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# Producer Price Index: Sources and Methods

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## **Preface**

Three of the principal price indices in the system of economic statistics – the producer price index (PPI), the consumer price index (CPI), and the export and import unit value (price) indices (XMUVI) – are well known and closely watched indicators of macroeconomic performance. They are direct indicators of the purchasing power of money in various types of transaction and other flows involving goods and services. As such, they are also used to deflate nominal measures of goods and services produced, consumed, and traded to provide volume measures of these variables.

The International Monetary Fund's PPI manual (2004) identifies 10 steps to design, construct, disseminate and maintain a producer price index. These are:

1. Determining the objectives, scope, and conceptual basis of the index
2. Deciding on the index coverage and classification structure
3. Deriving the weighting pattern
4. Designing the sample
5. Collecting and editing the prices
6. Adjusting for changes in quality
7. Calculating the index
8. Disseminating the index
9. Maintaining samples of businesses and product specifications
10. Reviewing and reweighting the index.

This manual aims to provide an overview of the South African PPI and will cover steps one to five, seven, nine, and ten above.

**Risenga Maluleke**  
**Statistician-General**

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## 1. Introduction to the South African producer price index (PPI)

### 1.1 Defining the PPI

The PPI indicates changes in producer prices of locally produced commodities including both exports and domestically sold goods. The PPI is defined as “A measure of the change in the prices of goods either as they leave their place of production or as they enter the production process” (OECD, 2006).

### 1.2 The South African PPI

#### 1.2.1 Uses of the South African PPI

PPIs are used for a variety of different purposes. There has always been substantial interest in, and demand for, price indices from the private sector, the public sector, the general public, and international agencies. The South African PPI serves three main purposes.

1. A short-term indicator of inflationary trends – The monthly PPI with detailed product and industry data allows short-term price inflation to be monitored through different stages of production.
2. Contract price adjustments – Long-term contracts can be indexed using the PPI to take the inflationary risk out of the contract.
3. A deflator in the compilation of national accounts – A fundamental use of the PPI is as a deflator in the national accounts. Therefore, the concepts underlying the PPI are often conditioned by those underlying the national accounts.

#### 1.2.2 History of the South African PPI

The South African PPI originated in 1970, covering commodities for South African consumption (discontinued in December 2007); output of SA industry groups – for SA consumption (discontinued in December 2007); PPI for domestic output of South African industry groups (discontinued in December 2012); PPI for materials used in certain industries; and PPI for selected materials.

The PPIs for final manufactured goods (headline PPI); intermediate manufactured goods; electricity and water; mining; and agriculture, forestry and fishing were introduced in January 2013.

PPIs for imported and exported commodities according to group were introduced in September 1997 and June 1999 respectively. These were replaced by unit value indices for exports and imports in January 2014.

### 1.3 Alignment with international best practice

In compiling the South African PPI, Statistics South Africa (Stats SA) largely follows the methodology guidelines in the *Producer Price Index Manual* (PPI Manual) published by the International Monetary Fund (IMF) together with the International Labour Organization (ILO), the United Nations Economic Commission for Europe (UNECE), the Organisation for Economic Co-operation and Development (OECD), and the World Bank. It is the main reference for concepts and definitions, it provides the theory and conceptual framework, and it aims to give methodological and practical guidelines for the compilation of PPIs.

PPI Manual (copy to browser):

<https://www.imf.org/external/pubs/ft/ppi/2010/manual/ppi.pdf>

Stats SA has committed itself to the adoption and use of methodology that is in line with international best practice and which is relevant and practicable in South African conditions. The sources and methods documents of other statistical agencies are also used as reference material.

## **2. Classification**

### **2.1 Background**

The PPI uses two classification systems, the Central Product Classification (CPC) and Standard Industrial Classification (SIC). As the name suggests, the CPC is used to identify and aggregate products. The CPC is a classification based on the physical characteristics of goods or on the nature of services rendered. Each type of good or service listed in the CPC is defined in such a way that it is normally produced by only one activity as defined in ISIC, the International Standard Industrial Classification of All Economic Activities – this classification is the international standard for the classification of productive economic activities. Its main purpose is to provide a standard set of economic activities so that entities can be classified according to the activity they carry out. The SIC is the South African adaptation of ISIC.

The CPC covers products that are outputs of economic activities, including transportable goods, non-transportable goods, and services (OECD, 2006). Each product grouping is assigned an industry classification according to SIC.

