

# Producing consumer price inflation statistics during the COVID-19 pandemic

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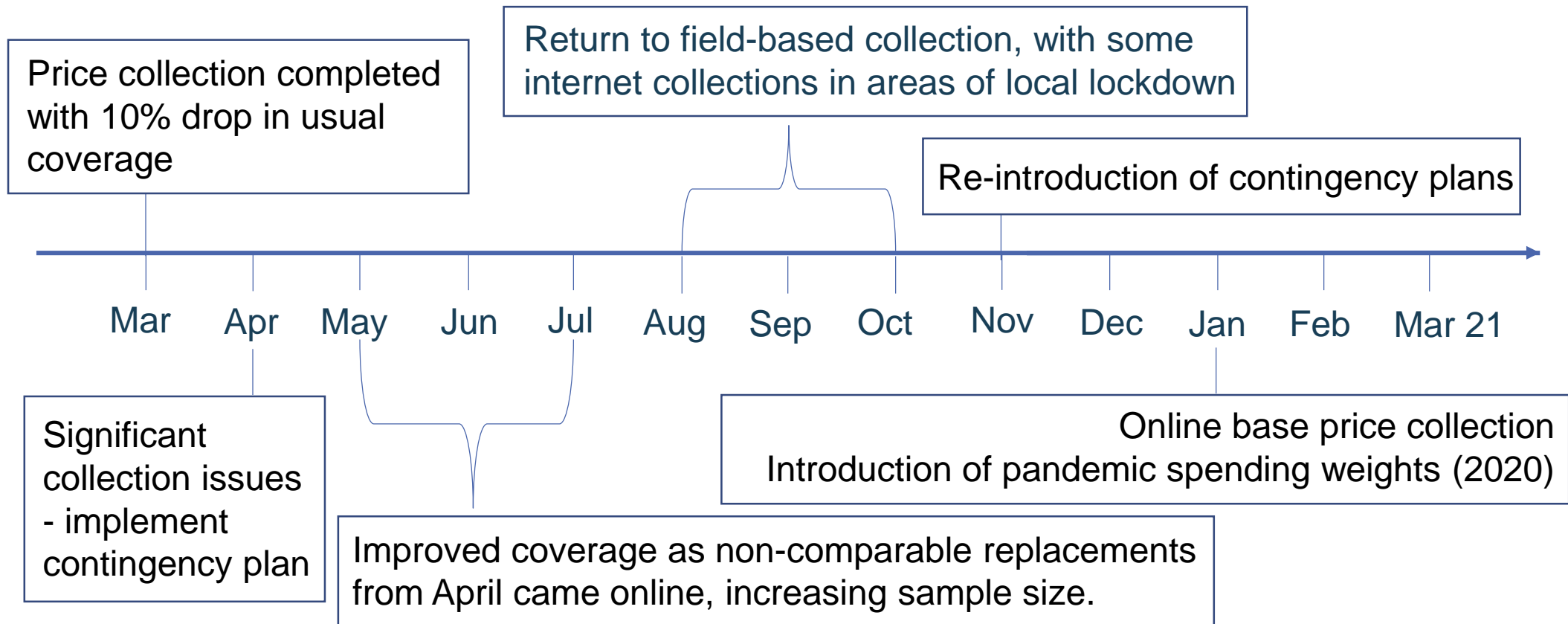
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**29<sup>th</sup> April 2021**

