

Electronic Data Collection Experiences in Finnish PPI

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Susanna Tåg / Anna-Riikka Pitkänen
Statistics Finland

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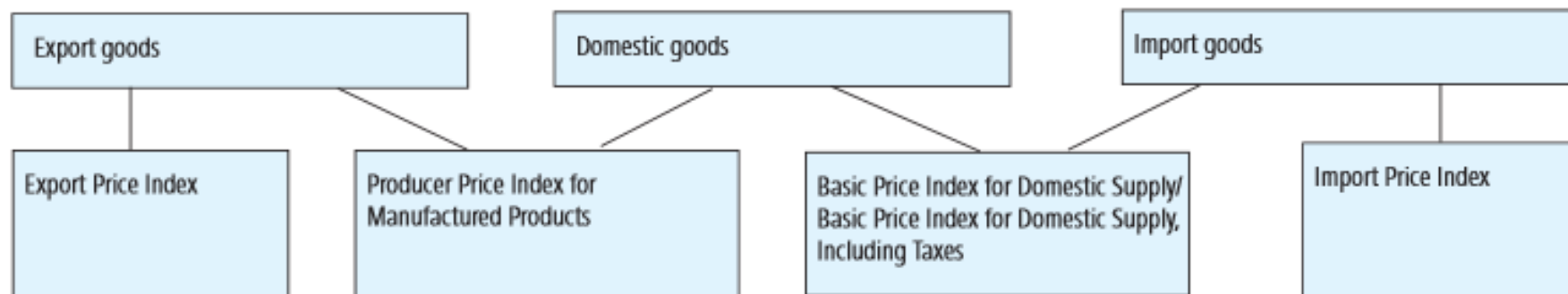
How to reach the goals?

The web questionnaire, Xcola

Future actions

What are the data used for?

Inclusion of domestic, export and import goods in different indices



From whom are data collected?

- The data collection covers enterprises that have production, imports or exports in the main groups A to F of the CPA2008 product classification
- The Statistics Act (280/2004) obliges Statistics Finland to treat the collected data as confidential. In the published statistics the data are reported at a level from which the data on an individual enterprise cannot be identified

