

COMPASS Kalstone Paris Residential Property Index (PARISSQM)

Benchmark Statement

20 of February 2019

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1. General information

Index Name: COMPASS Kalstone Paris Residential Property Index (PARISSQM)

Initial date of publication: 14th of May 2018

Index Administrator: Compass Financial Technologies (France)

Index Calculation Agent: Compass Financial Technologies (France)

2. Index description

The PARISSQM Index has been designed to provide a benchmark for the “typical” residential transacted price per square meter in Paris over a reporting period of 2 weeks.

The PARISSQM Index is based solely on real physical transactions data. The information used to build the Index come from the transaction data reported by notaries to Paris Notaires Services (PNS).

The calculation methodology used to compute the index has been designed to provide the most consistent, accurate and understandable short term transacted price picture of the residential property market in Paris.

The PARISSQM is published every two weeks on Friday evening at 5:30pm, Paris Time. It is quoted in Euros per square meter and aims to become the benchmark for the “typical” transacted price per square meter of Paris residential properties.

3. Regulatory information

The Benchmark is non-significant benchmark according to EU Regulation 2016/1011 given:

(a) it is not used directly or indirectly within a combination of benchmarks as a reference for financial instruments or financial contracts or for measuring the performance of investments funds having a total average value of at least EUR 50 billion on the basis of all the range of maturities or tenors of the benchmark, where applicable, over a period of six months; and

(b) it has market-led substitutes and, in the event that the benchmark ceases to be provided or is provided on the basis of input data no longer fully representative of the underlying market or economic reality or unreliable input data, the benchmark administrator do not anticipate a significant and adverse impact on market integrity, financial stability, consumers, the real economy or the financing of households or businesses in the EU.

4. Index Methodology

4.1. Input data

4.1.1. Input data Description

The Index level is based on residential transaction prices in Paris reported in the database BIEN.

Every 2 weeks the Index Contributor send to the Index Administrator all transactions data reported in the PNS database over the last two weeks. Then, the Index Administrator process the data to extract information which are going to be used to compute the new Index Level.

For each reported transaction, the following information are available:



- Date of the transaction
- Arrondissement (district)
- Total transacted price
- Price per square meter

4.1.2. Input data contributor

The PARISSQM Index is based solely on real physical transactions data. The input data used to build the PARISSQM come from the transaction data reported by notaries to Paris Notaires Services (PNS). PNS is considered as the most exhaustive source of information related to real estate transactions in Paris.

Created by the Notaries of Paris, Paris Notaires Services, PNS, is a not-for-profit association whose mission is to manage and develop the real estate database of notaries in Ile de France.

Within PNS, the department BIEN works on the exhaustive and rigorous collection of real estate transactions, data processing and the restoration of a coherent real estate repository built with unified management rules and semantics.

The team is, among others, composed of statisticians and experts in real estate.

4.1.3. Index Disruption – Extraordinary events

“Index Disruption Event” or “Extraordinary Event” means, in the determination of the Index Administrator, the occurrence of any of the following events affecting the Index:

- Temporary loss of sufficient data
- Index Contributor default to provide the input data on time
- the Index Administrator considers that the Index Contributor cannot pursue its role as Index Contributor

If an Index disruption or an Extraordinary event occurs, the Index Administrator will take any appropriate action to remedy the disruption.

4.2. Computation methodology

The choice of the methodology has been dictated by the following goals:

- The PARISSQM aims to represent the “typical” transacted price of a square meter in Paris.
- Construction aims to be easily understandable by the public and particularly by real estate markets participants
- The methodology must be easily replicable to other cities to allow for Index comparison between different geographical areas.

The PARISSQM is based on the computation of median prices observed over the reporting period.



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To mitigate potential bias linked to the changes in the proportion of properties sold in higher and lower priced arrondissement from one period to the other, stratification method (or mix-adjustment) is used according to the following steps:

1. Strata aiming to group transactions by geographical location (in our case by arrondissement) and long-term price levels are defined every year
2. For each stratum, a median price index is computed for the corresponding stratum. Then a smoothed price index based is computed for the corresponding stratum.
3. The aggregated Index level is computed using a Fisher Formula Index and the number of selected transactions for each stratum.

The resulting index is the PARISSQM.

4.3. Amendment to the Index methodology

The Index methodology may be supplemented, amended in whole or in part, revised or withdrawn at any time. Supplements, amendments, revisions and withdrawals may also lead to changes in the way the Index is compiled or calculated or affect the Index in another way.

In the absence of exceptional circumstances affecting the Index calculation or methodology, the Index is reviewed annually in March. The review includes re-testing model parameters and particularly re-defining the new stratum for the coming period.

Changes in Index methodology or computation parameters decided during the annual review are published on the last Index Eligible Business day of March and implemented on the first Index Publication Day of April.

The results of the Steering Index Committee will be published in a press release on COMPASS, Kalstone and Euronext websites and distributed timely to data vendors and major news sources.

The Index Administrator shall inform Index licensees of any amendment to the Index methodology with reasonable prior notice. The notification document shall provide Index licensees with the amendments, the reasons for making such amendment and the effective date of the changes.

5. Cessation of the Index

The Index Administrator has established procedures to be followed for termination of a Compass Index. Any termination of a Compass Index must be approved in advance by the Index Committee. A notice to licensees will be published in advance of the termination.

Before disactivating an index, the Index Administrator always determines whether there are any listed financial products issued on that index as the underlying. The Index Administrator terminates indices only provided that:

- a) All existing commercial customers have been consulted, and commercial relationships have been terminated or transitioned accordingly.
- b) Consultations with stakeholders have not led to the decision to continue the index.

The Index Administrator is not responsible for determining or offering an alternative index to its subscribers or other stakeholders when the Index is terminated. However, the Index Administrator may recommend an alternative index if it considers, based on various criteria, that this alternative index could be a credible substitute index.

