A contrast between indices produced with Booking.com data and direct survey data.
Swiss case study for the regions Bern and Lucerne SPPI.

## Angela Hernandez Santacoloma, Section PRICE

 Thursday, 22 ${ }^{\text {sd }}$ September 2022Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra
Swiss Confederation

## Presentation Landscape

The Hurdle
A gap between an index being produced from different sources

The path ahead


Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra
Swiss Confederation

## A NEW HOTEL INDUSTRY INDEX

Create a robust hotel index

Booking.com total 27 hotels. 12 Bern, and 15 Luzern

Survey total 29 hotels. 13 Bern, and 16 Luzern.


## COVID - 19



- 7.9 million in overnight stays for the big Swiss cities.A reduction in overnight stays of $65 \%$ among the major Swiss cities Geneva, Zürich, and Basel.-15.8 million in overnight stays for the Swiss hotel industry.
Confederaziun svizra


## swiss Confederation

## Hotel Reservation System



Schweizerische Eidgenossenschaft
Confédération suisse
Confederaziun svizra

Swiss Confederation

## Two elements to consider

-The purpose of the hotel is to set the price close to the maximum willingness to pay of its customer's, for which the hotel takes into account various factors available in real-time and then set the final price at the point of reservation. All the process takes place in real-time through digital systems.
-Factors influencing hotel room reservation:

- Date of arrival
- Time of booking
- Advanced booking (beforehand between six months and a week before arrival)
- Availability and demand for a type of room
- Hotel location
- Length of stay
- Number of hotel stars
- Quality of the hotel (review)
- Channel used to book the room (OTA's, online aggregator, hotel website, distribution system).


## The Observations 0.1

Prices are further subdivided when the internet appears and the establishment of e-commerce.
PRICE
before THE INTTERNET
Listing prices

> Transaction prices
after THE IINTERNET
Online
In-store


Note: The left panel shows the price of a particular skincare product sold at a particular offline shop, while the right panel shows the price of the same product sold at an online shop. The black and red lines represent the list and transaction prices.

## The Observations 1.1




## The Observations 1.2

## Overnight stay 2014 - April 2022



Indices Comparison Bern


## Most Important take aways

## MOST IMPORTANT REFLECTION:

A DISTICTION TO KEEP IN MIND:

It is probable for some branches that internet prices and in-store prices do not behave the same.

When working with internet data,
consider if all prices behave closely:

1. online list prices
2. online transaction prices
3. in-store list prices
4. in-store transaction prices

First, a simple transaction prices index is collected directly from the hotels in a traditional manner. Second, a hybrid form of a composed index including both transaction and online listing prices indices since they are both valid.

Schweizerische Eidgenossenschaft
Confédération suisse onfederazione Svizzer
Confederaziun svizra
Swiss Confederation


ANGELA HERNANDEZ SANTACOLOMA angela.hernandez santacoloma@bss.admin.ch
swiss federal statistical office
Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera
Confederaziun svizra