Collection of PPI price data in Statistics Finland 1/2

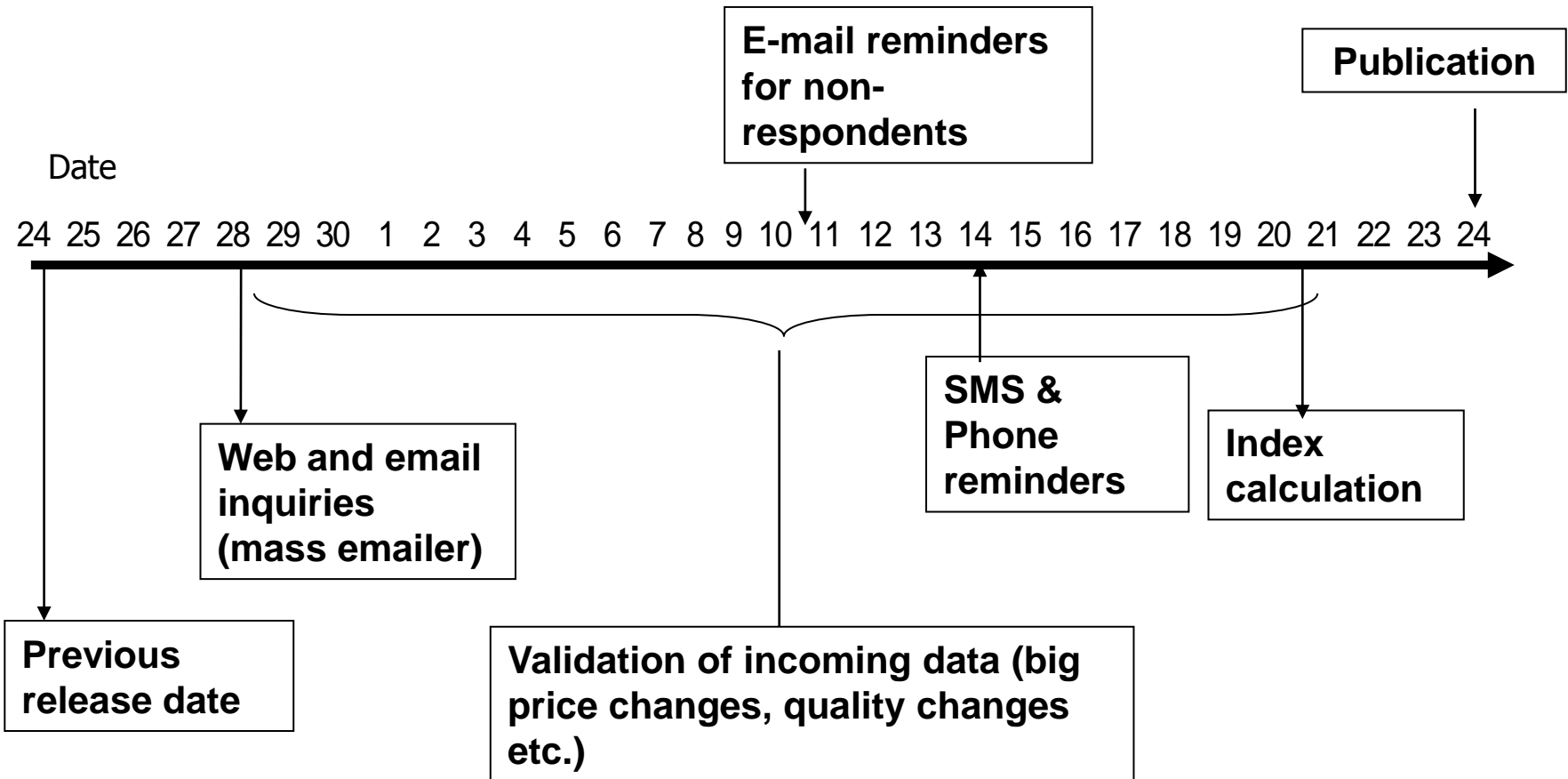
- The price data for the producer price indices (including export and import prices) are collected **monthly** from the enterprises, a few exceptions
 - Totally ~ 2500 prices are collected monthly from about 2000 data suppliers.
 - **82% of the prices are collected via Internet query**
 - **non-response 2-3%**, 50-100 prices
- The collection is also performed by the PPI team

Collection of PPI price data in Statistics Finland 2/2

Number of data suppliers, CPA product categories and price data for producer price indices

Index	No. of data suppliers	No. of CPA product categories	No. of price data
Producer Price Index for Manufactured Products	960	600	2.700
Export Price Index	440	350	1.000
Import Price Index	910	600	2.400
Basic Price Index for Domestic Supply/Basic Price Index for Domestic Supply, Including Taxes	1.580	850	4.150

Data collection process in PPI



Data collection; important things to consider 1/2

- **It is important that collecting prices and processing the data is done well** in order to have a good quality of price information and to calculate reliable indices
- Changes in the price index must not result from changes in quality – the index should represent pure price changes only without quality change
- **To be able to measure the development of prices and to quality adjust if necessary, the staff of the statistical office should know about the reasons of price changes**

Data collection; important things to consider 2/2

Price change (versus quality change)

$$\Delta p = \Delta pp + \Delta pq$$

Where

- Δp = observed/reported price change between two periods
- Δpp = pure price change between two periods with comparable price-determining characteristics
- Δpq = quality change, price change caused by a quality change between two periods

Data collection; selecting a method 1/2

When deciding on the ways to collect data three main aspects have to be considered:

- 1) **Security**. Because sales prices are often sensitive for reasons of competition, it is important to find a genuinely secure way to transmit data from the reporting unit to the statistical office
- 2) **Cost**. Because prices are generally collected each and every month the collection should be not too cost-intensive, neither from the perspective of the statistical office nor the reporting unit
- 3) **Response burden** for reporting units delivering price information over a long period of time: this should be kept as low as reasonably possible

Data collection; selecting a method 2/2

- Web questionnaire
- Excel sheet
- Postal questionnaire
- Phone collection
- Internet collection (stock prices, list prices?)