# Background

# Background: pandemic timeline



# Price collection and compilation

# Two main challenges

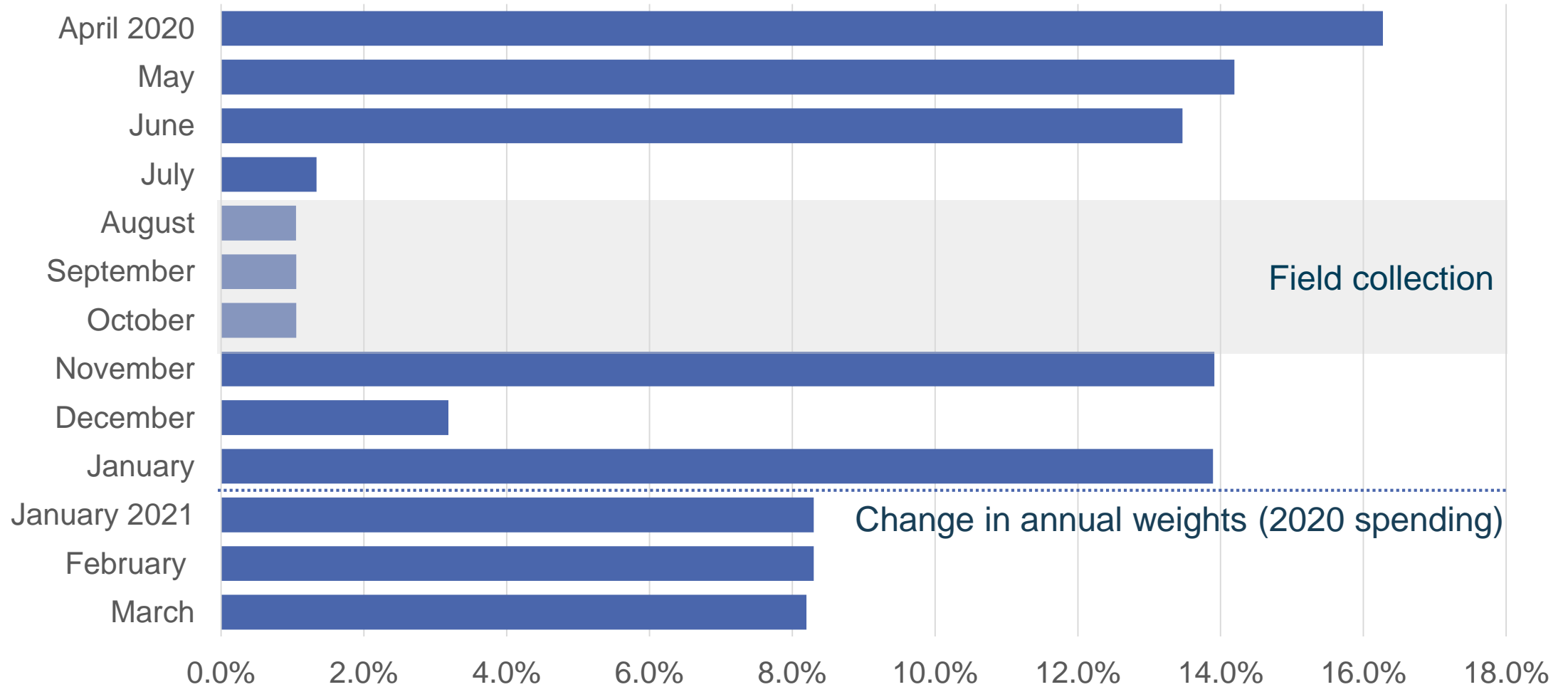
How do we collect prices?

