Ways of using scanner data for CPI
Examples from CPI Norway

CPI WORKSHOP BRUSSEL, 29 – 31 OCTOBER

TALL SOM FORTELLER

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Ways of using scanner data

- Replace field collection?

- Full scale use of data or part of the data?

- Direct from the retailers or through a third party?

- Daily, weekly or monthly price collection?

- Multiple use of the data?

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Methods for using scanner data in CPI

- Static approach

- Dynamic approach

- Homogenous products

- Multilateral method

  ◦ All methods are in use in the Norwegian CPI

Static approach

• Acts as manual price collection

• Furniture and furnishings

◦ Two retail chains

• Consumer electronics

◦ Two retail chains

◦ Challenging group to adjust for quality

◦ Currently investigating the possibility of other methods

◦ Dependent on specifications on products

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Dynamic approach

- Cut-off sampling

- Captures new items

- Pharmaceutical products

  ◦ Three pharmacy store chains, plus grocery stores

- (Previously food and non-food items)

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Homogenous products

- Combine multiple GTINs or Stock Keeping Units

- Clothing

  ◦ Two retail chains

- Recreation goods (Sports equipment)

  ◦ One retail chain

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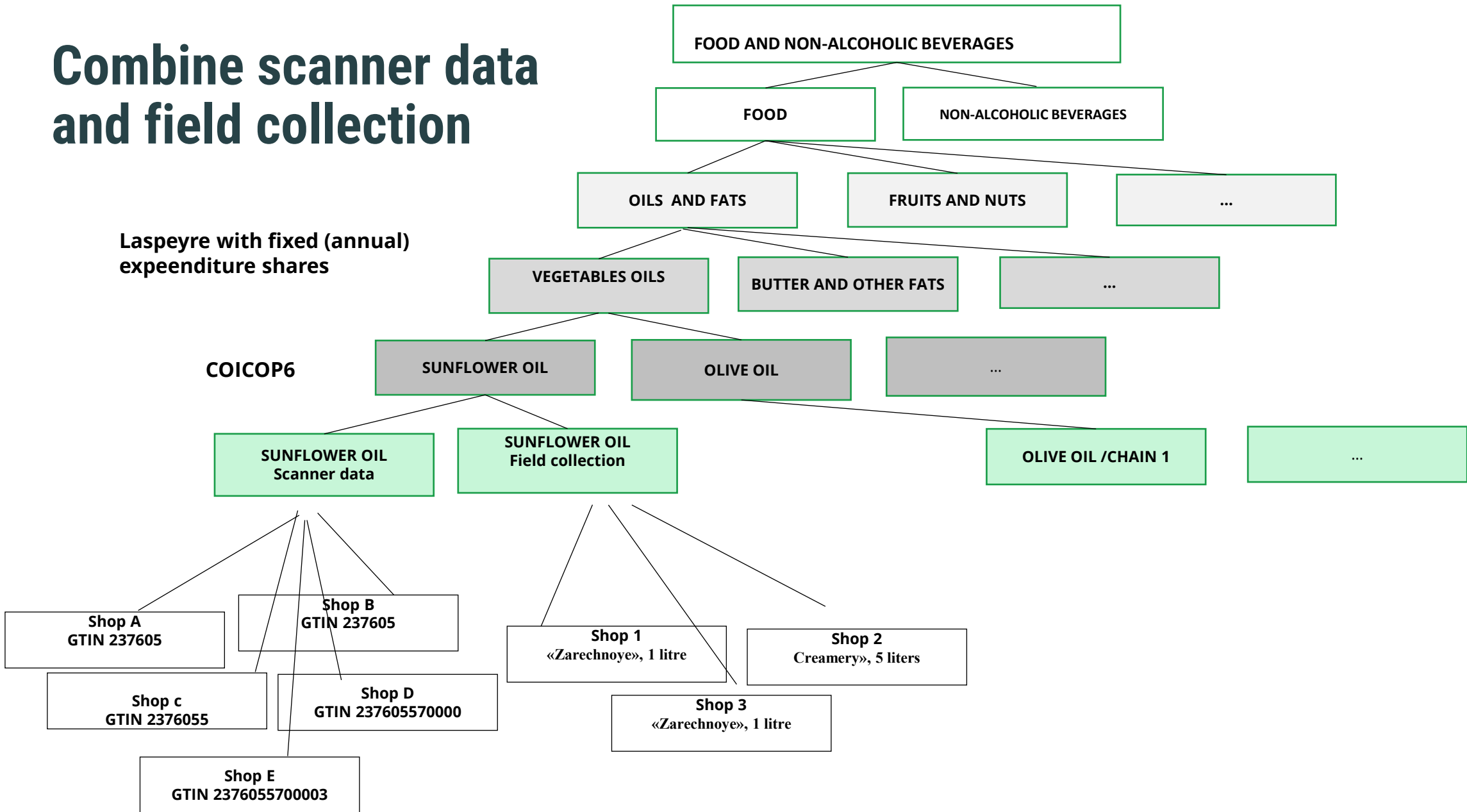
Multilateral method

- All products available in at least two periods of a time window

- Monthly weights are explicitly used in the index compilation

- Food and non-alcoholic beverages

- Beer, tobacco

- Fuels

- Non-food items from retailers

  ◦ Cleaning, maintenance and other non-durable household products (Coicop 05)

  ◦ Personal care products (Coicop 12)

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Combine scanner data and field collection

Laspeyre with fixed (annual) expeenditure shares

COICOP6

FOOD AND NON-ALCOHOLIC BEVERAGES

FOOD

NON-ALCOHOLIC BEVERAGES

OILS AND FATS

FRUITS AND NUTS

...

VEGETABLES OILS

BUTTER AND OTHER FATS

...

SUNFLOWER OIL

OLIVE OIL

...

SUNFLOWER OIL
Scanner data

SUNFLOWER OIL
Field collection

OLIVE OIL /CHAIN 1

...

Shop A
GTIN 237605

Shop B
GTIN 237605

Shop c
GTIN 2376055

Shop D
GTIN 237605570000

Shop E
GTIN 2376055700003

Shop 1
«Zarechnoye», 1 litre

Shop 2
Creamery», 5 liters

Shop 3
«Zarechnoye», 1 litre

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Multiple use: Annual revision of weights

	National Account	Scanner data
	Expenditures	Sales infromation
01.1.5 Oils and fats	**2351**	
01.1.5.1 Butter	928	868
01.1.5.2 Margarine	1064	995
01.1.5.3 Olive oil	178	166
01.1.5.4 Other edible oils	181	169
	2351	**2198**

- Food and beverage (and non-food)

- Distribute expenditures on **Oil and fats** to lower level

- Use the proportional distribution from scanner data

- 868/2198=0,3949

- 2351*0,3949= 928

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Multiple use, cont.

- Purchasing Power Parities (PPP)

- Dietary statistics

  ◦ Population's diet based on purchased food and beverages

- Not suitable for a household budget survey without additional information

  ◦ E.g. type of household to create socio economic groups

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