize CDS spreads contributed by IHS Markit CDS Pricing, who is subject to annual attestation of a Contributor Code of Conduct. Other local pricing sources are also used to determine the prices used for the index calculations.</p>
Qualification of the benchmark family	CDS Benchmark (Total, Excess Return and Strategy) Indices are administered as a significant benchmark.
2. Climate-related disclosures	
Type of benchmark family	Other benchmarks

Name of the benchmark	CDS Benchmark (Total, Excess Return and Strategy) Indices
Does the benchmark pursue ESG objectives?	No
Where the answer to the above question is negative, is any EU Climate Transition Benchmark or EU Paris-Aligned Benchmark available in the portfolio of IMBA UK or does IMBA UK have benchmarks that pursue ESG objectives or consider ESG factors?	Yes
3. Key information relating to the benchmark or family of benchmarks	
General description of the market or economic reality	Underlying the CDS Benchmark (Total, Excess Return and Strategy) Indices are CDS indices which measure the total or excess return of tradeable baskets. These underlying baskets are rolled onto a new series every 6 months. The CDS Benchmark (Total, Excess Return and Strategy) Indices operate under the assumption that the investor is always invested in the underlying on-the-run (i.e. current) credit index series and transitioned semiannually to the newly issued CDS index series. Further, they take into account the quarterly coupons on the underlying basket (a protection seller receives the coupon whereas a protection buyer pays the coupon), transaction costs and auction recovery from defaults.
Geographical boundaries of the market or economic reality	Geographical regions are defined by the underlying CDS index contracts being tracked by the CDS Benchmark (Total, Excess Return and Strategy) Indices. The CDS Benchmark (Total, Excess Return and Strategy) Indices cover the US, Asia, Australia and Europe.
Other relevant information relating to the market or economic reality	Market participants include asset managers, retail and investment banks, insurers, pensions funds, hedge funds and endowment funds. The underlying CDS indices are the most liquid indices traded in the global CDS markets.

4. The potential limitations of the benchmark and the circumstances in which the measurement of the market or economic reality may become unreliable	
Circumstances in which we would lack sufficient input data to determine the benchmark according to the methodology	<p>For the administrator to be able to publish the daily CDS Benchmark (Total, Excess Return and Strategy) Index level, the relevant CDS index prices must be published. In periods of market stress or disruption as well as in illiquid or fragmented markets preventing the publication of a daily iTraxx/CDX price, the administrator will publish a statement outlining the course of action due to the disruption on the administrator's website www.markit.com/Product/Indices under the iTraxx News page and CDX News page.</p> <p>In the event of a major structural change within the CDS market impacting the CDS Benchmark (Total, Excess Return and Strategy) Indices calculation, the administrator will follow the Change and Cessation policy and consult with market participants on any material changes it might need to introduce.</p>
Circumstances in which the degree of liquidity of the underlying market becomes insufficient to ensure the integrity and reliability of the benchmark determination according to the methodology	<p>As above. The depth of the prices published by the IHS Markit CDS Pricing Services should be high enough to ensure reliability of the composite to represent market sentiment. IHS Markit CDS Pricing requires at least three independent price sources to consolidate a price/spread. If this not achieved the last available price will be used in the CDS Benchmark (Total, Excess Return and Strategy) Indices.</p>
5. The controls and rules that govern the exercise of judgment or discretion in the calculation of the benchmark or family of benchmarks	
Position of each function or body that may exercise discretion in the calculation of a benchmark and governance thereof	<p>The administrator's indices are rules based and do not typically permit the use of discretion unless there are exceptional circumstances that are not addressed by either the index rules or an administrator policy. Such scenarios may include (but are not limited to):</p> <ul style="list-style-type: none"> • Failure of data providers; • Significant changes to the underlying market; • Complex corporate events; • Action by governmental or regulatory bodies that causes market disruption; and • Events beyond human control. <p>In the event that the administrator needs to take action or make a decision that has not been foreseen by the methodology or associated policy, senior members of the administration team will</p>

