EUROPEAN HOTEL PRICE

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EXECUTIVE SUMMARY

EHL's Institute of Real Estate, Finance & Economics is pleased to present the first update of the European Hotel Transaction Price Index that was initially launched last year. **In 2020, European hotel transaction prices decreased on average by 11.1% vs. the prior year.** The total transaction volume recorded by Real Capital Analytics (RCA) decreased to EUR 10.5 bn, which is 59% lower than the record transaction volume of 2019.

To date, the impact of the Covid-19 crisis on the European hotel real estate sector is significantly smaller than the -30% drop associated with the 2009 global financial crisis. This may be surprising, given the fact that the global pandemic has hit the hospitality industry at its core. Besides the outlook for a recovery on the back of accelerating vaccination campaigns, two major factors have contributed to the relatively modest price declines so far. First, government support for hotel staff and owners in many countries has preserved a more severe wave of bankruptcies and forced selling in the European hotel real estate sector. Secondly, liquidity interventions by central banks and policy makers have led to record high stock market indices and record low bond yields in the credit markets. As a result, cash rich investors are waiting on the sidelines, ready to invest in higher yielding investment alternatives such as hotels.

European Hotel Transaction Price Index
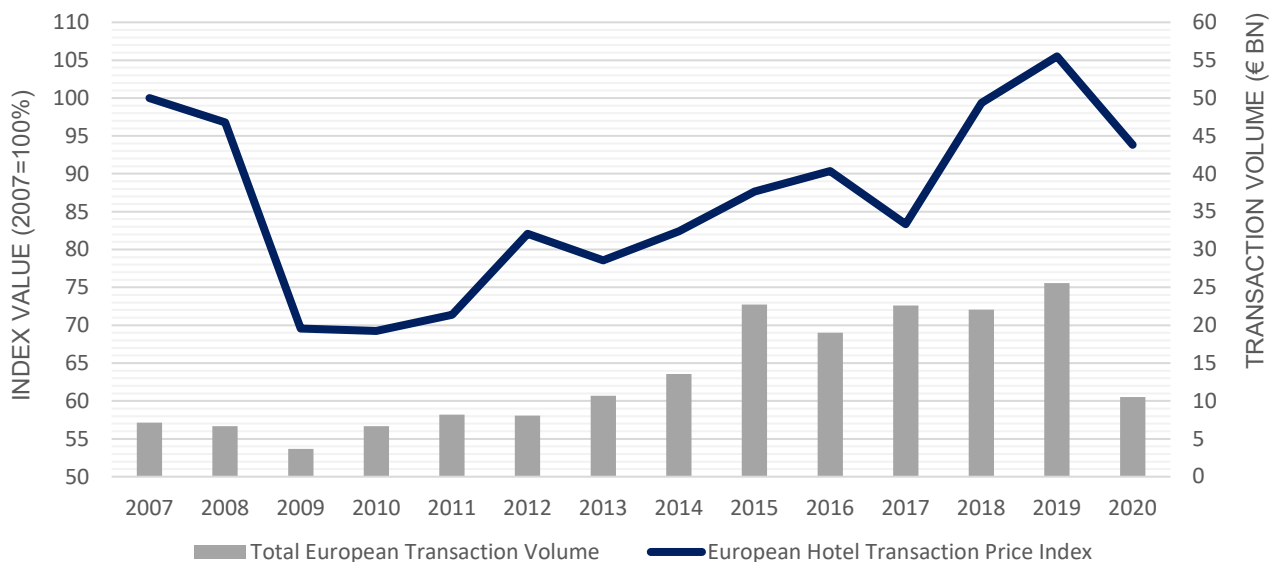
EHL European Hotel Transaction Price Index

	Index	y-o-y change in %	No. of obs.	Total Volume in € bn.
2007	100,0		59	7,1
2008	96,8	-3,2%	51	6,7
2009	69,5	-28,1%	49	3,7
2010	69,2	-0,4%	57	6,7
2011	71,4	3,1%	87	8,2
2012	82,1	15,0%	82	8,1
2013	78,6	-4,3%	112	10,7
2014	82,4	4,9%	153	13,6
2015	87,7	6,3%	160	22,8
2016	90,4	3,1%	173	19,0
2017	83,3	-7,8%	163	22,6
2018	99,4	19,3%	124	22,0
2019	105,5	6,2%	146	25,6
2020	93,8	-11.1%	76	10,5

On a cautious note, governmental support programs will eventually expire. Moreover, business travel and international travel may be structurally challenged for sustained periods of time. The fundamental recovery of the hotel real estate sector may thus be more bumpy than implied by current transaction price levels. We look forward to providing the next update of the European Hotel Transaction Price Index in spring 2022.

To the best of our knowledge, this is the first transaction-based price index of the European hotel investment market documenting a significant decline of hotel prices following the Covid-19 pandemic. In our sample, the average transaction price per hotel room in 2020 *increased* by 17% compared to 2019. However, rather than an increase in the price level, this surprising result reflects the higher quality of hotels transacted in 2020. In fact, our 2020 hotel transaction sample is characterized by a higher share of full service vs. limited service hotels, more transactions in the central business districts of a city, and significantly higher location ratings.

