

Impact of seasonal character of services on the price index calculation in Travel agencies, tour operators and other reservation services

Maja Dozet, Josipa Kalčić Ivanić - CBS

Introduction

- Developed through the project and conducted via a web application based on an existing application
- Started in Q4 2015, three quarters covered so far
- Still a pilot survey, not yet dissemination of data

Sample design

Turnover coverage

| Nace code | Number of enterprises | Turnover coverage |
|-----------|-----------------------|-------------------|
| 7911 | 81 | >50 % |
| 7912 | 12 | >90 % |
| 7990 | 9 | >70 % |
| 79 | 102 | |

Cut-off method used

Source: Statistical Business Register, 2014, CBS

Most of the enterprises are small in terms of employees; 90 % enterprises have < 50 employees, 10 % have > 50 employees

Data on web questionnaire

In the first quarter of the year, reporting units are asked to fill in a questionnaire with data on turnover from the previous year and with breakdown of the turnover by groups of services they provide

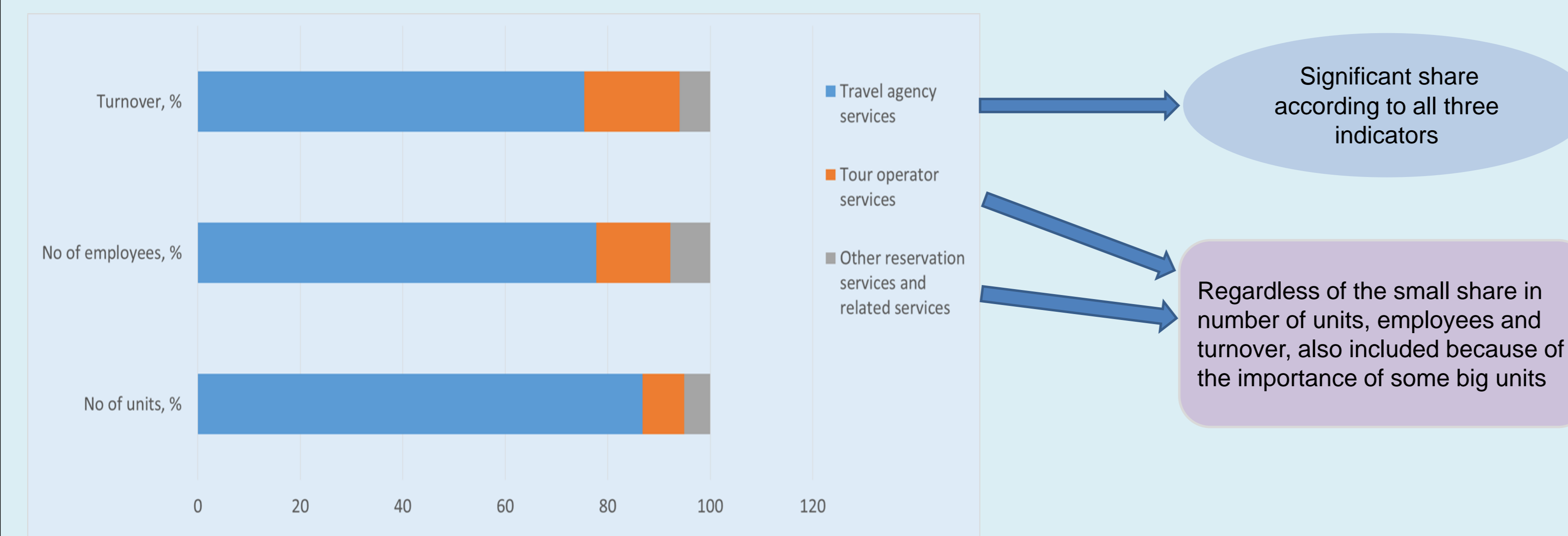
All service groups are well covered; classification from the web questionnaire is completely taken and related to CPA

Representative services for each of the service groups, as well as a detailed information on identified services, price formation and price in current and previous period are asked in the questionnaire every quarter

Classification and sector description

Statistical population consists of all active enterprises classified in one of N79 Nace Rev.2 according to their main activity and it contains 782 units, registered in the Business Register of Croatia, (2014)