	<p>consult internally with the applicable Index Administration Committee (IAC); this is to arrive at a decision that is consistent with the objective of the index in question and that causes minimal disruption to index stakeholders.</p> <p>Any changes to the index methodology or cessations will be decided upon as per IMBA's Benchmark Methodology Changes and Cessation policy (available here). Where a proposed methodology change is material IMBA will launch a wider consultation which is addressed to all relevant stakeholders. it will also notify the Board and the Benchmark Oversight Committee who will oversee the consultation process and can challenge the suggested approach. A methodology change is likely to be material if it has a substantial impact on the index calculation process or formula, the quality of the input data, the index selection rules, the underlying market or reality measured, the panel of contributors to the benchmark, or the benchmark level.</p>
<p>Ex-post evaluation process</p>	<p>As above, the exercise of judgment or discretion in the calculation is guided by precise internal guidelines to ensure that no conflict of interest arises and that the CDS Benchmark (Total, Excess Return and Strategy) Indices continue to reflect the underlying economic reality. To the extent there is feedback or comment on the use of expert judgment or discretion, the administrator will review those comments at the earliest opportunity.</p>
<p>6. Review of the methodology and changes to, or cessation of, the benchmark or family of benchmarks</p>	
<p>The methodology</p>	<p>The CDS Benchmark (Total, Excess Return and Strategy) methodology is applied to produce indices which measures the performance of holding on-the-run CDS index contracts. The indices reflect either a long or short credit position and replicates the behavior of a fictitious portfolio that buys or sells CDX or iTraxx contracts to always remains invested in the on-the-run contract, while taking into account all relevant cash flows. This allows investors to benchmark their CDS positions and use these indices as an ongoing performance measure of CDS positions for relevant regions and various trading assumptions.</p> <p>The Indices are divided into three categories reflecting different performance attributes prevalent in the CDS index markets. Though there are differences in determining the returns on the below CDS Benchmark (Total, Excess Return and Strategy) Indices, all CDS Benchmark (Total, Excess Return and Strategy) Indices utilize the same IHS Markit CDS Pricing source and the ISDA CDS Standard Model is applied to relevant aspects of the calculation (such as coupon accrual convention).</p> <ol style="list-style-type: none"> 1. <i>CDS Excess return benchmark indices</i>

	<p>The excess return benchmark indices reflect the mark to market returns on the underlying CDS index of a protection seller or buyer (i.e. a long position on the underlying on-the-run CDS index).</p> <p><u><i>CDS Total return benchmark indices</i></u></p> <p>The total return benchmark indices reflect the mark to market returns of the underlying CDS index plus the applicable overnight cash accrual on the same.</p> <p><u><i>CDS strategy benchmark indices</i></u></p> <p>These indices blend two or more CDS index contracts to reflect diversified exposure to different segments of the underlying CDS market. The strategy indices can be a manifestation of specific investor preferences such as risk-adjusted returns, weighted index exposure, leveraged returns etc.</p> <p>The methodology is subject to at least annual review by the administrator. Such review is approved by the Board and reported to the Benchmark Oversight Committee.</p> <ol style="list-style-type: none"> 2. Membership of the underlying CDS indices is determined by clear, transparent and objective rules that are publicly available. Example criteria include credit rating, liquidity and currency. The constituents of the underlying CDS indices is determined every six months. 3. The pricing used in the CDS Benchmark (Total, Excess Return and Strategy) Indices is sourced from IHS Markit CDS Pricing and additional local pricing providers are included where appropriate. Once the set of contributions have been selected, they are passed through an iterative outlier cleaning process. Experienced analysts manage the process of determining the CDS prices based on a rules-based methodology. 4. The exercise of judgment or discretion is very rarely used and governed as described above in section 5. 5. In the situation of extreme market disruption or a severe decrease in liquidity in the underlying CDS indices, the administrator would need to resort to modelled pricing provided by IHS Markit CDS Pricing. The depth of the prices published by the IHS Markit CDS Pricing Services should be high enough to ensure reliability of the composite to represent market sentiment. IHS Markit CDS Pricing requires at least three independent price sources to consolidate a price/spread. If this not achieved the last available price will be used in the CDS Benchmark (Total, Excess Return and Strategy) Indices. A notification will be sent to users if there is a situation where the indices cannot be calculated or when the calculation of a significant part of the index is based on assumptions due to the lack of available data. In exceptional situations where it is not
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	<p>possible to calculate an index at all, an index calculation day may be declared a non-trading day.</p> <ol style="list-style-type: none"> 6. The CDS Benchmark (Total, Excess Return and Strategy) Indices are subject to an official restatement policy that describes how errors in the calculation or the membership is handled. The key determinants to decide if an index needs to be restated following an error are the magnitude of the error on the index performance as well as the impact on the users of the index. 7. The identification of potential limitations of the CDS Benchmark (Total, Excess Return and Strategy) Indices, including its operation in illiquid or fragmented markets are addressed above in section 4. 8. Circumstances might arise that would warrant a cessation of a benchmark such as: lack of demand for the benchmark, a deterioration in data sufficiency or changes in market structure. In considering whether to discontinue an index, the administrator -may conduct stakeholder consultation and assess downstream usage of the index by market participants as part of wider procedures identified in the administrator's Change and Cessation policy. <p>Further details of the administrator's Change and Cessation and the iTraxx/CDX Restatement policies are available on the administrator's website here.</p>
<p>Rationale for adopting the methodology</p>	<p>The key elements of the methodology of the CDS Benchmark Indices are input data and the semi-annual roll.</p> <p>Sources of input data</p> <p>The CDS Benchmark indices are calculated using IHS Markit CDS Pricing Service which is a contribution-based pricing service. The pricing composites are created using robust quality screening methodology to ensure the inputs are reflective of the underlying market.</p> <p>Semi-annual roll</p> <p>The indices roll into the latest on-the-run series semi-annually as a new series of the underlying iTraxx/CDX indices is launched every six months, typically in March and September</p>

