



HALIFAX HOUSE PRICE INDICES – BENCHMARK STATEMENT

1. General Disclosures	
Benchmark family name	Halifax House Price Indices (HHPI)
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	30 April 2020
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	No, the administrator does not receive contributions of “input data” (as defined by the BMR) in relation to this family of benchmarks. The HHPI utilizes data relating to approved mortgage transactions (Mortgage Offer Data) entered into by Lloyds Banking Group (LBG). The Mortgage Offer Data is provided by LBG, the parent entity of Halifax.
Qualification of the benchmark family	The HHPI is administered as a significant benchmark.
2. Climate-related disclosures	
Type of Benchmark family	Other benchmarks
Name of the benchmarks	HHPI benchmarks
Does the benchmark pursue ESG objectives?	No

<p>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 take into account ESG factors?</p>	<p>Yes</p>
<p>3. Key information relating to the benchmark or family of benchmarks</p>	
<p>General description of the market or economic reality</p>	<p>The HHPI is a barometer of UK house prices based on LBG Mortgage Offer Data and has been calculated since January 1983.</p>
<p>Geographical boundaries of the market or economic reality</p>	<p>The HHPI measures house prices across the UK. A headline, UK aggregate HHPI measure is produced each month, while HHPI measures are produced on a quarterly basis for: Wales, Scotland and Northern Ireland, as well nine English Regions.</p>
<p>Other relevant information relating to the market or economic reality</p>	<p>The HHPI is derived from mortgage transaction data from a single provider (LBG) that is one of the UK's largest mortgage lenders, with mortgage offers comprising around 15%–20% of the total UK mortgage market.</p>
<p>4. The potential limitations of the benchmark and the circumstances in which the measurement of the market or economic reality may become unreliable</p>	
<p>Circumstances in which we would lack sufficient input data to determine the benchmark according to the methodology</p>	<p>The statistical reliability of the HHPI would be compromised if an extreme event caused an unexpectedly sharp decline in the volume of Mortgage Offer Data in any given month and in turn the volume of mortgage transactions that were available for input into the HHPI model.</p> <p>During the 30 years in which the HHPI has been produced (a period which includes the global financial crisis of 2008-09 and resulting recession) volumes of Mortgage Offer Data have remained sufficient to produce the family of benchmarks. In a scenario where the number of mortgage transactions received from LBG fell below general statistical standard guidelines and to the extent that this might have a material impact on the statistical integrity of the HHPI, the Index Advisory Committee (IAC) would make a decision as to whether the family of benchmarks should be published. For a publication in this scenario the Administrator would make HHPI users aware that the family of benchmarks (or individual benchmarks that are part of the family) has been based on</p>

	<p>an unusually low volume of transactions and the factors that had driven this. The IAC may also consider consulting with users around temporary changes to the methodology to address data sufficiency, e.g. inclusion of mortgage transaction data from earlier periods in the calculation of the model. The accuracy of the data inputs would not be affected by any extreme event and quality checks are in place to verify data quality.</p>
<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>	<p>See above.</p>
<p>5. The controls and rules that govern the exercise of judgment or discretion in the calculation of the benchmark or family of benchmarks</p>	
<p>Position of each function or body that may exercise discretion in the calculation of a benchmark and governance thereof</p>	<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; • 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 consult with the IAC to arrive at a decision that is consistent with the objective of the index in question and that causes minimal disruption to index stakeholders. Where appropriate, and reasonably practicable, the administrator may consult with stakeholders. In any event the administrator will make all reasonable efforts to ensure stakeholders are aware that discretion or judgement has been used and how.</p>
<p>Ex-post evaluation process</p>	<p>As above, the exercise of judgment or discretion in the calculation of the HHPI would need to be approved by the IAC prior to the publication of the HHPI to ensure that no conflict of interest arises</p>