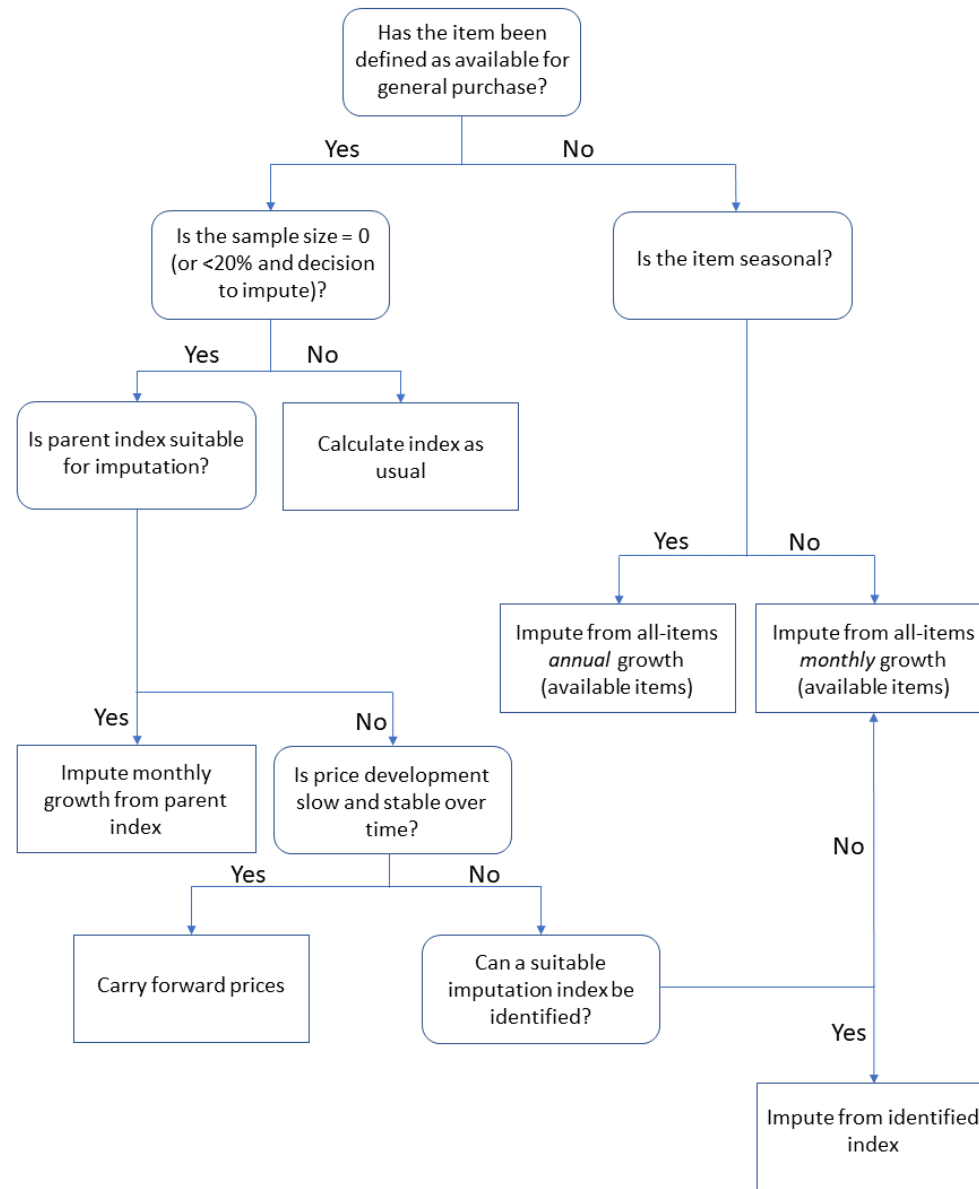
- Move to online collection and phone calls

How do we deal with items which are no longer available to purchase?