### **2.2 Central Product Classification (CPC)**

The South African PPI follows the CPC version 2.1. The high-level CPC sections are:

- 0 - Agriculture, forestry and fishery products
- 1 - Ores and minerals; electricity, gas and water
- 2 - Food products, beverages and tobacco; textiles, apparel and leather products
- 3 - Other transportable goods, except metal products, machinery and equipment
- 4 - Metal products, machinery and equipment
- 5 - Constructions and construction services
- 6 - Distributive trade services; accommodation, food and beverage serving services; transport services; and electricity, gas and water distribution services
- 7 - Financial and related services; real estate services; and rental and leasing services
- 8 - Business and production services
- 9 - Community, social and personal services.

CPC sections 0 to 4 are included in the South African PPI.

### **2.3 Standard Industrial Classification (SIC)**

The Standard Industrial Classification of All Economic Activities version 5 (SIC v5) compiled by Stats SA is based on the International Standard Industrial Classification of All Economic Activities (ISIC) (third revision) with suitable adaptations for local conditions.

The SIC structure is based on the following major divisions:

- 1 - Agriculture, hunting, forestry and fishing
- 2 - Mining and quarrying
- 3 - Manufacturing
- 4 - Electricity, gas, and water supply
- 5 - Construction



6 - Wholesale and retail trade; repair of motor vehicles, motor cycles and personal and household goods; hotels and restaurants

7 - Transport, storage, and communication

8 - Financial intermediation, insurance, real estate and business services

9 - Community, social and personal services

0 - Private households, extraterritorial organisations, representatives of foreign governments and other activities not adequately defined.

The South African PPI covers major divisions 1 to 4. Separate tables are published for each industry with manufacturing divided between intermediate and final manufactured goods. The publication comprises the following five industry tables:

**Table 1 – Structure of the monthly PPI release**

Industry	Table number in the monthly PPI release
Agriculture, forestry and fishing	5
Mining	4
Intermediate manufactured goods	2
Final manufactured goods	1 (this is the headline PPI)
Electricity and water	3

Intermediate manufactured goods refer to products that require further processing. The allocation of manufactured goods between intermediate and final production is shown in Annexure A.

## 2.4 Structure of classification in the South African PPI

The structure of the PPI is made up of 1-digit, 2-digit, 3-digit, 4-digit, 5-digit and 9-digit classification levels (within CPC), where the 9-digit code is an indicator product or elementary index attached to a weight.

For example, Table 2 shows the hierarchy of product description for the prices of products commonly referred to as “motor vehicles”.

**Table 2 – Central Product Classification (CPC) PPI hierarchy**

Product hierarchy		Product description
CPC section	4	Metal products, machinery and equipment
CPC division	49	Transport equipment
CPC group	491	Motor vehicles, trailers and semi-trailers; parts and accessories thereof
CPC class	4911	Motor vehicles
CPC sub-class	49113	Motor cars and other motor vehicles principally designed for the transport of persons
Indicator product (for sub-class 49113)	491130001	Passenger vehicles
Sampled product (for indicator product 491130001)	491130001 (1)	Volkswagen Polo 1.6 Trend-line
	491130001 (2)	Volkswagen Jetta 2.0 TSI Highline

As mentioned above, each product is also classified according to the economic activity to which it belongs based on SIC – see Table 3.

**Table 3 – Standard Industrial Classification (SIC) PPI hierarchy**

Product hierarchy		Product description
SIC major division	3	Manufacturing
SIC division	38	Manufacture of transport equipment
SIC major group	381	Manufacture of motor vehicles
SIC group	3810	Manufacture of motor vehicles
CPC sub-class	49113	Motor cars and other motor vehicles principally designed for the transport of persons
Indicator product (for sub-class 49113)	491130001	Passenger vehicles
Sampled product (for indicator product 491130001)	491130001 (1)	Volkswagen Polo 1.6 Trend-line
	491130001 (2)	Volkswagen Jetta 2.0 TSI Highline

## 2.5 Indicator products

In order to collect prices, CPC sub-classes need to be divided into meaningful groups called indicator products, which represent the elementary indices of the PPI. These are typical groupings of products at a lower level than the CPC sub-class. Indicator products are chosen in a manner that will ensure they represent the majority of the output of the sub-class they represent. These groupings are sourced from industry associations or data from Stats SA industry surveys, such as the manufacturing large sample survey (LSS).

According to the PPI Manual (page 214) some key concepts underlie the construction of elementary indices:

- elementary aggregates should be fairly homogeneous;
- they should consist of products that may be expected to have similar price movements, minimising a wide dispersion of price changes; and
- the elementary aggregates should be appropriate to serve as strata for sampling purposes for data collection.

