



Update of the CPI weights and basket



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Update of the CPI weights and basket

Programme

Welcome: Tracy Daniels, Director: Corporate communications

Presentation: Patrick Kelly, Chief Director: Price statistics

Questions



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The need to update weights

Price indices comprise two main elements



Updated monthly



Determine the relative impact of price changes on aggregate indices and updated only periodically

The need to update weights

Price indices comprise two main elements

Weights



Weights of CPI are proportions of total household consumption expenditure

A weight is attached to each product in the basket of goods and services

The need to update weights



As weights get older they become less relevant

- Changing tastes
- New products and services
- Upper level substitution bias (upward bias)



International standards require that CPI weights are updated at least every five years



The CPI weights and basket last updated in January 2017

Data sources for weights

Household expenditure survey

“The HES [household expenditure survey] serves as the primary data source for deriving expenditure shares for the goods and services covered by the CPI”

2020 International CPI Manual: Methods and sources

Benefits of the household expenditure survey

- Covers all categories of consumer expenditure with detailed product values
- National and sub-national coverage
- Conceptual and classification consistency with CPI
- Covers all outlet types

Data sources for weights

Household expenditure survey

- Last expenditure survey: 2014/15 Living Conditions Survey
- No funding received between 2015 and 2021
- Some, but insufficient, funding allocated from 2022

- Present approach is a short term solution
- But this is a serious long term problem

Data sources for weights

National accounts

“ *National accounts data may be used when the HES is conducted too infrequently to ensure the reliability of the CPI* ”

2020 International CPI Manual: Methods and sources

Many developed countries use the Household final consumption expenditure (HFCE) component of the national accounts for regular updates of high level CPI weights

Data sources for weights

National accounts



Benefits

- National accounts provides a conceptual framework for CPI household expenditure
- Uses same classification (COICOP)
- Updated annually and so are timely
- Uses wide range of sources



Drawbacks

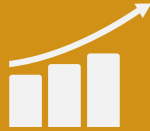
- Level of product detail
- Only national estimates
- Revisions