Possible impacts of changes to, or the cessation of the benchmarks upon the financial contracts, financial instruments that reference the benchmark or the measurement of the performance of investment funds	The CDS Benchmark (Total, Excess Return and Strategy) Indices are used for benchmarking, risk and performance reporting, total return swaps, credit linked notes and exchange traded products. In the event of a cessation of the CDS Benchmark (Total, Excess Return and Strategy) Indices, users would need to switch to other comparable indices or agree appropriate terms for settlement of contracts linked to the CDS Benchmark (Total, Excess Return and Strategy) Indices.
7. Key Terms	
Benchmark Oversight Committee	means the independent function overseeing the IMBA UK Board with regard to the administration of the CDS Benchmark (Total, Excess Return and Strategy) indices
Board	means the Board of Directors of IMBA UK
ESG	means Environmental, Social, and Governance, recognised as the three central pillars measuring sustainability and societal impact of institutions, sovereigns, or other entities
IHS Markit Benchmark Administration Ltd. (IMBA UK)	means the administrator, which is the UK entity authorised by the FCA responsible for the daily provision of the CDS Benchmark (Total, Excess Return and Strategy) Indices
IHS Markit CDS Pricing	means IHS Markit CDS Pricing standalone service that is independent of the index administrator and is based on contributed data, observed quotes in the market and parsed data
Index Administration Committee	means the committee with responsibility for overseeing day to day administration of the CDS Benchmark (Total, Excess Return and Strategy) Indices
ISDA CDS Standard Model	means the standard methodology for CDS mark-to-market calculations. More information is available at www.cdsmodel.com
8. Additional information	
Additional information	For more information, including methodology documents please visit https://ihsmarkit.com/products/indices.html or contact us at indices@ihsmarkit.com

9. Document governance

Document name	CDS Benchmark (Total, Excess Return and Strategy) Indices Benchmark Statement
Document owner	Regulatory Compliance
Applies to	CDS Benchmark (Total, Excess Return and Strategy) Indices family
Approved by	Board of IHS Markit Benchmark Administration Ltd. and Benchmark Oversight Committee
Date of Last review	8 June 2021

IMPORTANT:

This Benchmark Statement will be updated whenever the information it provides is no longer correct or sufficiently precise and at least where:

(a) there is a change in the type of the benchmark;

(b) there is a material change in the methodology for determining the benchmark or, where the Benchmark Statement refers to a family of benchmarks, in the methodology for determining any benchmark within the family of benchmarks.

This Benchmark Statement will be updated at least every two years.

ABOUT US

IHS Markit (NYSE: INFO) is a world leader in critical information, analytics and expertise to forge solutions for the major industries and markets that drive economies worldwide. The company delivers next-generation information, analytics and solutions to customers in business, finance and government, improving their operational efficiency and providing deep insights that lead to well-informed, confident decisions. IHS Markit has more than 50,000 key business and government customers, including 85 percent of the Fortune Global 500 and the world's leading financial institutions. Headquartered in London, IHS Markit is committed to sustainable, profitable growth.

CONTACT US

For more information, including methodology documents please visit <https://ihsmarkit.com/products/indices.html> or contact us at indices@ihsmarkit.com.

NOTICES AND DISCLAIMERS

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