Only 221 hotels have been sold between April-December 2020, representing a 63% drop from the three quarters one year ago.

The hedonic regression methodology that is the basis for our European Hotel Transaction Price Index allows for the estimation of yearly hotel transaction price levels, while controlling for the qualitative attributes of the hotels sold in a particular year. In turn, we report year-over-year price changes for a constant quality set of hotels.

DATA AND DESCRIPTIVE STATISTICS

The EHL Hotel Transaction Price Index is based on the whole spectrum of European hotel transactions recorded in RCA's commercial real estate transaction data base. To increase the reliability of our index estimates, we focus on confirmed transaction prices of single-hotel transactions from cities with at least five transaction observations.

The 2020 version of the index is based on 1,334 hotel transaction across 26 European countries between 2007 and 2020. The data basis is representative of the diversity of the European hotel sector. The majority of transactions occurred in the UK (27%), Germany (21%), France (9%) and Spain (7%). 73% of transactions are from metropoles with more than 500,000 inhabitants, with the remaining transactions occurring in smaller cities. The share of full-service hotels as opposed to limited-service hotels is 64%. Most hotels are associated with major brands, while only 38% of them are independent.

How we increased the reliability of the index estimates

1   Our empirical approach requires us to clearly attribute an individual hotel's price to its specific characteristics. We thus remove all portfolio transactions to exclusively focus on single-hotel transactions.

2   We remove all observations where the transaction price has been "appraised" or is based on "street talk".

3   We only take into account hotel transactions from cities with at least five observations in total, in order to be able to estimate a city's price level reasonably well.

26 EUROPEAN COUNTRIES
1 334 TRANSACTIONS

27%
21%
9%
7%

73% TRANSACTIONS
IN METROPOLE CITIES

64% FULL SERVICE HOTELS

38% INDEPENDENT BRANDS

METHODOLOGY

The European Hotel Transaction Price index is estimated based on the following hedonic regression model:

$$Ln(P_{i,t}) = \beta_0 + \sum_t \delta_t D_t + \sum_j \beta_j H_{i,j} + \varepsilon_{i,t}$$

Where $Ln(P_{i,t})$ is the natural logarithm of the transaction price for hotel i sold in year t, β_0 is the intercept of the regression model, δ_t represents the coefficients for the year dummy variables (or index values) for the respective years D_t in which the transaction takes place, β_j represents the coefficients on the effect of the vector of hedonic price attributes H_j, $\varepsilon_{i,t}$ is the error term.

Hedonic regression-based real estate indices pool all observations throughout the sample period and use year-dummy variables D_t to estimate the transaction price level in a specific year relative to the base year. We define 2007 as the base year of the index. The estimated coefficients δ_t for the years 2008 to 2020 thus represent the change in the price level for each year relative to 2007.

To understand the merits of hedonic regression-based indices, consider a simplistic "average transaction price per room"-index as the counter example. In years with many upscale hotel transactions in expensive cities such as London or Paris, such an index will tend to record unusually high levels of average transaction prices. In the given example, this is however largely because of the specific characteristics of the transaction sample in that period, and not necessarily because of the general hotel transaction price level in that year. Note that the latter should be the ultimate objective of a well-constructed index.

The hedonic regression approach circumvents this problem by explicitly taking into account the characteristics (e.g. Parisian full-service hotel in a strong location) of any hotel sold in a given year through the vector $H_{i,j}$. As all the hedonic factors are thus implicitly held constant, any changes in price levels is captured only through the year-dummy variables D_t. The table on the next page contains a description of the hedonic factors we control for.

Overall the model explains 68% in the variation of European hotel transaction prices.

CONTROL VARIABLES

FACTOR	VARIABLE	DESCRIPTION
Location	CITY	City-level indicator variable (e.g. Amsterdam or Brussels), which accounts for a city's price level.
	CBD	Indicator variable denoting whether the hotel is located in a city's central business district (CBD).
	RATING	User rating of the hotel's location obtained from Google travel.
Quality	AGE	Hotel's age in years, included in the model as a squared term to allow for non-linear aging effects. Moreover, we employ an indicator variable denoting whether the hotel was built before 1930.
	RENOVATED	Indicator variable denoting whether the hotel was renovated within the last three years.
	RENOVATION	Indicator variable denoting whether the new buyer plans a renovation, implying the hotel is currently in need of renovation.
Size	ROOMS	Hotel's number of rooms, included as a squared term to allow for economies of scale.
	FLOORS	Number of floors of the hotel building relative to the average number of floors in the city.
Operations	FULL-SERVICE	Indicator variable denoting whether the hotel provides full- or limited-service.
	INDEPENDENT	Indicator variable denoting whether the hotel is independent or branded.

ACKNOWLEDGEMENTS

LIABILITY DISCLAIMER

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