Stats SA published benchmarked national accounts data in 2021

Weights reference period



The period in which the consumption expenditure took place

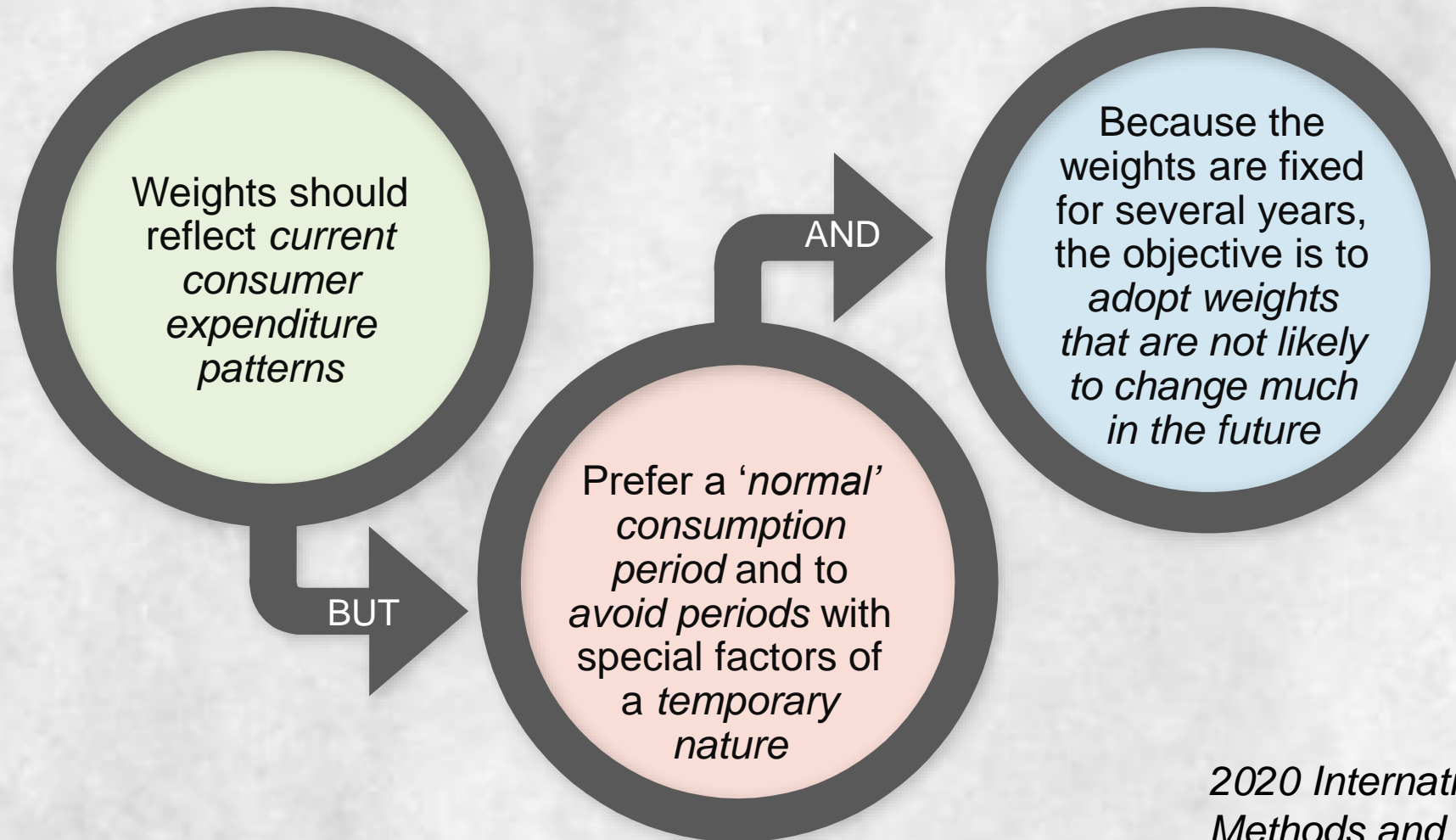


Current weights based on 2014/15 expenditure data and price updated to December 2016 using relevant inflation rates



Price updating is no longer encouraged internationally

Weights reference period



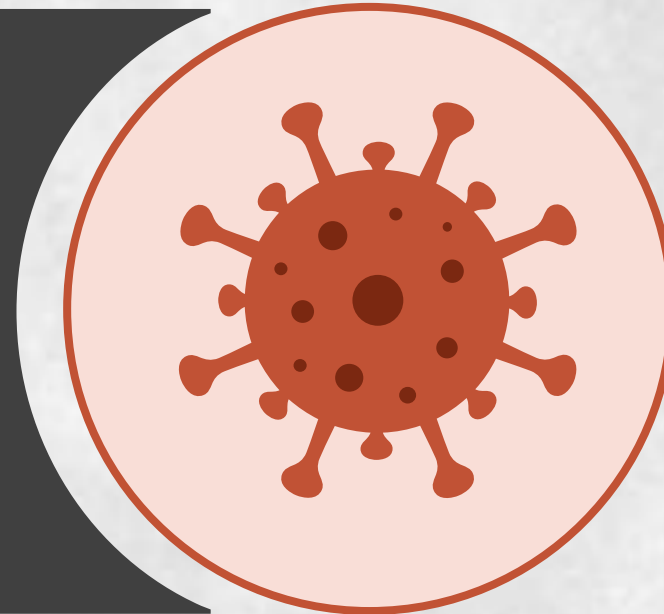
*2020 International CPI Manual:
Methods and sources*

Weights reference period

Expenditure patterns in 2020 complicated by COVID-19

Overall drop in economic activity

Specific categories affected: e.g. hotels, restaurants, alcoholic beverages, public transport dropped, streaming and data usage increased



Key features of this update

1. Update weights in January 2022 CPI release
2. Use National accounts (HFCE) growth rates
3. No price updating
4. Weights reference period : 2019
5. Maintain proportions for lower level detail – geography, deciles, pensioners...
6. Update basket for retail items
7. Rebase indices to December 2021 =100

Weights calculation

1. Current weights (December 2016) are starting point
2. Applied benchmarked HFCE growth rates from average 2016-2017 to 2019

Note: All calculations in Rands and total country

Weights calculation

Product level

Total country

	2016	2019	Diff
Food and non-alcoholic beverages	19,14	19,07	- 0,06
Alcoholic beverages and tobacco	5,87	6,23	0,36
Clothing and footwear	4,04	3,82	-0,22
Housing and utilities	22,54	22,54	0,00
Household contents	4,34	4,38	0,05
Health	1,29	1,33	0,03
Transport	14,72	14,74	0,02
Communication	2,62	2,42	- 0,20
Recreation and culture	4,83	4,90	0,07
Education	2,34	2,44	0,10
Restaurants and hotels	3,42	3,49	0,08
Miscellaneous goods and services	14,86	14,64	- 0,21