Share of population

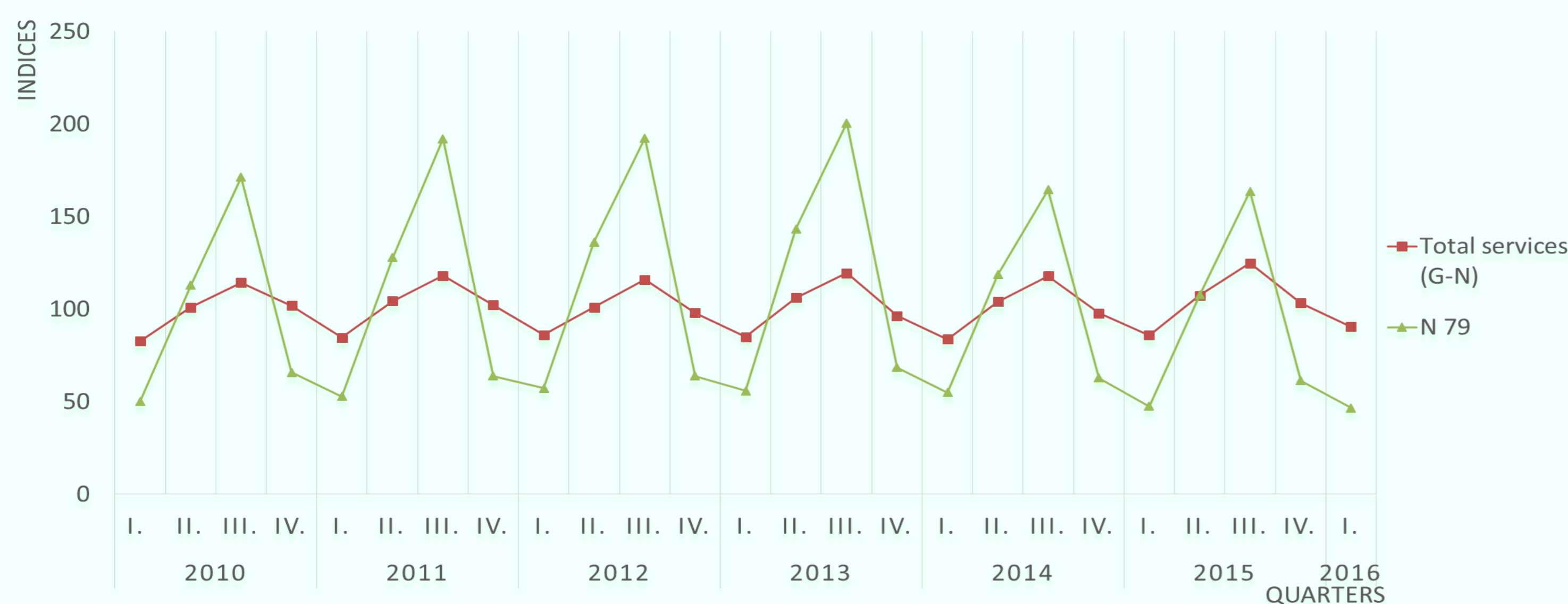


Source: Statistical Business Register, 2014,

The existence of Seasonal services poses some significant challenges in production of a quarterly SPPI for N79

