



# Modernization of the online questionnaire of the Swiss Structural Survey

**Group of Experts on Population and Housing Censuses**

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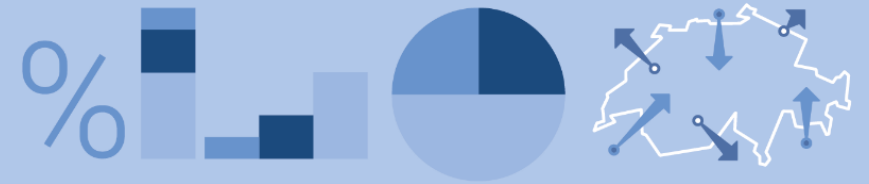
# Outline of the presentation

1. Brief overview of the Swiss Census and Structural Survey
2. Online first test
3. The 2018 structural survey
4. Results
5. Outlook and conclusion



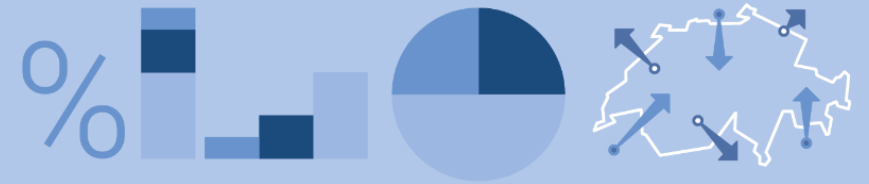
# 1. Brief overview of the Swiss Census

- Since 2010, the Swiss Census is register based
- It is annual
- It is supplemented by sample surveys
- It consists of 4 components
  - Register surveys
  - Structural survey
  - Thematic surveys
  - Omnibus surveys



# 1. Brief overview of the Structural Survey

- Annual sample survey
- Reference day: December 31<sup>st</sup>
- Gross sample size: approx. 320'000 persons
- Persons aged 15 or older, part of the Swiss permanent resident population, living in private households
- Participation is compulsory, two reminders
- Mixed mode: online (eCensus) and paper questionnaires



# 1. Data validation

- Data from paper and online questionnaires are validated
- Automatic codification
- Manual treatments by temporary employees
- Telephone call-back procedure by external institute for questionnaires that hold incomplete or inconsistent information
  
- The external institute also operates the census hotline



# 1. eCensus return rate up to 2017

Structural Survey	eCensus return rate %
2010	23.6%
2011	25.8%
2012	26.9%
2013	27.2%
2014	27.4%
2015	28.6%
2016	30.1%
2017	31.0%





## 2. Online first test

### Initial situation

- eCensus return rate at around 30%
- Need for the modernization of the online questionnaire
- New scanning partner from 2019 on
- Will to increase data quality
- Demands of the digital age



## 2. Online first test

### Test setup

- Test in parallel to the 2017 structural survey
- Test sample of 16'000 persons (gross)
- People in the test sample receive **only** an invitation letter with access information to the online questionnaire, no paper questionnaire