	<p>and that the HHPI continues to reflect the underlying economic reality. The decision of the IAC would be recorded and notes on the nature of the judgment or discretion that have been exercised would be published on the public release documents relating to the family of benchmarks. To the extent there is feedback or comment on the use of expert judgment or discretion, the IAC 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>	<ol style="list-style-type: none"> <li data-bbox="913 488 2029 1378"> <p>The HHPI methodology is applied to produce a number of standardised indices covering different categories of houses (all and existing) and of buyers (first-time buyers and former owner-occupiers). Index levels are published in regular monthly bulletins for the UK as a whole and as quarterly bulletins giving regional analyses. Licensed users receive the HHPI data updates through a Secure File Transfer Protocol site.</p> <p>The need for "standardisation" arises out of the fact that no two houses are alike: they may differ according to a variety of quantitative and qualitative Property Characteristics relating to the physical attributes of the houses themselves or to their locations.</p> <p>Thus, analyses of average house price differences between one region and another, or of changes in average prices over time, are not based on the comparison of like with like if the "characteristics-mix" of houses traded is not standardised.</p> <p>The problem of comparability cannot be tackled without information about the Property Characteristics, as well as the price, of each house included in the Mortgage Offer Data. Given the great variety of combinations of Property Characteristics possessed by houses and given also a desire to measure their influence at regional, as well as at national levels, it was necessary to establish a data-capturing system large enough to provide representative coverage of all house transactions in each region of the UK.</p> <p>As a leading mortgage lender in the UK, Halifax has been in an ideal position for over three decades to obtain large-scale representative data which are used in the HHPI model.</p> <p>The methodology is subject to at least annual review by the administrator. Such review is carried out by the Board of the administrator and the Benchmark Oversight Committee.</p> <li data-bbox="913 1233 2029 1378"> <p>All underlying Mortgage Offer Data comes from a single source – LBG. The data comprise approved mortgage transaction data for mortgages granted by LBG in the latest month. The Mortgage Offer Data not only records the price of each property, but also defined Property Characteristics such as location, age of property and the number of habitable rooms. The HHPI is calculated using what is known as a Hedonic Price Regression. In</p>

