Chain Linking and Annual Update of Weights for Producer Price Indices for Services in Italy

Cristina Cecconi, Francesco Santangelo, Adele Vendetti

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Main features of the Italian SPPIs

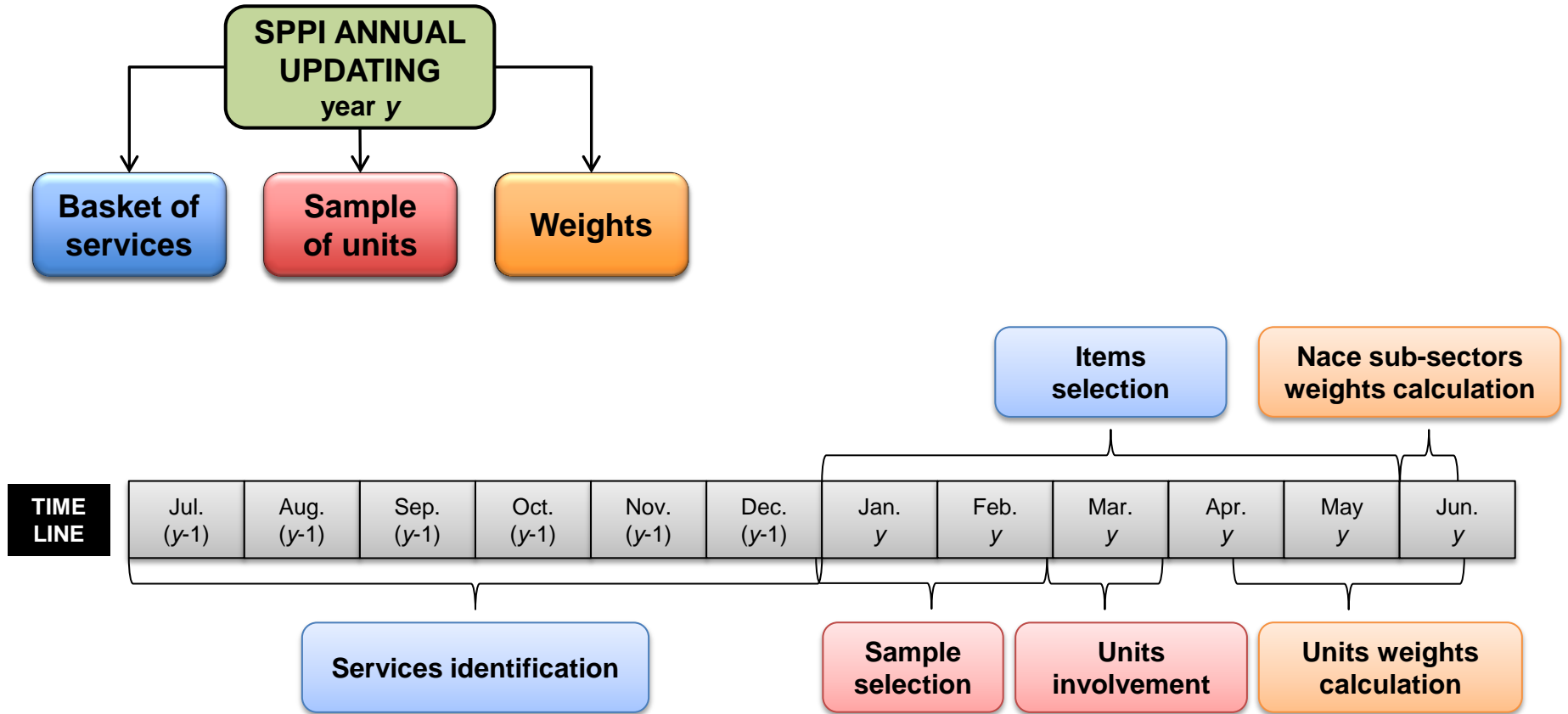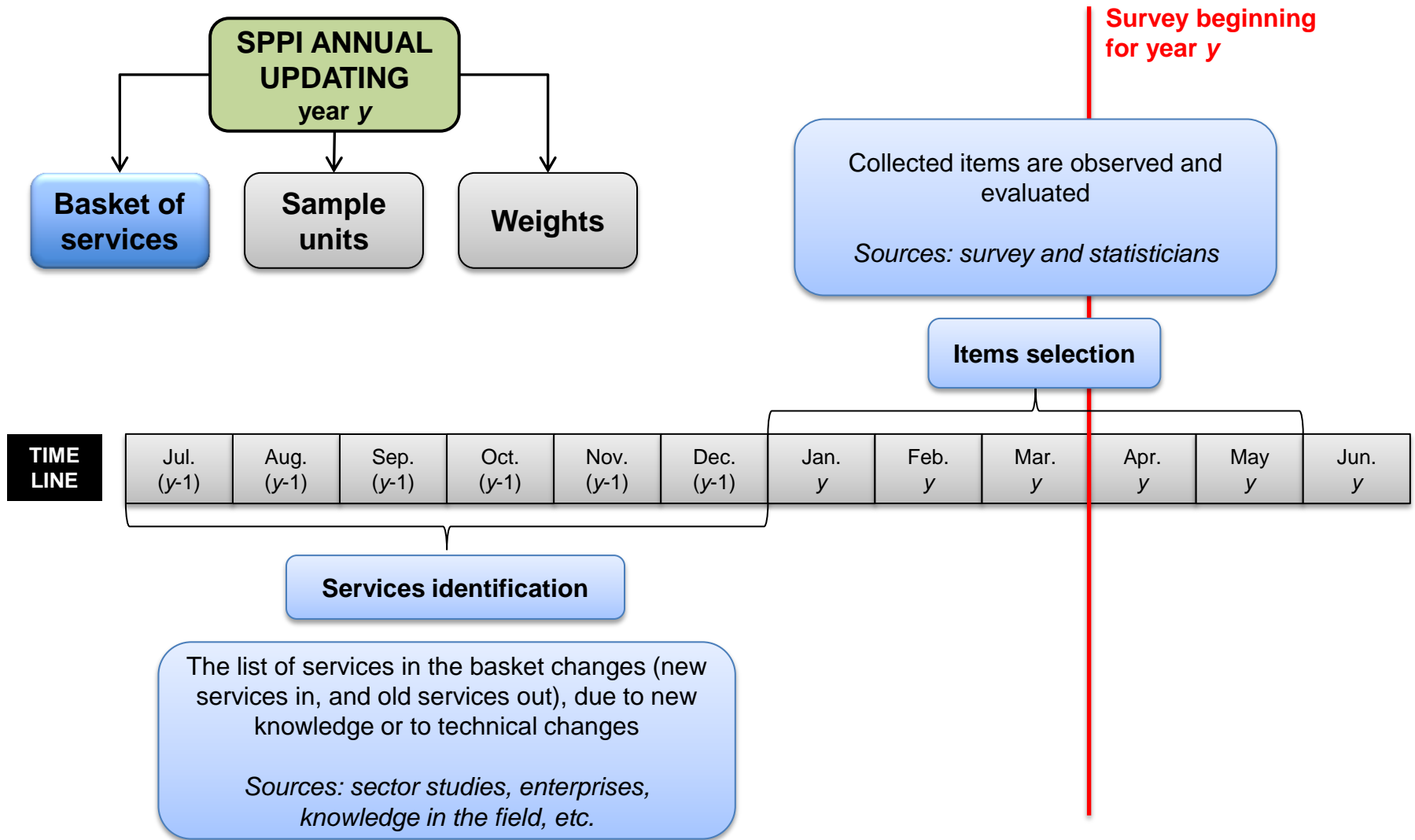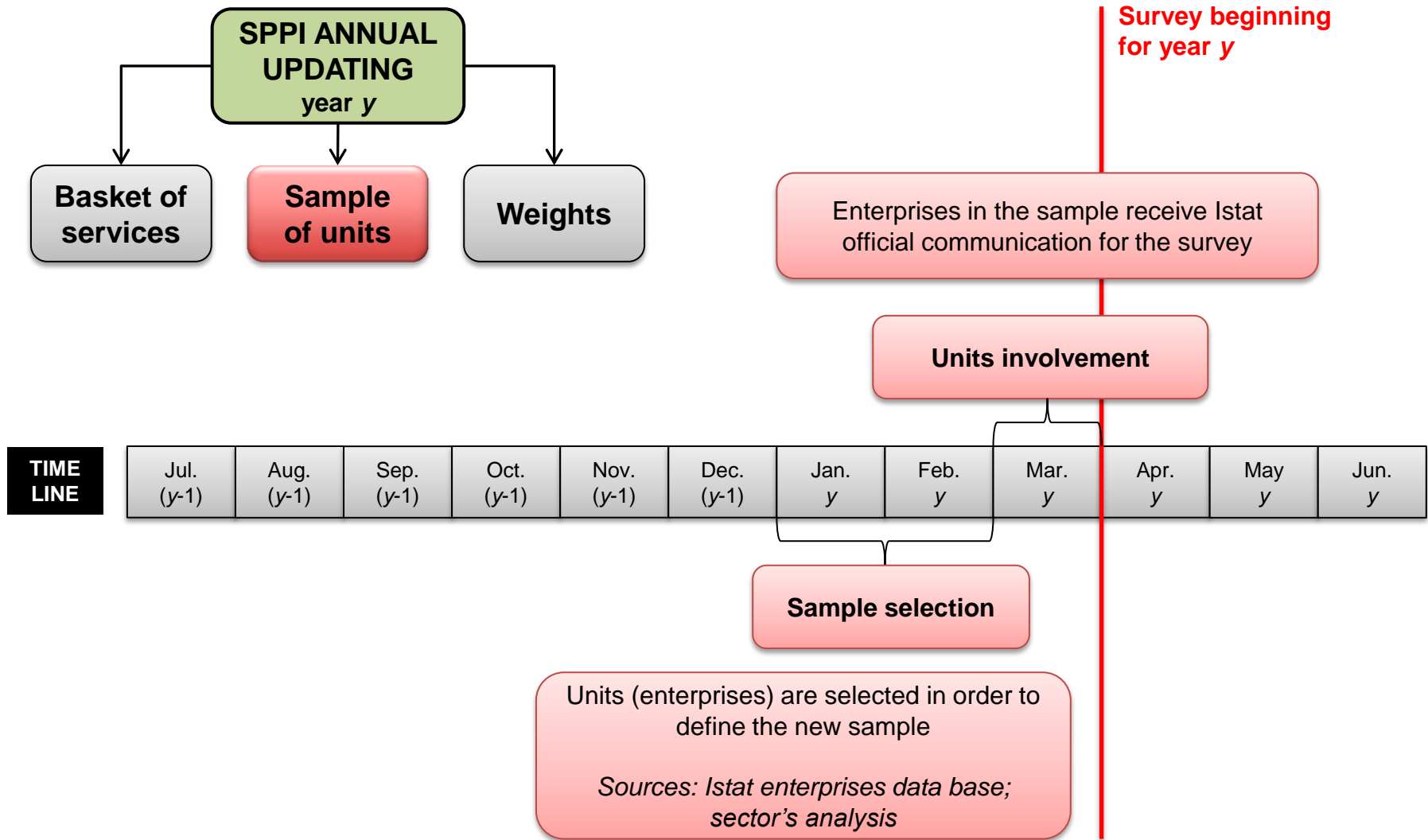|	
annually chain-linked Laspeyres type (year y)	chaining method: quarterly overlap
	base period: fourth quarter of year (y-1)
	weights reference period: year (y-1)
	reference period: year 2010
annual updating	basket, sample of units, weights
calculation	weighted means of level indices
quarterly indices	data collection, calculation, dissemination
industry based	enterprise price indices