- Register/administrative data (i.e. customs)

Web questionnaire

- Online reports may contribute to a reduction of costs and perceived burden for the reporting unit as well as for the statistical office
 - When the reporting units provide their prices online, those may be transferred automatically for processing (without further data entry)
- One problem that has to be solved is to ensure the confidentiality of data that are sent via internet
- When using an online method the reporting units are normally reminded by e-mail when to submit the prices
- A significant advantage of using online questionnaires is the possibility to integrate price and quality checks in the questionnaire

Goals with the new PPI web collection system

- Good usability
- Collect more (and more relevant) information
- Information with better quality
- Efficiency
 - Reduce the time used in the whole data collecting process - answering the query, validating the price data etc.
 - Automate the validation process and the treatment of the observations

How to reach the goals?

- Gather more information
 - The most important new variable: **the previous price of the substitute product**
- Guide the user to give **relevant information**
 - Less validation phone calls or emails, the data collected has a higher quality than before
 - Less manual editing, the editing is based on an information with higher quality
- **Automation** of the validation process
 - Combine variables and make new derived variables from the raw data
 - Include the previous price of the substitute product into the index calculation process

The new web questionnaire, XCola

Producer price indices

[Home](#)[Enterprise data](#)[Price collection](#)[Filling-in instructions](#)

Statistics Finland - Producer Price Index - Front page

The price inquiry on producer price indices for manufactured products collects data on products and their prices from enterprises. The data inquired pertain to enterprises' import, export or domestic market prices. Five separately calculated indices that measure the price development of products from enterprises' viewpoint are produced monthly for the producer price indices. These indices are:

- Producer Price Index for Manufactured Products
- Price Index
- Import Price Index
- Basic Price Index For Domestic Supply
- Basic Price Index for Domestic Supply, Including Taxes (former Wholesale Price Index)

The data supply obligation of enterprises is based on the Finnish [Statistics Act \(280/2004, amended 361/2013\)](#) All the price data collected for the producer price indices from enterprises and the enterprises which supply the data are confidential. The data are released as confidential so the data of a single enterprise cannot be deduced on the basis of the results.

Further information on the monthly data collection and producer price indices is available from:

- Anni Huuskonen 029 551 2992
- Mervi Nyfors 029 551 3480
- Merja Pokela 029 551 3283
- Anna-Riikka Pitkänen 029 551 3466

Service email address

- thi.tilastokeskus@tilastokeskus.fi

[Further information about the inquiry](#)


[Home page of Producer price indices](#)

[Point figures for Producer price indices in the StatFin service](#)

[Regulation \(EC\) No 1158/2005 of the European Parliament and of the Council](#)

[Council Regulation \(EC\) No 1165/1998](#)

[Go to enterprise data](#)[Go to price collection](#)

 **Statistics Finland**

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Producer price indices

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Enterprise data

Please check that all the data are up-to-date. If necessary, comment on the changes under Additional information.

Data supplier

*Mandatory data

*Enterprise/establishment

*Postal address

*Postal code and post office

*Enterprise's switchboard

Contact person's data

*Name

*Telephone number

or

Mobiletelephone

*Email

Deputy contact person

Name

Telephone number

Mobiletelephone

E-mail address

Additional information

[Save](#) | [Save and go to price collection](#)

Producer price indices

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[Enterprise data](#)
[Price collection](#)
[Filling-in instructions](#)

Price collection

- Fill in the price data for the month inquired on the form, in price information for inquiry month
- Comment on exceptional price changes under Additional information. The drop-down menus on the form also help in reporting price and product changes.
- If the imports/exports or production of the product have ceased altogether or are about to cease, select a new product in its place. This is done by selecting **Edit data** on the form.
- If the product has not been imported/exported or sold in the survey month, enter the same price as previously reported as price for the survey month.
- More detailed information in the [Filling-in instructions](#).

