



Office for
National Statistics

UK Scanner Data Project – Update on Obtaining Scanner Data

Eurostat Scanner Data Workshop
September 2013

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Overview

- 2011 Eurostat grant
- Key lessons learnt
- Sample scanner data acquired by ONS
- Initial analysis of sample scanner data
- Next Steps
- Questions for workshop participants

2011 Eurostat grant

- Grant to undertake research on the exploitation of scanner
- Intention was to conclude with an end-to-end guide on the process of:
 - obtaining
 - implementing and
 - using scanner data

Key lessons learnt

- Legal requirement
 - Lack of relevant legislation is a key barrier for ONS
 - Although this is helpful it's often not enough on its own
- Approaching retailers and gaining cooperation
 - Compliment legal requirement
 - Support of senior management in NSI
 - Contact management in retail chains as they make the decision on whether to provide the data
 - Building trust and confidence, maintaining relationships and data sharing

Key lessons learnt

- **Maintaining Relationships**
 - Maintain a single point of contact at a working level
 - Consider own account manager
 - Consider a written contract
- **Dependence on data suppliers: risks and contingencies**
 - Dependence on retailer's ability and willingness to provide monthly data on agreed dates
 - Impact of retail chain sudden unable or unwilling to supply data

Sample scanner data acquired by ONS

- Obtained 2 years of sample scanner data from a UK based retailer
- Two items:
 - Shampoo
 - Toothpaste
- Data aggregated by month and includes key variables such as:
 - Sales (on and off deal)
 - Quantities (on and off deal)
 - Product description
 - Unique identifiers (EAN code)

Sample scanner data acquired by ONS

	A	B	C	D	E	F	G	H	I	J	K	L
1	ITEM_CODE	ITEM_DESC	CATEGORY	LADDER	EAN_CODE	SHELF_EDGE	UNITS_ON	SALES_ON	UNITS_OFF	SALES_OFF	YEAR	MONTH
2	00000007	7500000000	Haircare	SHAMPOO	0000000000	0000	0000	00000000	0000	00000000	2013	Apr
3	00000007	7500000000	Haircare	SHAMPOO	0000000000	0000	0000	00000000	0000	00000000	2013	Feb
4	00000007	7500000000	Haircare	SHAMPOO	0000000000	0000	0000	00000000	0000	00000000	2013	Jan
5	00000007	7500000000	Haircare	SHAMPOO	0000000000	0000	0000	00000000	0000	00000000	2013	Mar

- Analysis started early Aug 2013
- Results presented are based on off sale data for items available for the whole time period
- Indices are subject to revision as ONS refines its methods over the coming months