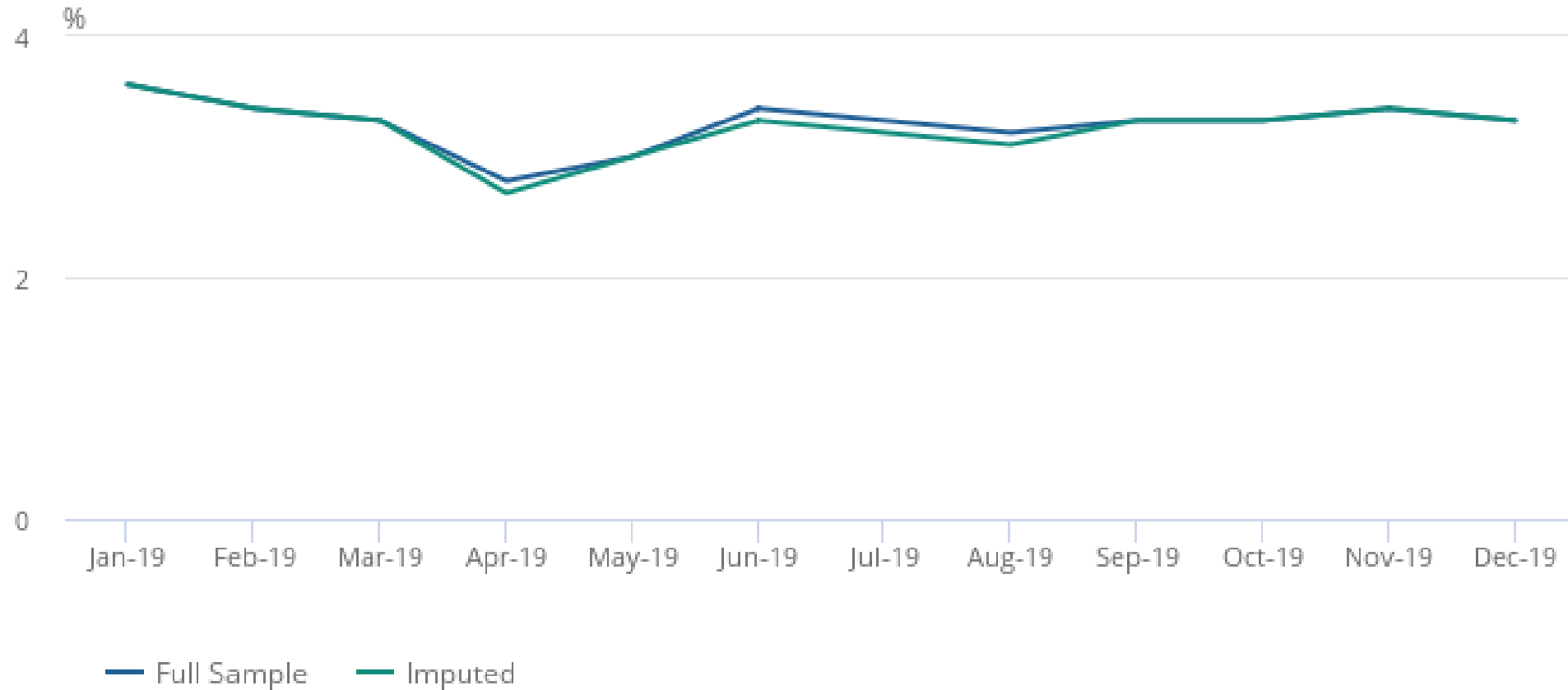
- Continue with fixed basket weights
- Impute to minimise impact on all-items measures