Product 1 / 2 - Product data

Price concept ⓘ	CPA ⓘ	Product group ⓘ				
<input type="text" value="Export price"/>	<input type="text" value="26516200"/>	<input type="text" value="Machines and appliances for testing the mechanical properties of materials"/>				
Product	Unit	Country	Currency	Price in the previous month	August / 2014	The main reason for the price change
<input type="text" value="Analysaattori"/>	<input type="text" value="KPL"/>	<input type="text" value="JPN"/>	<input type="text" value="EUR"/>	<input type="text" value="180000"/>	<input type="text"/>	<input type="text" value="Select if the price is exceptiona"/>
Additional information	<input type="text"/>					

Data on the product changed, a new product in its place or the product removed

[Edit the data](#)

Producer price indices




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Additional information


Data on the product changed, a new product in its place or the product removed [Edit the data](#)


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Product 1 / 2 - Product data

 Price concept 

 CPA 

 Product group 

Product

Unit

Country

Currency

Price in the previous month

August / 2014

The main reason for the price change

Additional information

To edit the data, click the "Edit data" button.

Data on the product changed, a new product in its place or the product removed

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Additional information	<input type="text"/>					

Data on the product changed, a new product in its place or the product removed

[Edit the data](#)

Producer price indices




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Product 1 / 2 - Product data

Price concept  CPA  Product group 

Export price 26516200 Machines and appliances for testing the mechanical properties of materials

Product	Unit	Country	Currency	Price in the previous month	August / 2014	The main reason for the price change
Analysaattori	KPL	JPN	EUR	180000	160000	

Additional information

- Select if the price is exceptional
- Change in the number of orders or the customer
 - Product attributes changed
 - Price change due to world market prices
 - Price change due to production costs
 - Discount/Campaign price
 - Other reason, comment in the Additional information field

Data on the product changed, a new product in its place or the product removed [Edit the data](#)

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Product 1 / 2 - Product data

Price concept 

Export price

CPA 

26516200

Product group 

Machines and appliances for testing the mechanical properties of materials

Product

Unit

Country

Currency

Price in the previous month

August / 2014

The main reason for the price change

Analysaattori


KPL


JPN

EUR

180000

160000

Change in the number of order 

Additional information 

Estimate which share of the price change describes the general change in the price level in the product group in question.

Data on the product changed, a new product in its place or the product removed

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Additional information	<input type="text"/>						

Data on the product changed, a new product in its place or the product removed

Edit the data



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Data on the product changed, a new product in its place or the product removed [Cancel](#)

Product 1 / 2 - Data on changed product

You selected that you wish to change the product's data or attributes. Update here the data for the changed product.

The main reason for the product change

Price concept 
CPA 
Product group 

Product
Unit
Country
Currency
Price in the previous month
August / 2014

Additional information



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Data on the product changed, a new product in its place or the product removed Cancel

Product 1 / 2 - Data on changed product

You selected that you wish to change the product's data or attributes. Update here the data for the changed product.

The main reason for the product change

Select

Price concept i

CPA i

Product group i

Export price 26516200 Machines and appliances for testing the mechanical properties of materials

Product	Unit	Country	Currency	Price in the previous month	August / 2014
Analysaattori	KPL	Japani <input type="button" value="v"/>	Euro <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>

Additional information





Producer price indices

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Filling-in instructions

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Data on the product changed, a new product in its place or the product removed Cancel

Product 1 / 2 - Data on changed product

You selected that you wish to change the product's data or attributes. Update here the data for the changed product.

The main reason for the product change

- Select
- Country, currency or unit changed
- Updating of the product description, the product corresponding to the previous one
- A new product, does not correspond to the previous one in its attributes; the old product run out
- A new product, does not correspond to the previous one in its attributes; the old product no longer representative
- The product removed and no new product in its place
- Other reason, comment in the Additional information field

Physical properties of materials

Currency Price in the previous month August / 2014

Analysaattori Japani Euro

Additional information



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Data on the product changed, a new product in its place or the product removed Cancel

Product 1 / 2 - Data on changed product

You selected that you wish to change the product's data or attributes. Update here the data for the changed product.