Fig 1: Shampoo - Paasche, Laspeyres, Fisher
Excludes sales < 100

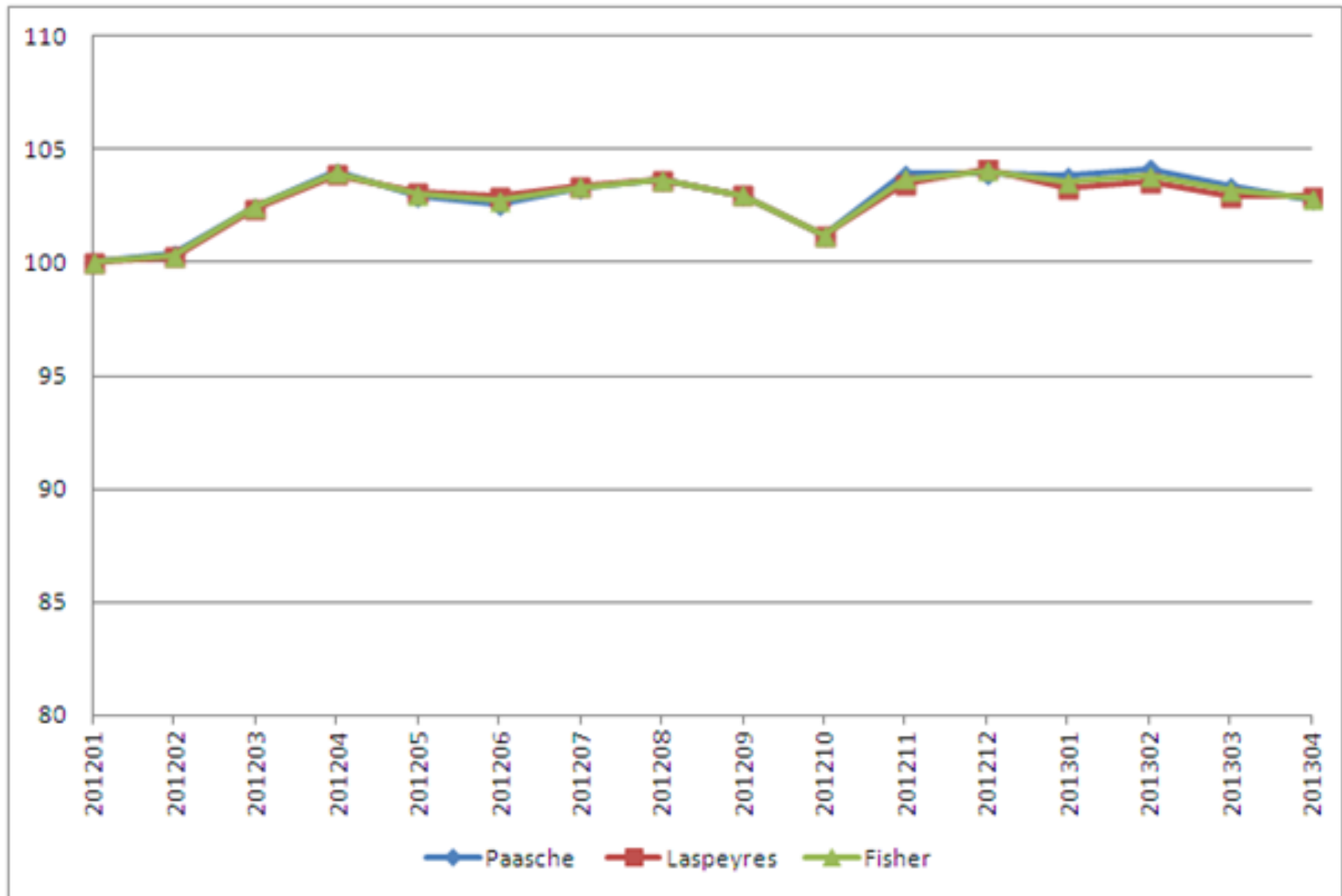


Fig 2: Shampoo - Jevons, Dutot, Carli
Excludes sales < 100

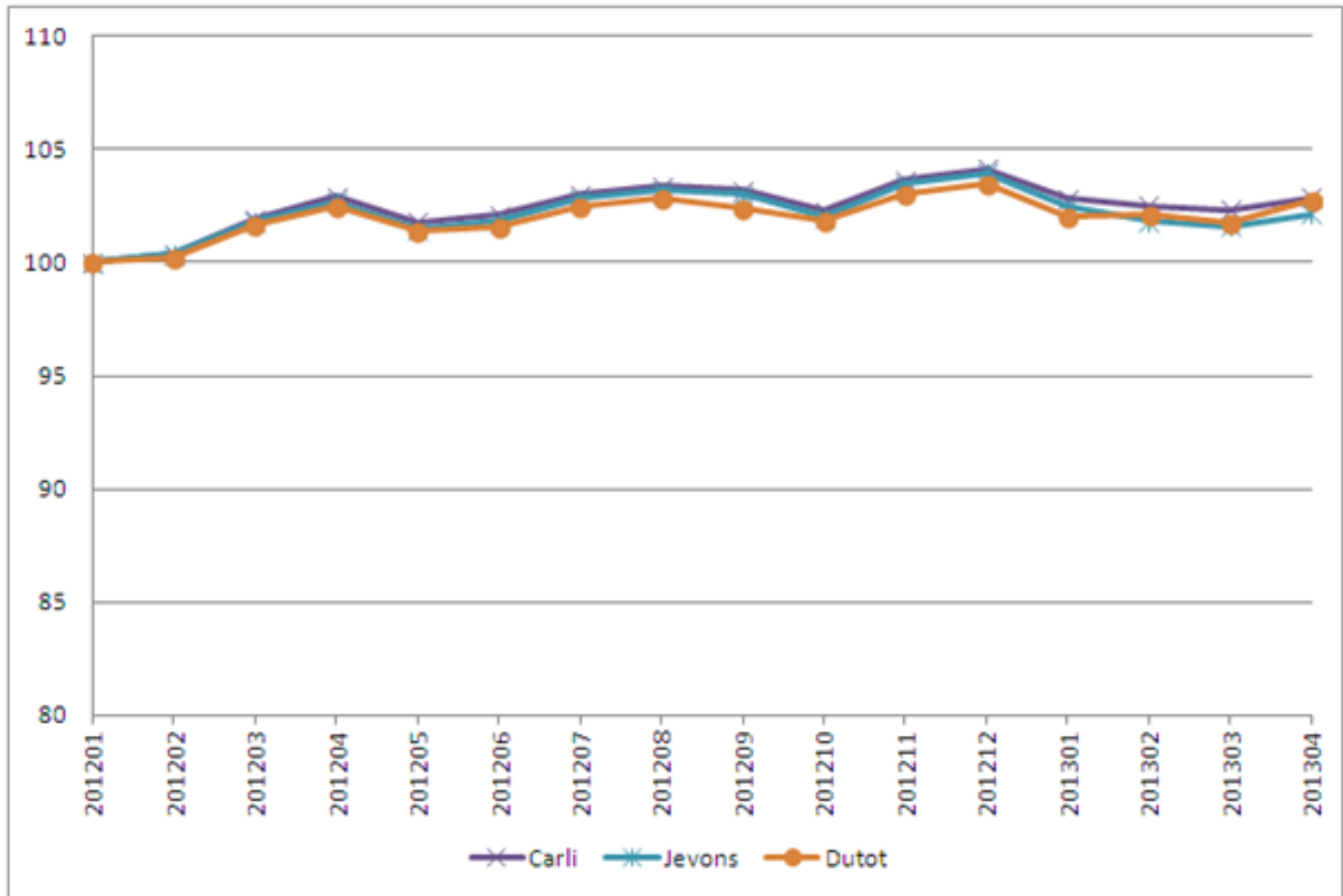