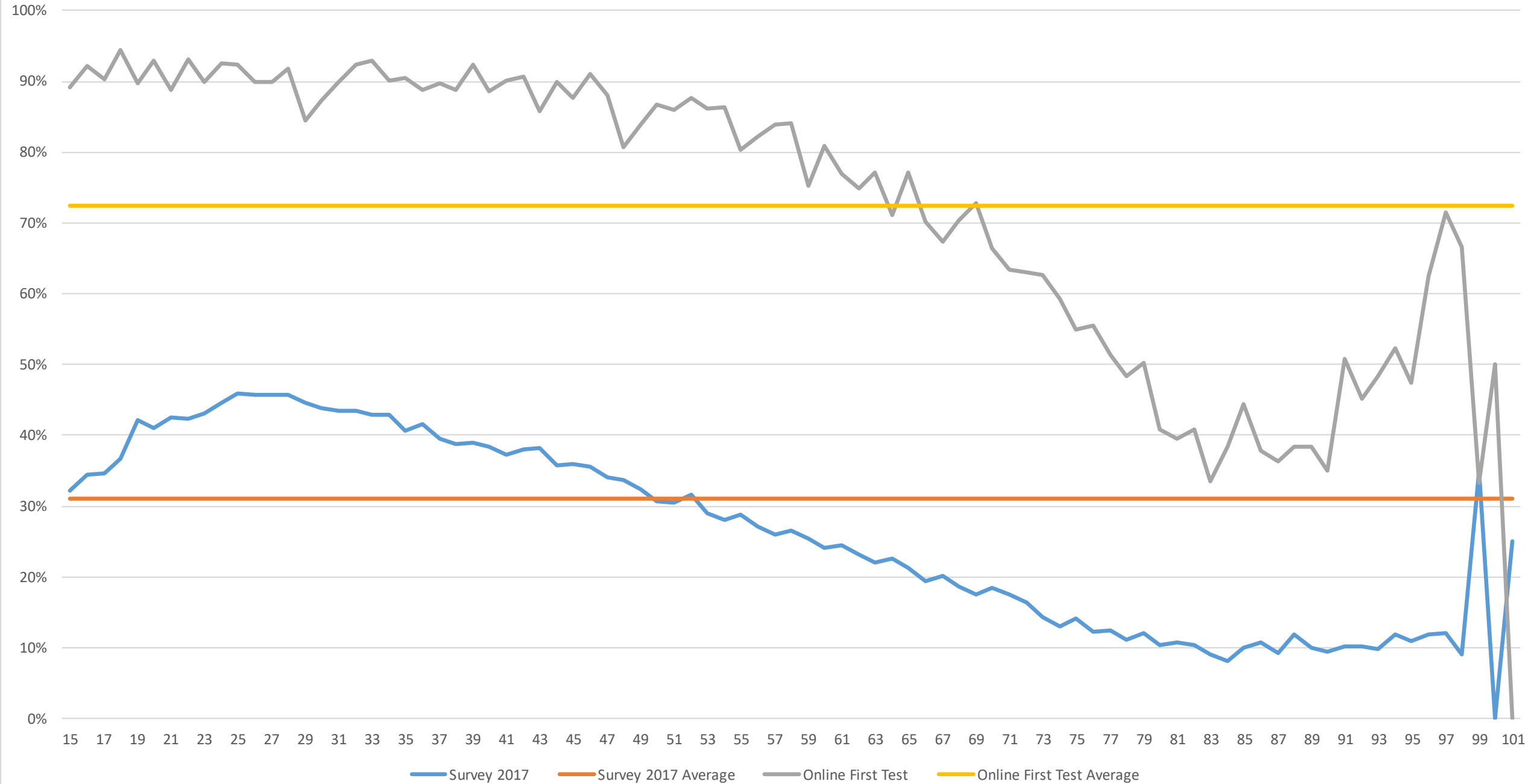


## 2. Online first test

### Results

- Response rates of the 2017 structural survey and the online first test almost identical
- eCensus return rate for the online first test was **72.5%**
- eCensus return rate for the 2017 structural survey was 31.0%
- Age is the most important variable for explaining response via eCensus

# Online questionnaire return rates per age

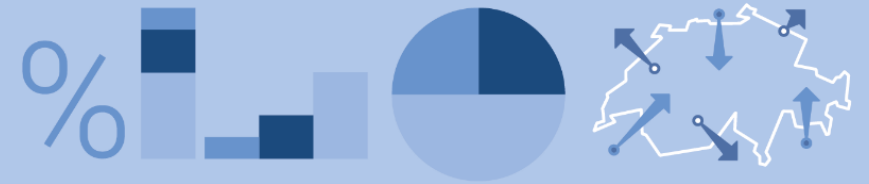




## 2. Online first test

### Results

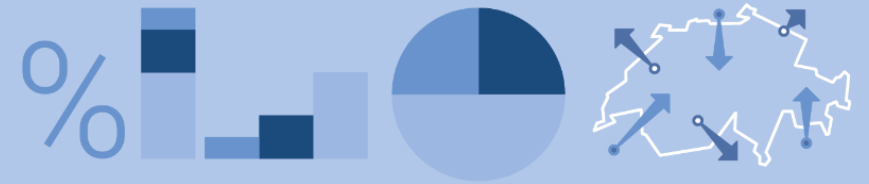
- People aged 60 and older often order paper questionnaires
- Order rate for the online first test sample: 17.2%
- Order rate for the 2017 structural survey: 1.6%
- Amount of manual treatments was reduced
- Amount of telephone call-backs was reduced
- Increase of data quality