# Proportion of unavailable items by month (CPIH, %)



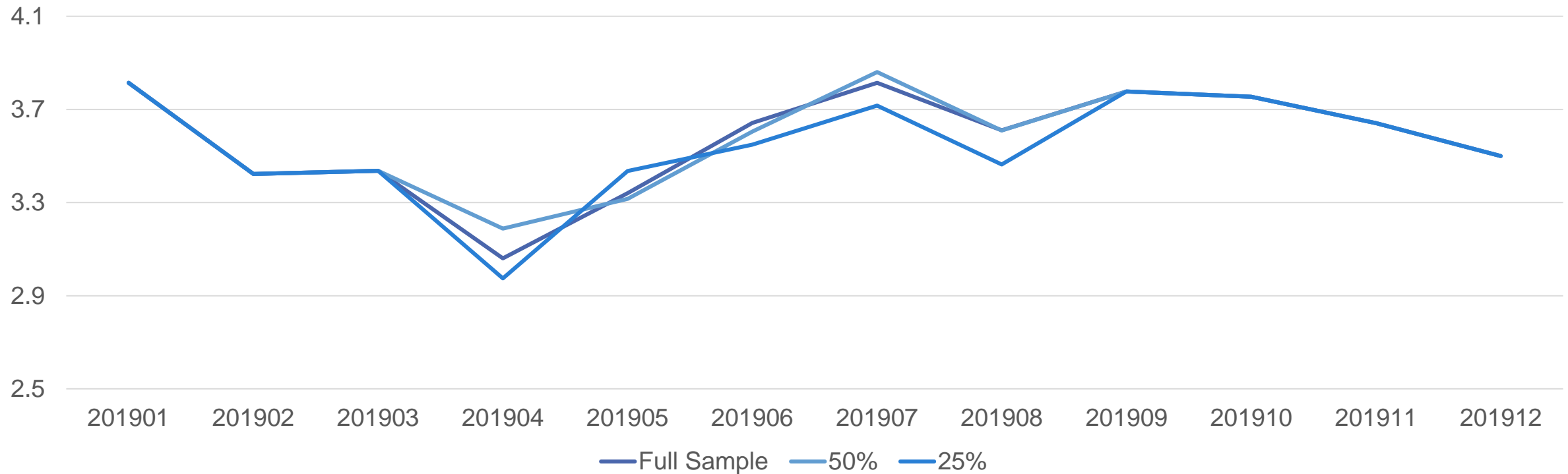


# Impact of imputation on CPIH (12-m%, 2019)





# Impact of low sample sizes on CPIH (12-m%, 2019)



# After the lockdown...

- Key principle for resuming normal price collection after lockdown:
  - Aim to preserve index levels prior to implementation of Covid-19 lockdown restrictions
- Impact on monthly and annual growths
- Localised lockdowns

# Weights for 2021

# Weights for 2021

Adjust 2019 HHFCE using a range of data sources, primarily 2020 Q1-3 HHFCE (Eurostat)

- Estimate 20Q4 expenditure ( $=20Q3 \times 19Q4 / 19Q3$ )
- Other adjustments (e.g. package holidays)
- Use 2020 estimates for most heavily affected spending categories (>25% of 2019 expenditure)

Adjusted Classes	Change (%)	Adjusted Classes	Change (%)
03.1.4 Cleaning, repair and hire of clothing	-26.3%	07.3.2 Passenger Transport by Road	-32.2%
05.1.3 Repair of furniture	-38.4%	07.3.3 Passenger Transport by Air	-73.1%
05.6.2 Domestic Services and Household Services	-24.4%	07.3.4 Passenger Transport by Sea	-79.5%
06.1.2 Other Medical and Therapeutic Equipment	38.9%	09.1.5 Repair of Audio-Visual Equipment	-21.3%
06.2.1 Medical Services and Paramedical Services	-63.2%	09.4.1 Recreational and Sporting Services	-41.0%
06.2.2 Dental Services	-42.0%	09.4.2 Cultural Services	-45.9%
06.3.0 Hospital Services	-37.4%	09.6.0 Package Holidays	-75.0%
07.1.1 Motor Cars	-24.4%	11.1.1 Restaurants and Cafes	-35.8%
07.1.3 Motorcycles and Bicycles	25.9%	11.1.2 Canteens	-57.5%
07.2.2 Fuels and Lubricants	-27.6%	11.2.0 Accommodation Services	-45.8%
07.2.4 Other Services	-27.4%	12.1.1 Hairdressing and Personal Grooming Establishments	-38.7%
07.3.1 Passenger Transport by Railway	-44.3%	12.1.2 Appliances and Products for Personal Care	31.7%

# Further considerations

## Quality assurance:

- APCP-Technical, internal QA from Prices and National Accounts
- Comparison against other data sources

## Prices:

- 8.3% of CPIH base period basket unavailable due to lockdown – impute notional base prices
- Chain linking ‘locks in’ imputations made during pandemic

# Supplementary analysis

Supplementary measure	Time period	Purpose
Faster indicators	Weekly Ongoing since Apr 20	Uses alternative data sources to give an early indication of inflationary movements for some spending categories
Re-weighted basket	Quarterly publication (Monthly series) Ongoing since Apr 20	Impact of monthly changes in consumer spending on CPI and CPIH
Impact of weight adjustments	Standalone, Jan 21	Impact of using 2020 data for some expenditure weights rather than 2019, as usual
Re-scaled basket	Monthly Apr 20 to July 20	Impact of imputing for unavailable items (rather than removing them from the basket)
Impact of price collection issues	Standalone	Impact of low sample sizes Impact of imputing for available items



## Effect of reweighting consumer prices basket (2020, 12-m%)