Fig 3: Shampoo - Jevons, Dutot, Carli

Includes all sales

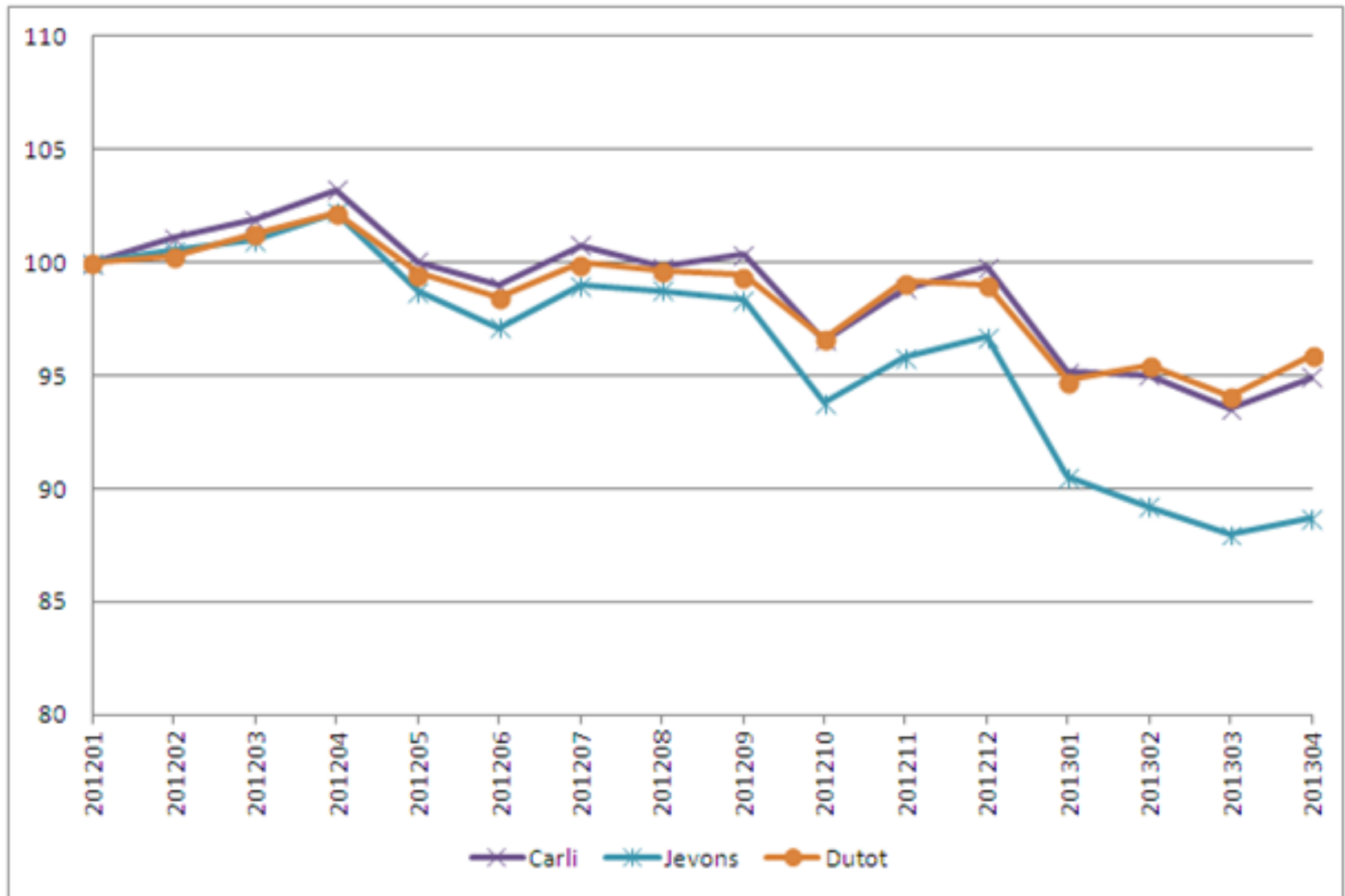


Fig 4: Shampoo, CPI, Index – Jevons

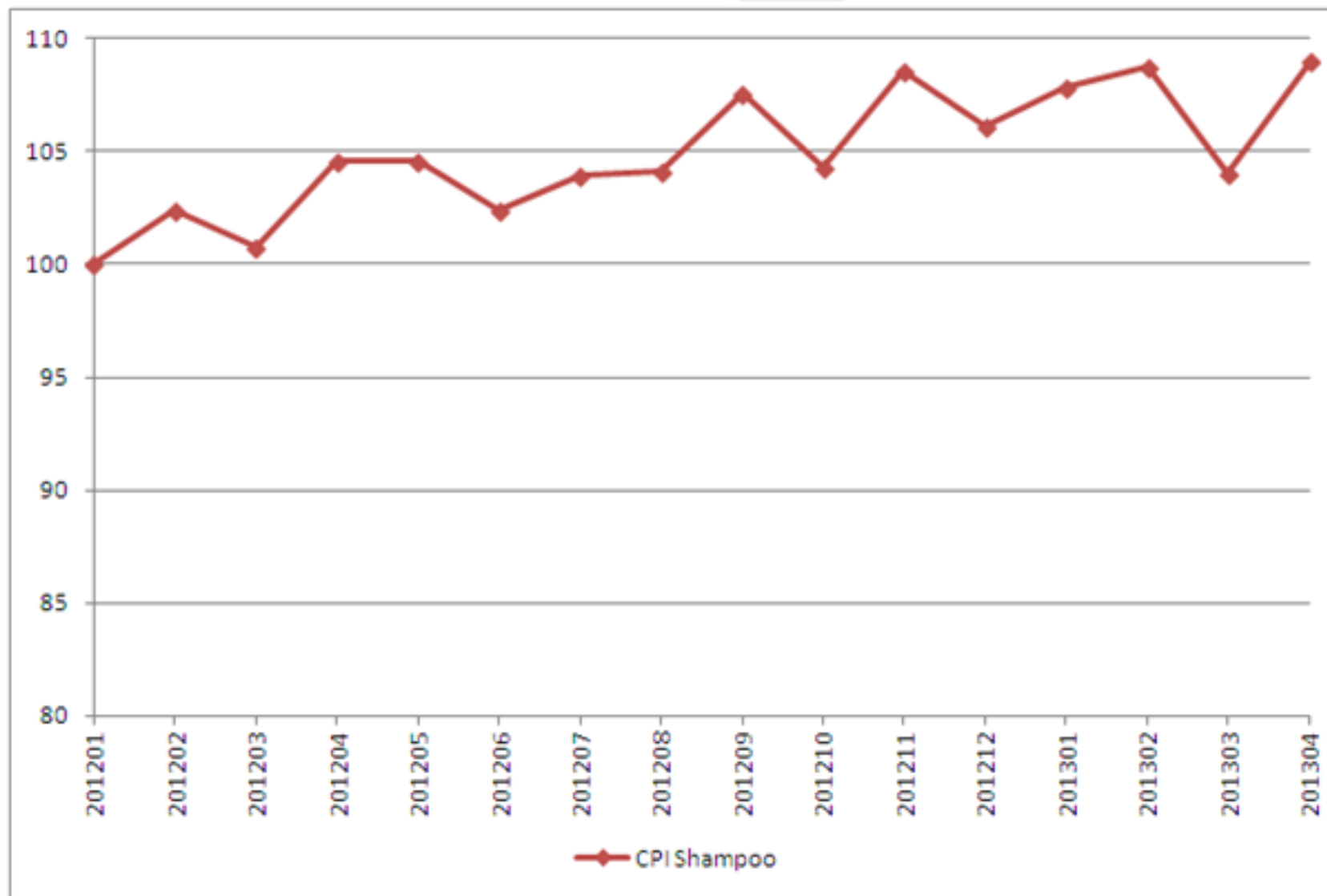