Weights calculation

High level change in weights

Headline (all urban)

	2012	2016	2019	Diff
Food and non-alcoholic beverages	15,41	17,24	17,14	-0,10
Alcoholic beverages and tobacco	5,43	5,82	6,26	0,44
Clothing and footwear	4,07	3,83	3,65	-0,18
Housing and utilities	24,52	24,62	24,49	-0,13
Household contents	4,79	4,35	4,37	0,02
Health	1,46	1,40	1,44	0,04
Transport	16,43	14,28	14,35	0,07
Communication	2,63	2,63	2,42	-0,21
Recreation and culture	4,09	5,16	5,20	0,04
Education	2,95	2,53	2,62	0,09
Restaurants and hotels	3,50	3,09	3,25	0,16
Miscellaneous goods and services	14,72	15,05	14,81	-0,24

Weights calculation

Selected changes in weights

Headline (all urban)

	2016	2019	Diff
Electricity	3,75	3,63	-0,12
Fuel	4,58	4,82	0,24

	2016	2019	Diff
Goods	48,70	48,68	-0,02
Services	51,30	51,32	0,02

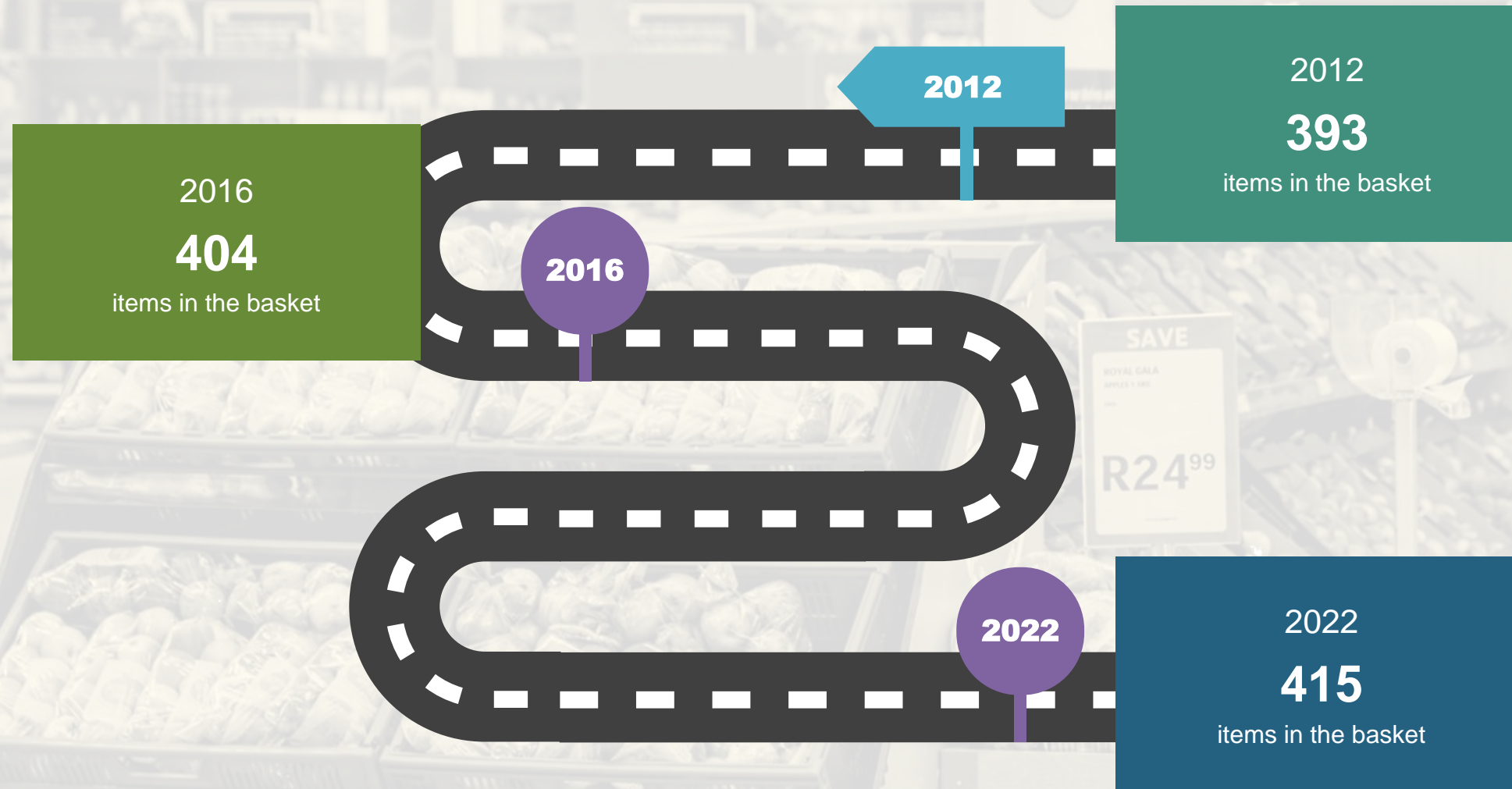
Basket changes

Method

1. Retailer data used for identifying basket changes
2. No changes made in groups with no data (mainly services)
3. Caution in removing products
4. New products considered if over threshold in retailer data

Basket changes

Highlights



Basket changes

Highlights

14
products
enter the
basket

2
products
leave the
basket

1
product
split into
2

4
products
combined
into
2

1
product
renamed

Basket changes

Food and non-alcoholic beverages



Basket changes