SPPIs annual updating process

SPPIs annual updating process

SPPI ANNUAL UPDATING year *y*

- **Basket of services**
- **Sample units**
- **Weights**

Survey beginning for year *y*

Collected items are observed and evaluated

Sources: survey and statisticians

Items selection

TIME LINE	Jul. (*y*-1)	Aug. (*y*-1)	Sep. (*y*-1)	Oct. (*y*-1)	Nov. (*y*-1)	Dec. (*y*-1)	Jan. *y*	Feb. *y*	Mar. *y*	Apr. *y*	May *y*	Jun. *y*

Services identification

The list of services in the basket changes (new services in, and old services out), due to new knowledge or to technical changes

Sources: sector studies, enterprises, knowledge in the field, etc.

SPPIs annual updating process

SPPI ANNUAL UPDATING year *y*

- Basket of services
- Sample of units
- Weights

Survey beginning for year *y*

Enterprises in the sample receive Istat official communication for the survey

Units involvement

Sample selection

Units (enterprises) are selected in order to define the new sample

Sources: Istat enterprises data base; sector's analysis

TIME LINE	Jul. (*y*-1)	Aug. (*y*-1)	Sep. (*y*-1)	Oct. (*y*-1)	Nov. (*y*-1)	Dec. (*y*-1)	Jan. *y*	Feb. *y*	Mar. *y*	Apr. *y*	May *y*	Jun. *y*