Fig 5: Toothpaste - Paasche, Laspeyres, Fisher
Excludes sales < 100

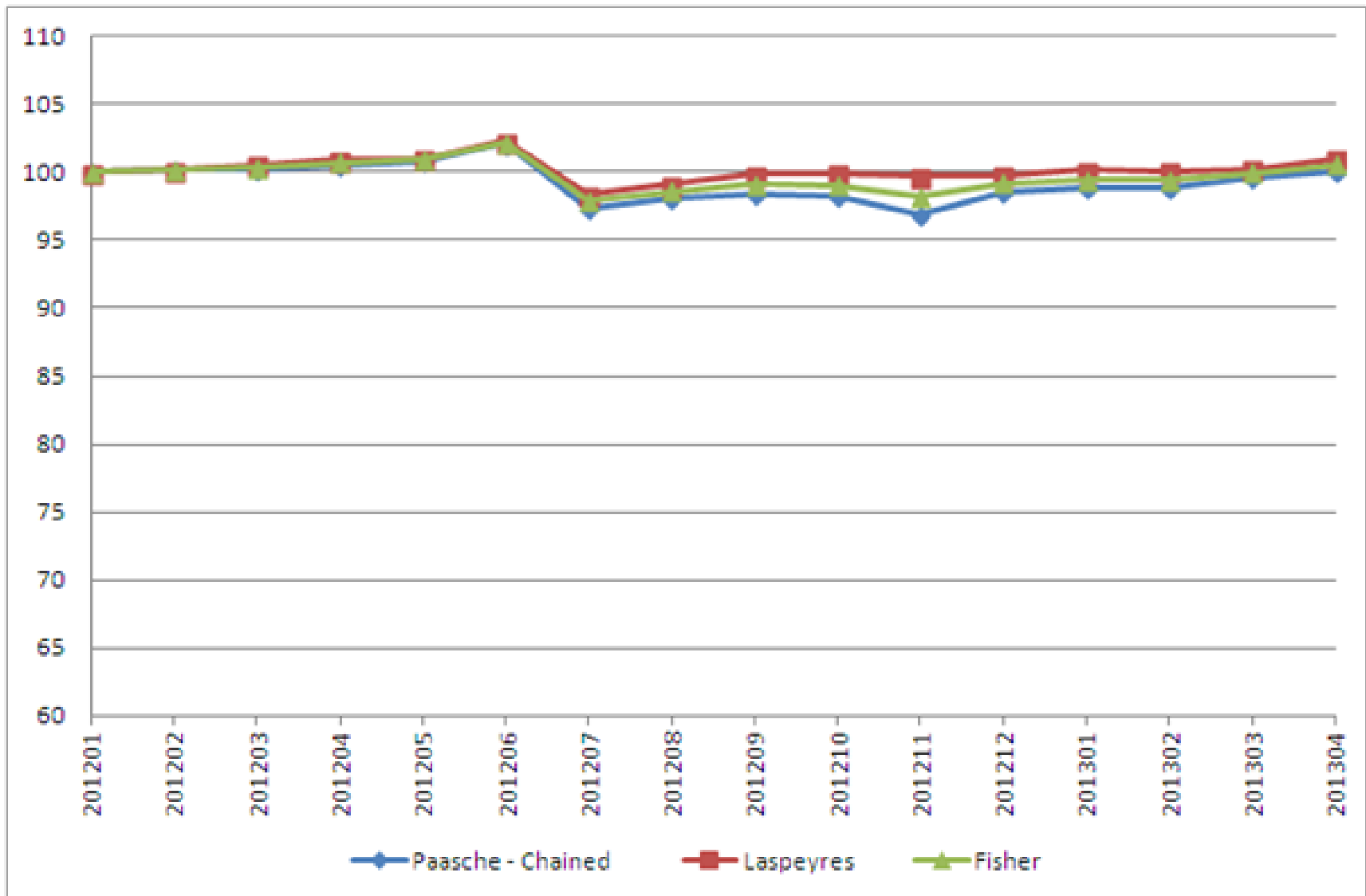


Fig 6: Toothpaste - Jevons, Dutot, Carli
Excludes sales < 100