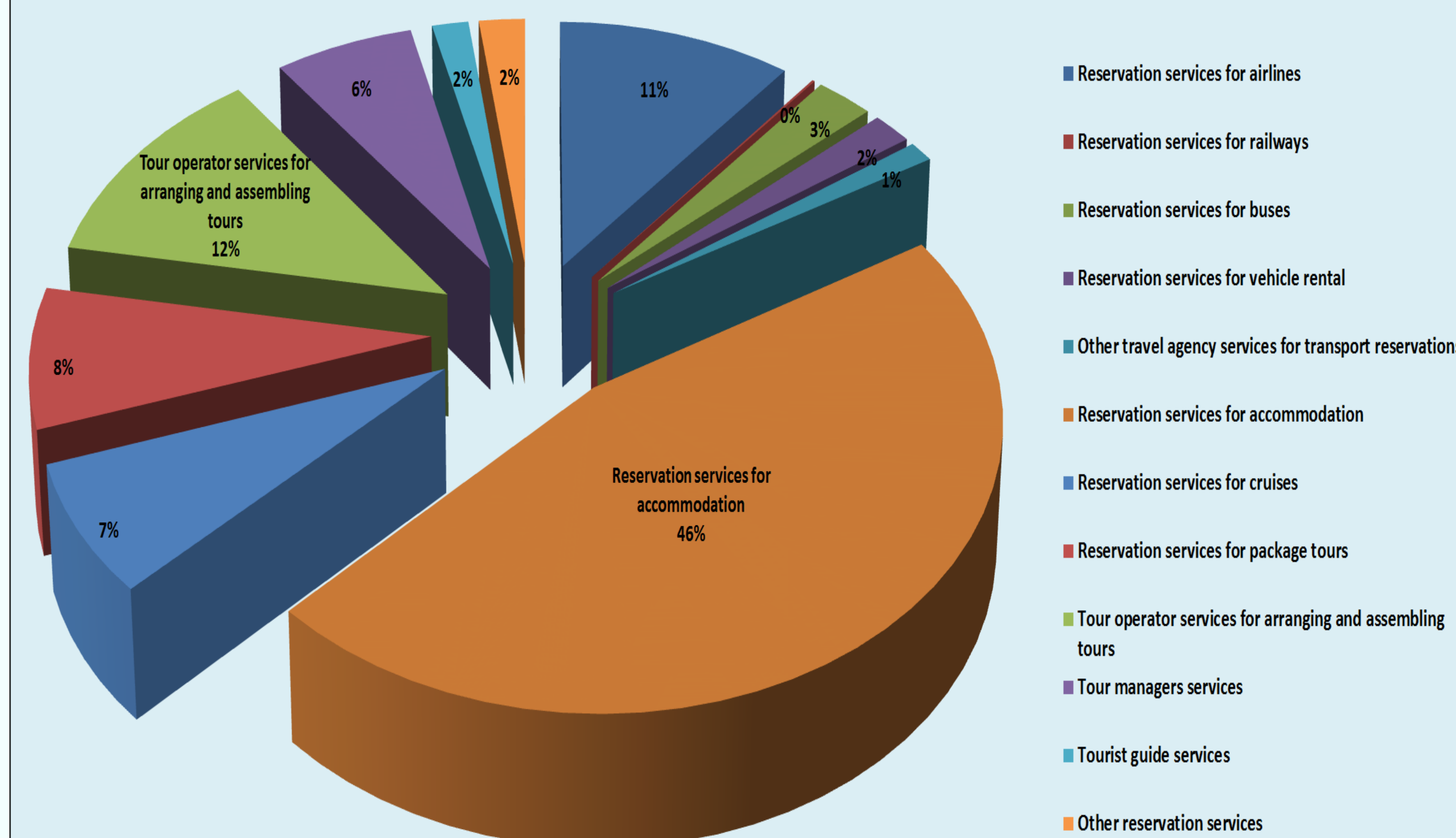
The gross turnover indices of the services sector and N79 (2010=100)

In the Q2 and Q3 turnover of the services sector and especially of N79 were significantly higher than in the Q1 and Q4

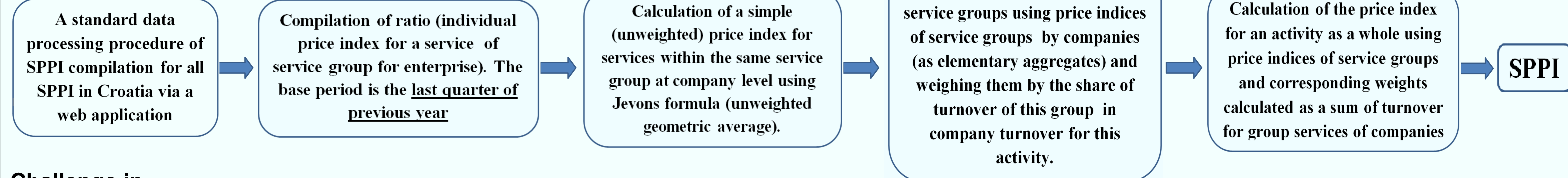


In Croatia many travel agencies are open only during the summer season, while some service providers are active and in other periods as well, but these services are often not typical and are carried out "just to survive", until they reach the summer season.

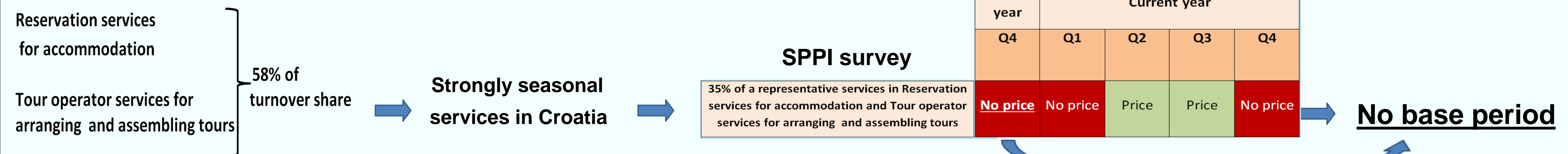
SPPI pilot survey share of Travel agencies, tour operators and other reservation services turnover by group of services, 2015