The main reason for the product change

A new product, does not corres

Price concept i

CPA i

Product group i

Export price

26516200

Machines and appliances for testing the mechanical properties of materials

Product

Unit

Country

Currency

Price in the previous month

August / 2014

Analysaattori 223

KPL

Japani

Euro

Additional information





Data on the product changed, a new product in its place or the product removed [Cancel](#)

Product 1 / 2 - Data on changed product

You selected that you wish to change the product's data or attributes. Update here the data for the changed product.

The main reason for the product change

Price concept [i](#) **CPA** [i](#) **Product group** [i](#)

Product	Unit	Country	Currency	Price in the previous month	August / 2014
<input type="text" value="Analysaattori 223"/>	<input type="text" value="KPL"/>	<input type="text" value="Japani"/>	<input type="text" value="Euro"/>	<input type="text" value="85000"/>	<input type="text" value="92000"/>

Additional information

Product 2 / 2 - Product data

Price concept [i](#) **CPA** [i](#) **Product group** [i](#)

Product	Unit	Country	Currency	Price in the previous month	August / 2014	The main reason for the price change
<input type="text" value="Analysaattori"/>	<input type="text" value="KPL"/>	<input type="text" value="AUT"/>	<input type="text" value="EUR"/>	<input type="text" value="80000"/>	<input type="text" value="79000"/>	<input type="text" value="Select if the price is exceptional"/>

Additional information

Data on the product changed, a new product in its place or the product removed [Edit the data](#)



[Save](#)

[Go to the contact information](#)



Producer price indices

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Price collection

- Fill in the price data for the month inquired
- Comment on exceptional price changes under the product
- If the imports/exports or production of the product has changed, comment on the change by selecting **Edit data** on the form.
- If the product has not been imported/exported or sold in the survey month, enter the same price as previously reported as price for the survey month.
- More detailed information in the [Filling-in instructions](#).

Data missing from the form. Fill in the missing data and save the form again. ✕

- The input is required. [\[Go\]](#)
- The input is required. [\[Go\]](#)

Product 1 / 2 - Product data

Price concept i

Export price

CPA i

26516200

Product group i

Machines and appliances for testing the mechanical properties of materials

Product

Unit

Country

Currency

Price in the previous month

August / 2014

The main reason for the price change

Analysaattori

KPL

JPN

EUR

180000

Select if the price is exceptions ▼

Additional information ▲▼

Data on the product changed, a new product in its place or the product removed

[Edit the data](#)



Producer price indices

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Price collection

- Fill in the price data for the month inquired.
- Comment on exceptional price changes under the 'Additional information' field.
- If the imports/exports or production of the product has changed, comment on the change in the form.
- If the product has not been imported/exported or sold in the survey month, enter the same price as previously reported as price for the survey month.
- More detailed information in the [Filling-in instructions](#).

✕

Data missing from the form. Fill in the missing data and save the form again.

- If the previous price is not known, estimate the previous price in the Additional information field. [\[Go\]](#)

Edit data on

Data on the product changed, a new product in its place or the product removed

Cancel

Product 1 / 2 - Data on changed product

You selected that you wish to change the product's data or attributes. Update here the data for the changed product.

The main reason for the product change

A new product, does not corres

Price concept



CPA



Product group



Export price

28516200

Machines and appliances for testing the mechanical properties of materials

Product

Unit

Country

Currency

Price in the previous month

August / 2014

Analysaattori

KPL

Japani

Euro

82000

Additional information

Empty text area for additional information with a red arrow pointing to it.



Producer price indices

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Price collection

The data are saved successfully.

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Product 1 / 2 - Product data

Price concept i

CPA i

Product group i

Export price

28516200

Machines and appliances for testing the mechanical properties of materials

Product

Unit

Country

Currency

Price in the previous month

August / 2014

The main reason for the price change

Analysaattori

KPL

JPN

EUR

180000

180000

Select if the price is exceptions v

Additional information v

Data on the product changed, a new product in its place or the product removed

Edit the data

Future actions

- The new price collection system is now in use in PPI (including also Export and Import prices) and in Building cost index
- Next: Cost and Agricultural indices and SPPI

Thank you!

Susanna Tåg
susanna.tag@stat.fi
tel. +358 29 551 2991

Anna-Riikka Pitkänen
anna-riikka.pitkanen@stat.fi
tel. +358 29 551 3466