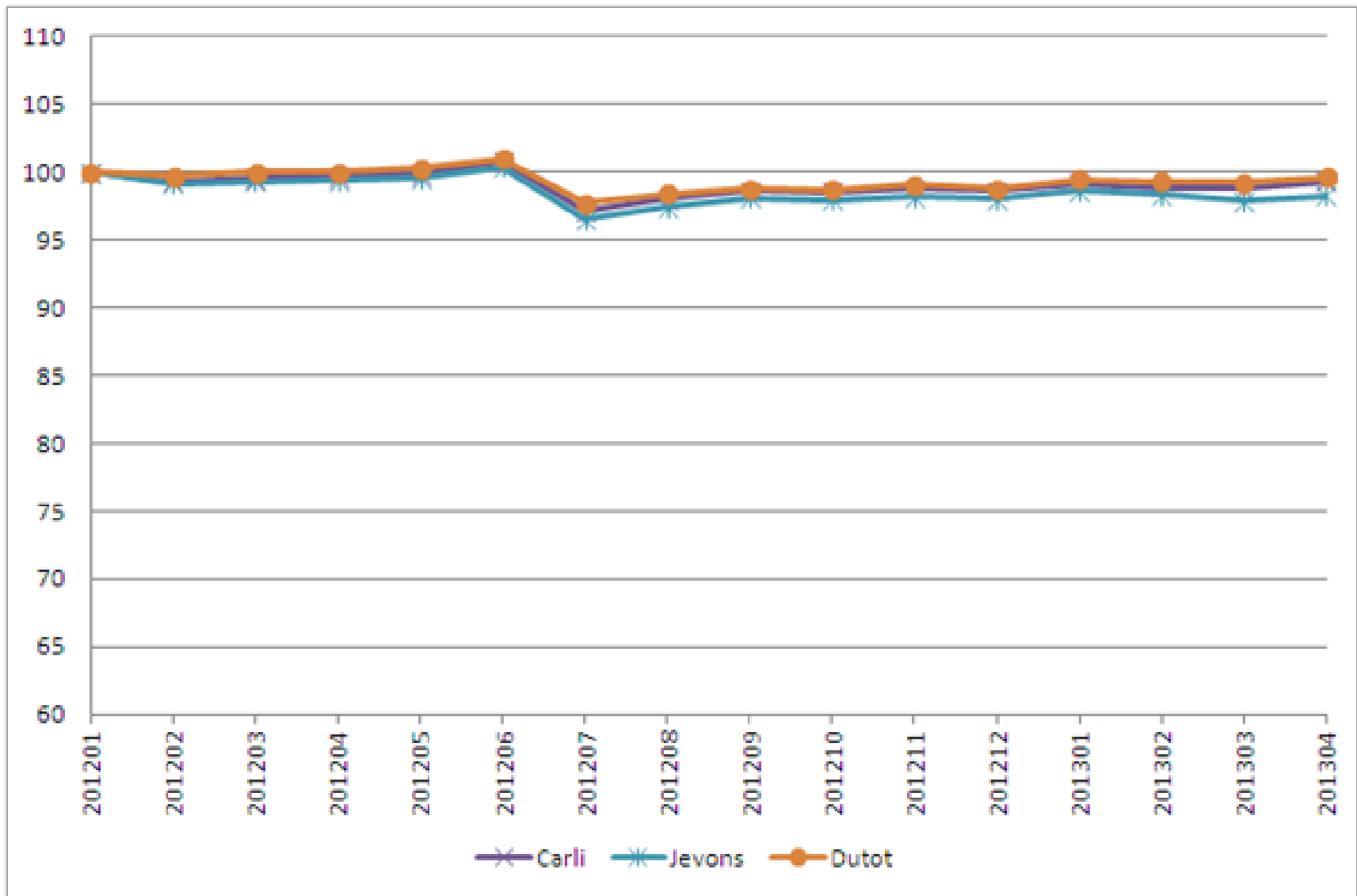


Fig 7: Toothpaste - Jevons, Dutot, Carli

Includes all sales

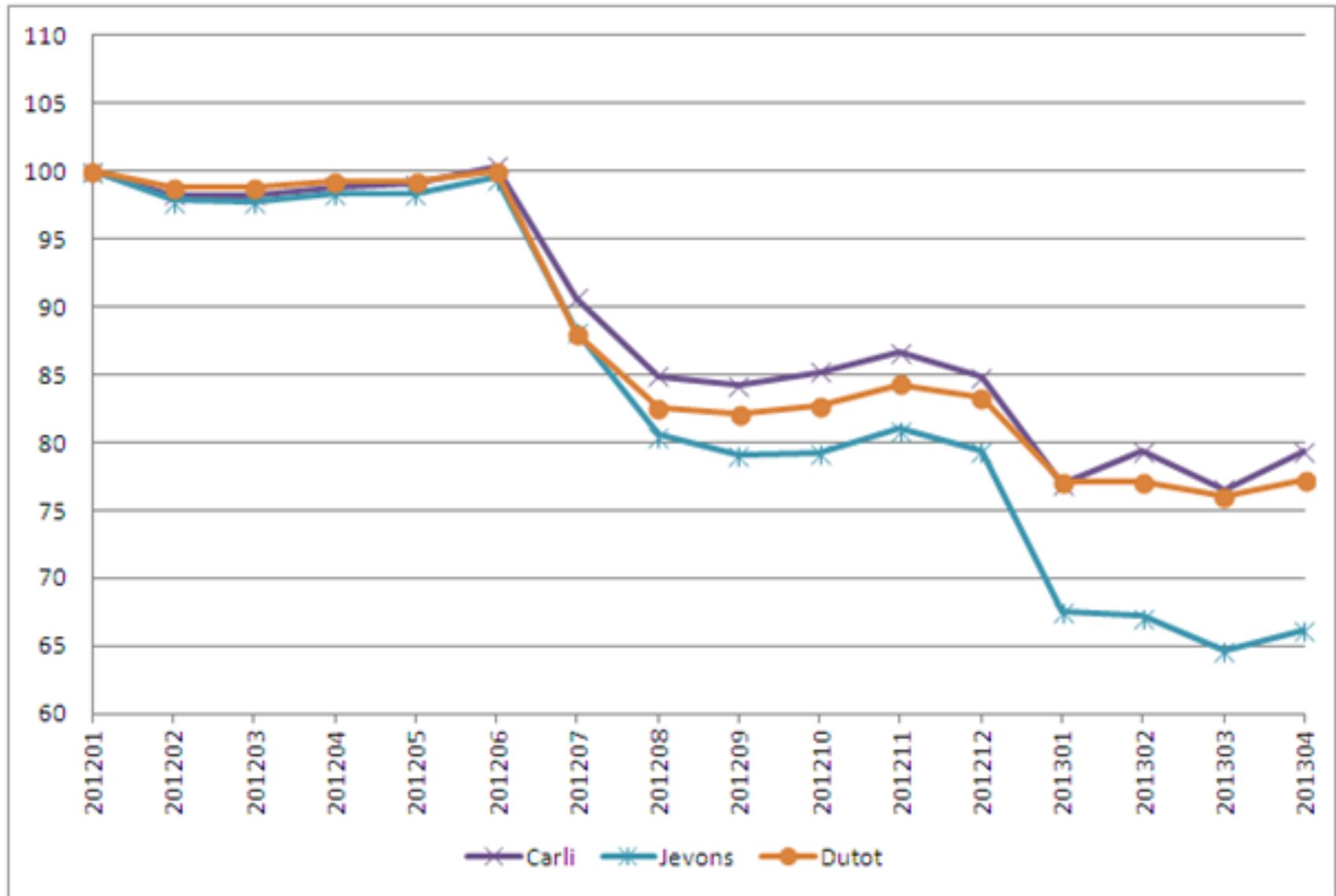
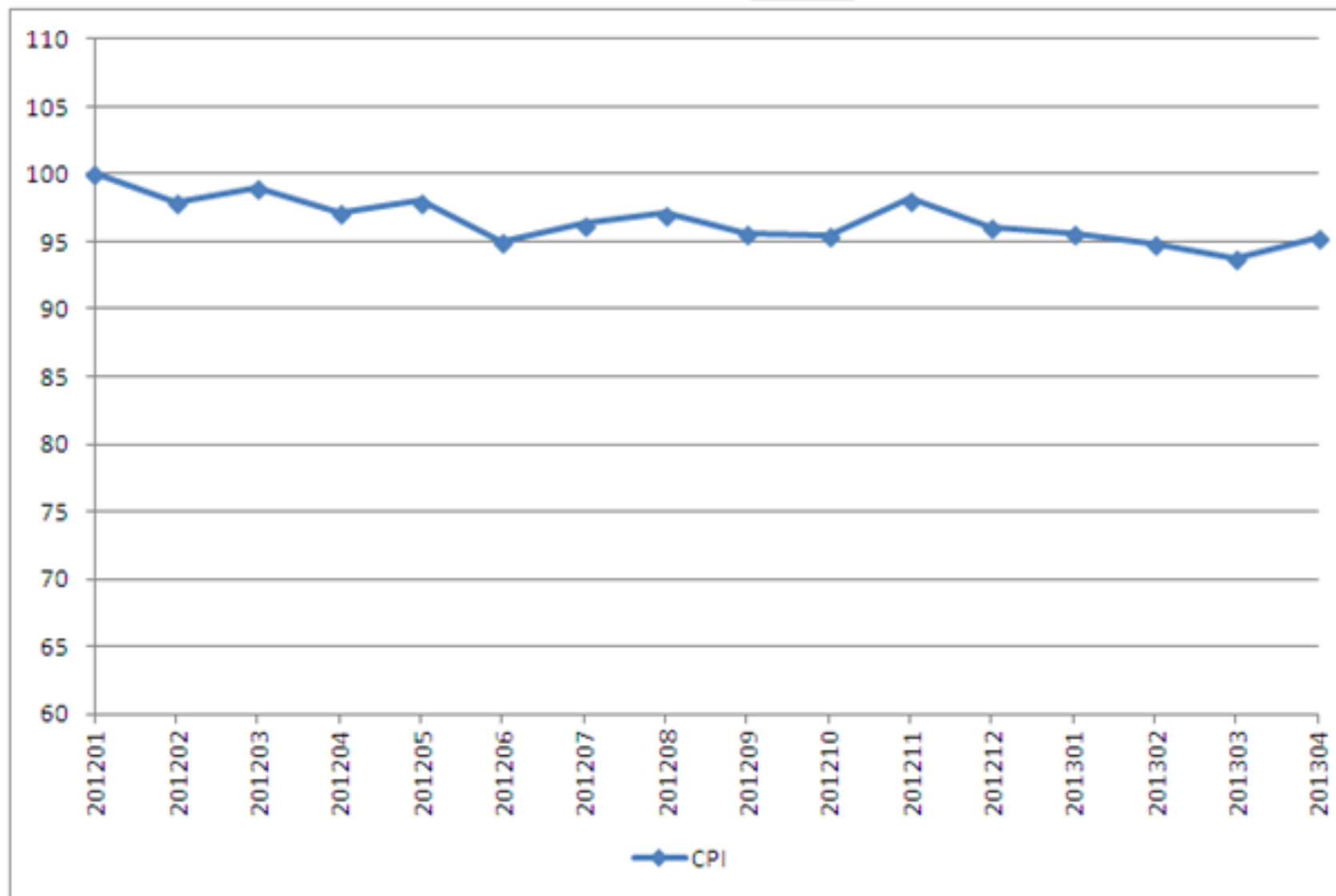


Fig 8: Shampoo, CPI, Index – Jevons



Next steps

- Refine methods further including data cleaning and outlier identification
- Extend analysis to include on sale data, new & discontinued items
- Produce alternative indices such as RYGEKS

Questions for workshop participants

Q1. What can we deduce from the initial indices created?

Q2. What deductions, if any, can we make from the sensitivity of the indices to low quantity sales?

Q3. Do you have any general comments around cleaning scanner data?

Questions/comments?

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