## 3. The 2018 structural survey

### Setup

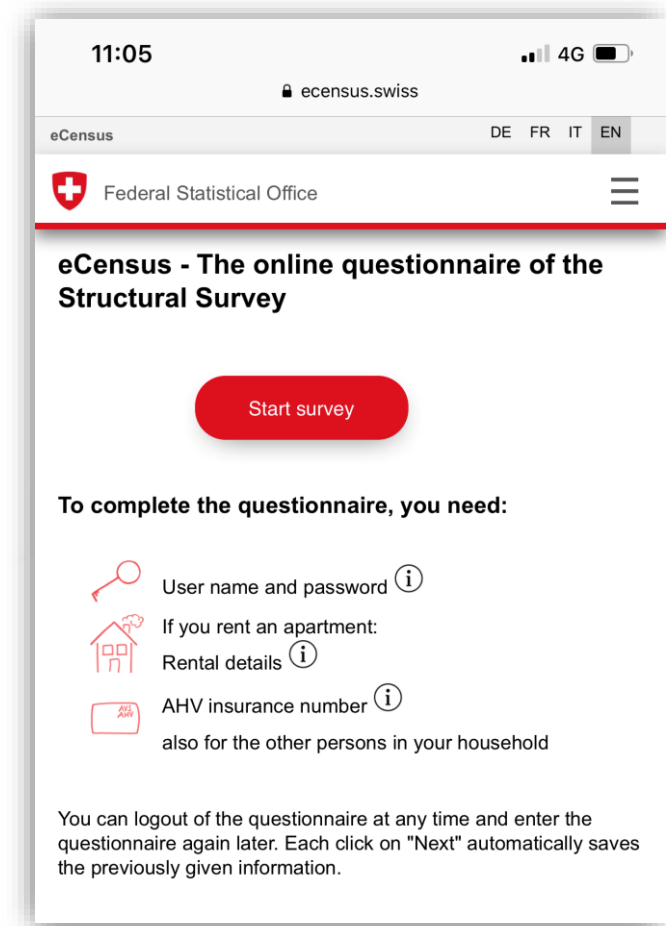
- Strategy for the initial send-out:
  - age 15-64: only letter with login (78.6% of the sample)
  - age 65 and older: paper questionnaire (21.4% of the sample)
- First reminder: only letter with login information
- Second reminder: paper questionnaire
- Important measure: sufficiently staffed hotline

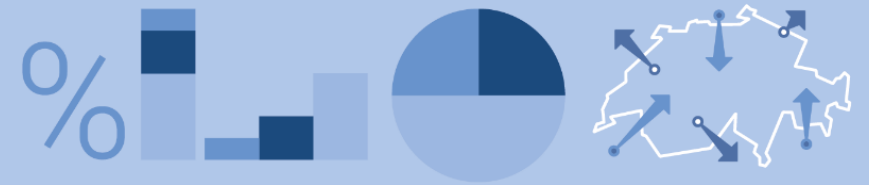


## 3. The 2018 structural survey

### Setup

- Programming of a new eCensus solution
- Responsive Web Design
- Modern and user-friendly design
- Languages: German, French, Italian, English
- Comprehensive tests on different devices and with different browsers