Alcoholic beverages

Gin




New products
in the basket

Basket changes

Household maintenance



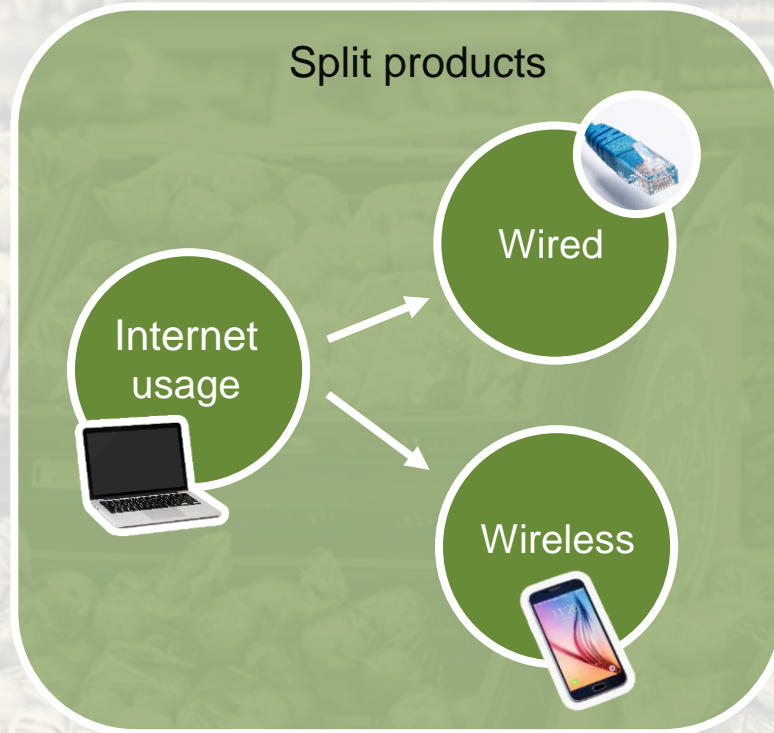
Floor
and wall
tiles



New products
in the basket

Basket changes

Communication



Basket changes

Furnishings, household equipment




New products in the basket

Combined products

Traditional lightbulb

Energy saving lightbulb



Basket changes

Recreation and culture



Basket changes

Miscellaneous – personal care



Basket changes

Method to allocate weights

New product in existing 4 or 5 digit groups

1. Aggregate expenditure total fixed
2. Value of new product determined by ratio to an existing product in the retail data
3. Weight of all products in group adjusted to fit in total of fixed aggregate

Basket changes

Method to allocate weights

New product in new 5 digit groups

Added expenditure by using ratio at 4 digit to get expenditure value

What to look out for

January 2022 CPI release published on 16 February and will contain

- Index reference period December 2021 = 100
- Updated weights (reference 2019)
- Updated basket
- Updated time series data sets (rebased, not revised)

Documents available today

- Official weights release (P0141.5)
- Explanatory note
- Press statement
- Thematic story

Thank you!

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