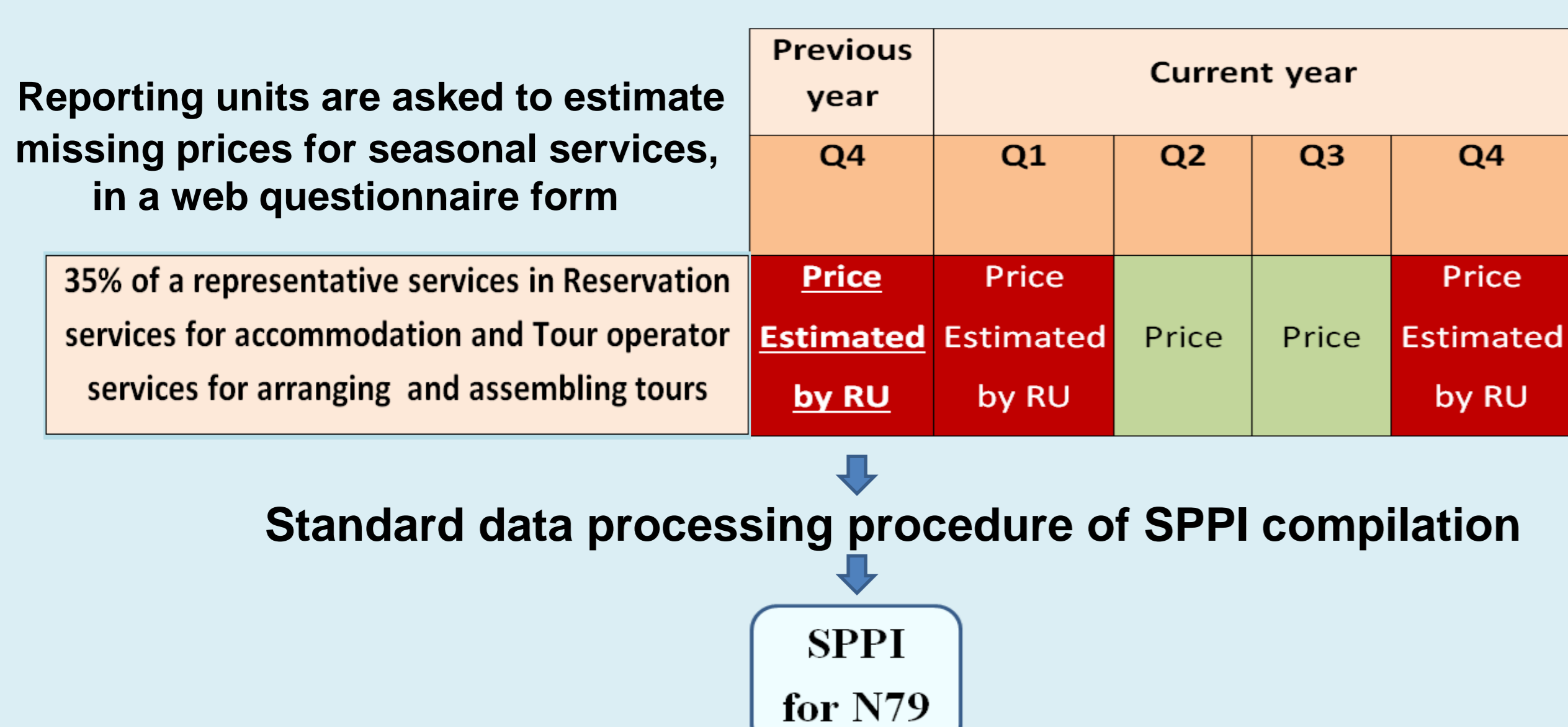
SPPI compilation



Challenge in producing of SPPI for N79



Estimation of prices for out-of-season services



Results and Conclusions

- The existence of seasonal products poses some significant challenges for production of a quarterly SPPI for N79
 - It was recognized that there is no completely satisfactory way of dealing with the absence of seasonal service prices in some periods as well in the base period
 - Decision was made that the best solution would be to ask the reporting units to estimate and impute the missing price in web questionnaire form (If the representative service had been provided in a particular period, what the price would have been?)
- The total turnover in the N79 in 2015 was only 4% of all turnover in the services sector. Why is this seasonal issue important?
- It is a first SPPI in Croatia with strongly seasonal services
 - In the near future, CBS will start developing an SPPI for the Accommodation services which are also highly seasonal services in Croatia
 - The total turnover in Accommodation services in 2015 was 14% of all turnover in the services sector

ISSUES FOR CONSIDERATION

- According to the standard data processing procedure of SPPI compilation in Croatia, is the estimation of missing prices by reporting units the best way of dealing with the absence of seasonal service prices?
- Is the estimations of 35% too many?