	<p>this hedonic approach to price measurement, goods are valued not for themselves as such but for the set of attributes which they possess. In the case of housing, prices will reflect the valuation placed by purchasers on the particular set of locational and physical attributes (or characteristics) possessed by each house. Pre-defined exclusion criteria determine which mortgage transactions are included in the model and which are excluded. Once included, there is no prioritization of the mortgage transaction data. The volumes of mortgage transactional data used in the model for the HHPI is closely monitored on a monthly basis. The model does not use any extrapolation for missing data.</p> <ol style="list-style-type: none">3. The exercise of judgment or discretion is very rarely used in the calculation of the HHPI. When applied, the exercise of judgment or discretion in the calculation of the HHPI is determined by diagnostics derived from a monthly monitoring pack that are used to review the performance of the HHPI model and the coefficients of each of the Property Characteristics that are used in the hedonic regression model that calculates the family of benchmarks. This analysis is then used to determine any exercise of judgment or discretion in the calculation of the family of benchmarks. The administrator of the indices would advise on the use of such discretion and any proposal around the exercise of judgment or discretion would need to be approved by the IAC prior to the publication of the HHPI family of benchmarks.4. During the 30 years in which the HHPI has been produced (a period which includes the global financial crisis of 2008-09 and resulting recession) volumes of Mortgage Offer Data have remained sufficient to produce the family of benchmarks. In a scenario where the number of mortgage transactions received from LBG fell below general statistical standard guidelines and to the extent that this might have a material impact on the statistical integrity of the HHPI, the IAC would make a decision as to whether the family of benchmarks should be published. For a publication in this scenario the Administrator would make HHPI users aware that the family of benchmarks (or individual benchmarks that are part of the family) has been based on an unusually low volume of transactions and the factors that had driven this. The IAC may also consider consulting with users around temporary changes to the methodology to address data sufficiency, e.g. inclusion of mortgage transaction data from earlier periods in the calculation of the model. The accuracy of the data inputs would not be affected by any extreme event and quality checks are in place to verify data quality.5. Any errors detected in the data would be raised with LBG – the sole provider of data – and resolved as quickly as possible. If necessary, publication of the family of benchmarks would be delayed while the errors were resolved. If a re-determination of any benchmark was required, this would be republished alongside a clear explanation to all users of the reason for the re-determination and the difference between the initially published and re-
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	<p>determined data. Further details of the HHPI Restatement Policy are available on the administrator's website here.</p> <p>6. The identification of potential limitations of the benchmark, including its operation in illiquid or fragmented markets and the possible concentration of inputs is covered above.</p> <p>The HHPI methodology, as described in the index manual (as amended, replaced or substituted from time to time) is available here.</p>
<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</p>	<p>Generally, the administrator will publicly consult on any planned material change or the cessation of the HHPI to allow stakeholders to indicate where changes to or the termination of the benchmark are expected to have adverse impacts. The administrator will make reasonable efforts to address stakeholder concerns expressed in response to such consultation and to allow for reasonable advance notice for stakeholders in order to unwind existing contracts or instruments or seek an appropriate substitute benchmark. However, there may be circumstances where external factors beyond the control of the administrator could lead to short-term changes to or the termination of the HHPI without proper consultation or adequate notice period, e.g. where a continuous disruption of the underlying market or an underlying data point requires a change to the methodology or impacts the viability of the benchmark. For more details please refer to the administrator's Change and Cessation Policy available on the administrator's website here.</p> <p>The HHPI is used primarily for capital and impairment purposes, including for assessment of the quality of mortgages on a lenders' books and variances in Loan to Value (LTV) ratios resulting from changes in house prices. The HHPI is used in a similar way (i.e. calculating LTV) in large lenders' Covered Bonds Programmes. The impact of a cessation of the HHPI would be that users would need to look to other sources of UK house price data against which to assess their mortgage lending and may have a direct impact on investors with positions in financial contracts or financial instruments referencing the HHPI. We are aware of a small number of financial instruments which directly use the HHPI as the determinant. Those product issuers would also need to consider alternative sources of UK house price data in order to settle those instruments.</p>

7. Key Terms	
Benchmark Oversight Committee	means the independent function overseeing the IMBA UK Board with regard to the administration of the HPPI.
BMR	means the Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016.
Hedonic Price Regression	in this hedonic approach to price measurement, goods are valued not for themselves as such but for the set of attributes which they possess.
HHPI	means Halifax House Price Indices (HHPI).
Index Advisory Committee	means the committee with responsibility for overseeing day to day administration of the HHPI.
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 HHPI.
LBG	means Lloyds Banking Group.
Mortgage Offer Data	means approved mortgage transactions entered into by LBG. This covers all data relating to the property on which a mortgage has been offered. This information will include the price of the property against which the mortgage is being offered as well as the Property Characteristics such as type (detached, semi-detached, terraced, flat, bungalow), size, age and location.
Property Characteristics	the index uses a variety of characteristics to determine a standardised house in the UK which, when taken together, help to explain the majority of the variation in house prices
8. Additional information	
Additional Information	For more information, including the full methodology document visit https://ihsmarkit.com/products/halifax-house-price-index.html or contact us at support@ihsmarkit.com

9. Document governance

Document name	Halifax House Price Indices Benchmark Statement
Document owner	Regulatory Compliance
Applies to	Halifax House Price Indices (HHPI) benchmark family
Approved by	Board of IHS Markit Benchmark Administration Ltd. and Benchmark Oversight Committee
Date of Last review	30 April 2020

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 the full methodology document visit <https://ihsmarkit.com/products/halifax-house-price-index.html> or contact us at support@ihsmarkit.com

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