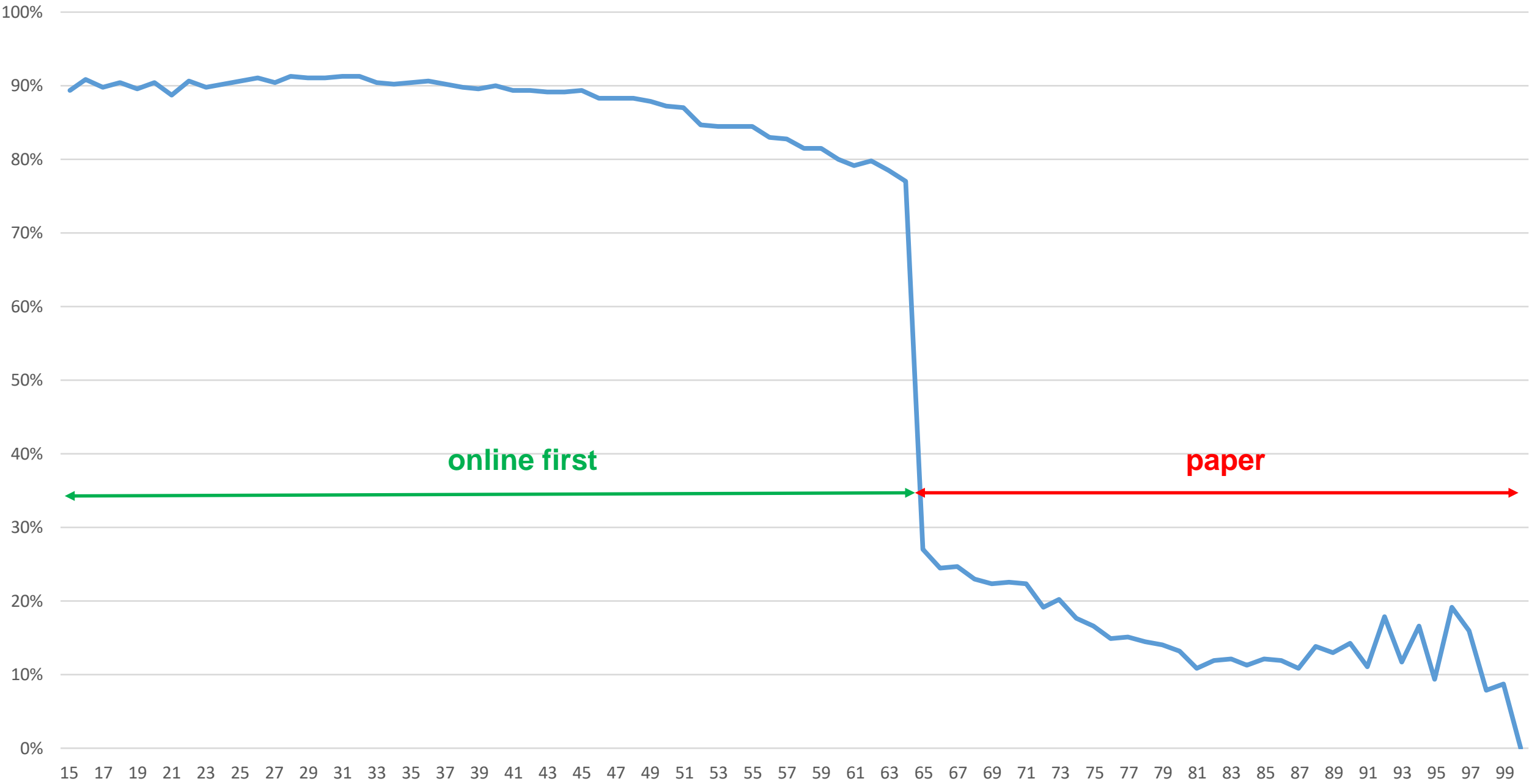


## 4. Results

### Return rates by channel

Sample / Channel	eCensus	Paper	Total
Part 15-64 (online first)	87.6%	12.4%	100%
Part 65+ (paper)	18.4%	81.6%	100%
<b>Total</b>	<b>71.9%</b>	<b>28.1%</b>	<b>100%</b>

# Structural survey 2018, online questionnaire return rates per age





## 4. Results

### Order rate of paper questionnaires

Sample	Order rate
Part 15-64 (online first)	5.1%
Part 65+ (paper)	2.8%
<b>Total</b>	<b>4.6%</b>







## 4. Results

### Further results

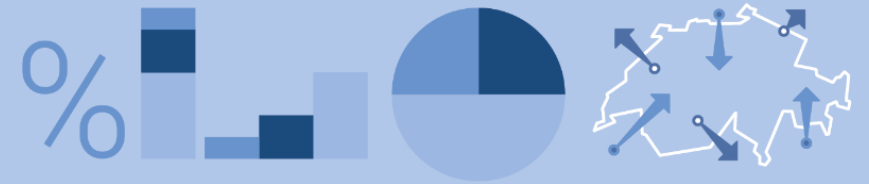
- Manual treatments and quality checks were reduced (64.9% vs 78%)
  - Telephone call-backs were reduced (9.4% vs 14.6% in 2017)
  - Average number of errors per call-back questionnaire: 1.72 vs 1.93
- 
- ✓ **Overall increase in data quality**
  - ✓ **Reduction of costs**



## 5. Outlook and conclusion

### Improvements for the 2019 structural survey

- Further increase the return rate via eCensus, in particular increase the use of smartphones
- Improvements in the eCensus questionnaire
- Automated procedure for recording paper questionnaire orders in the hotline



## 5. Outlook and conclusion

### Conclusion

- The online first procedure was very successful
- Efforts are part of the FSO strategy to increase use of mixed mode in surveys