SPPIs annual updating process

Chain linking *vs* fixed base approach: an example

Index	Base period	Reference period	Weights reference period
Chain-linked index	quarter 4, year (y-1)	2006=100	year (y-1)
Fixed base index	average of year 2006	2006=100	2006
Mixed index	average of year 2006	2006=100	year (y-1)

✓ same sample of units
✓ chain-linked index: base period + weights reference period change yearly
✓ fixed base index: base period + weights reference period agree with the reference period
✓ mixed index: base period coincides with the reference one and weights reference period changes yearly

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Chain linking *vs* fixed base approach: an example
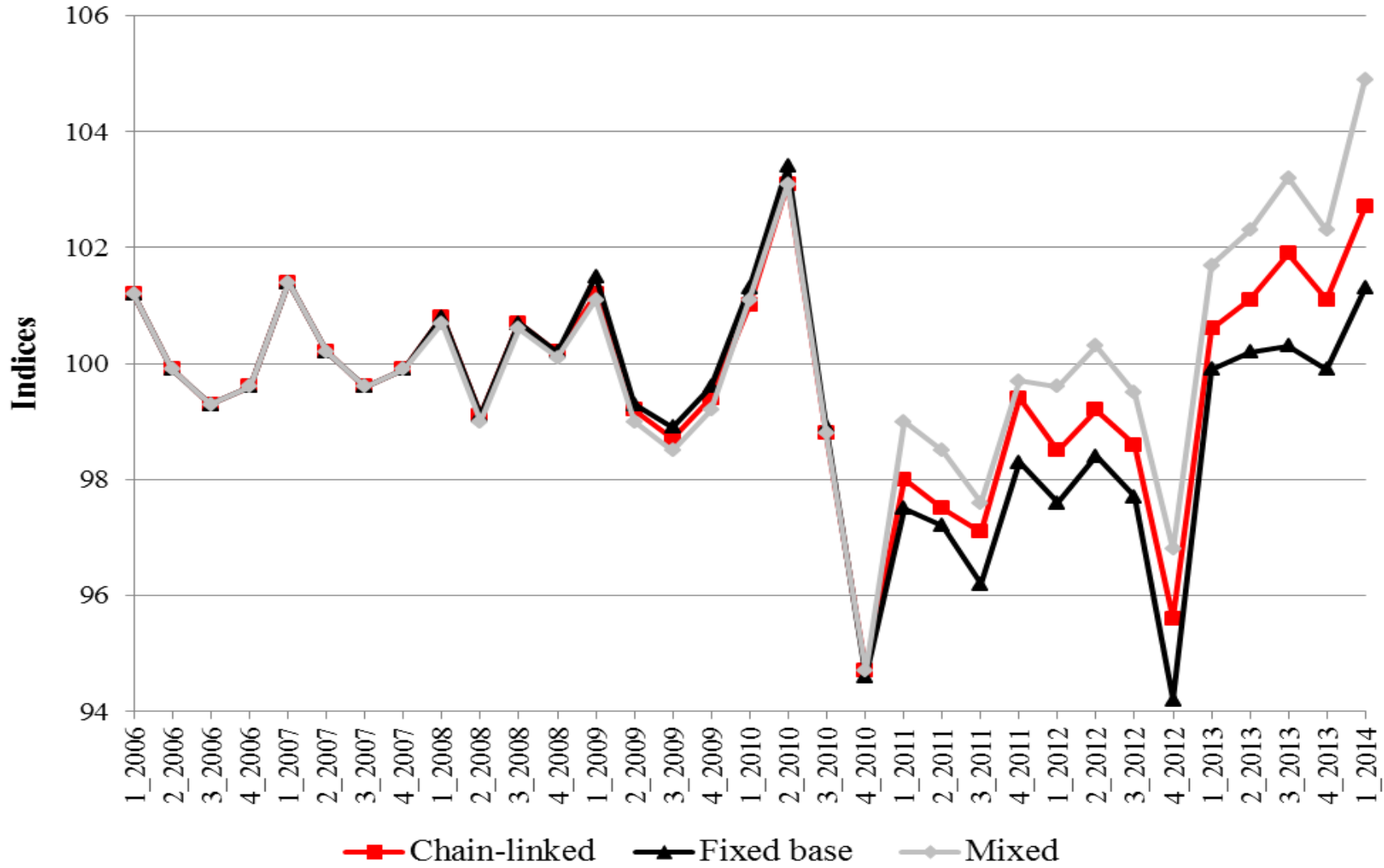
Thank you!

Cristina Cecconi (cecconi@istat.it)