## 2.6 Sampled products

Sampled products are the actual products that are priced in the PPI survey. Each sampled product is priced consistently over time to ensure comparability. Sampled products are chosen in a manner that will ensure that their price movements reflect the price movements of the indicator product that they represent. The specific products are sampled based on information received from the producer.

### **3. Weighting sources and derivation**

#### **3.1 Introduction**

The weights of the PPI represent the proportion of production value by local producers in a specific 12-month period. Each indicator product in the PPI has a weight attached to it, which reflects its relative importance in the overall index of its industry table. The impact that price changes of a product has on the overall index is therefore determined by its weight. The weighted average of changes in the price of specific products in the PPI determines the new index level and consequently the monthly and annual percentage changes of the aggregate indices. Whereas the prices are updated monthly, the weights are updated annually.

There are two levels of weights in the South African PPI: the industry-level weights based on value added (generally at a SIC 4-digit or 3-digit level), and the product-level weights within each of these industries, based on additional sources.

In terms of geographic coverage, all production of goods within the boundaries of South Africa is in scope, whether it is for local consumption or export.

#### **3.2 Need to update weights**

The weights reference period is the time period to which the weights refer. The chosen period is usually 12 months and should reflect economic conditions that are reasonably normal or stable.

The accuracy of weights in representing current production patterns decreases as the length of time increases from the weights reference period. However, the frequency of updating weights depends on the availability of the data sources.

The PPI Manual (pages 95-97) lists the following as potential sources for weights:

- industry or establishment censuses or surveys;
- national accounts;
- business register;
- administrative data; and
- industry associations.

#### **3.3 Sources and derivation of the PPI weights**

According to international standards, the weights and basket of the PPI should be updated at least every five years. This is to ensure that changes in industry production are reflected in the weighted aggregates of the measure of inflation. Most of the weights of the South African PPI are updated every year, while the manufacturing lower-level weights and overall PPI basket are reviewed every 3 years.<sup>1</sup> The most recent updates to the weights were introduced in reference month January 2024, while the PPI basket was also last reviewed in reference month January 2024.

The PPI Manual (page 95) indicates that although industry surveys and censuses are the primary sources, in many countries these might be unreliable due to significant under-coverage, especially of the informal market. Information on output by industry as captured in the System of National Accounts (SNA) may prove to be a better source of weight information at industry level than the original survey data. It also advises that if supply and use tables (SUTs) or input/output tables are available, the information on commodity flows for various

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<sup>1</sup> Dependent on data availability.

industries and products by type of use is an excellent source of net weight information for developing indices following a method such as the stages of production approach.

As a general framework, the 2008 SNA incorporates the concepts, classification and methods of the PPI. In a number of countries, national accounts estimates are used for updating PPI weights in conjunction with other production data. The practical advantage is that the SUTs are updated every year, whereas detailed industry surveys are typically conducted on a less frequent basis.

In the South African PPI, the industry-level weights (generally SIC 4-digit or 3-digit level) are based on the gross value added provided in the SUTs. The SUTs are also used to determine which products belong to the intermediate or final indices. While the SNA does not provide the same level of product detail as an industry survey, it has the advantage of deriving production estimates from a wide range of data sources.

To fill the gaps as far as possible and determine what weight to allocate to specific products within each of these industries, a range of additional data sources are employed including Stats SA survey data (e.g. manufacturing LSS), administrative records, and industry association information. Where updated data are not available at detailed product level, the existing proportions are retained, with adjustments being made at higher-level aggregates.

Table 4 shows the specific sources used to compile the PPI weights.

**Table 4 – Sources of the PPI weights**

Industry	Industry-level weights	Product-level weights
Agriculture, forestry and fishing	National accounts 2020	<ul style="list-style-type: none"> <li>Abstract of Agricultural Statistics (2022) – Department of Agriculture, Land Reform and Rural Development</li> <li>Ocean (marine) fisheries and related services industry (2020) – Stats SA</li> <li>Forestry, logging and related services industry (2020) – Stats SA</li> </ul>
Mining	National accounts 2020	<ul style="list-style-type: none"> <li>South African Mining Industry Annual Commodity Summary (2022) – Department of Mineral Resources and Energy</li> </ul>
Manufacturing	National accounts 2020	<ul style="list-style-type: none"> <li>Manufacturing large sample survey (2021) – Stats SA</li> </ul>
Electricity and water	National accounts 2020	<ul style="list-style-type: none"> <li>Water (2021/22): Department of Water and Sanitation</li> </ul>

The PPI value-added weights are reviewed and updated on an annual basis. This implies that the index is reweighted every year in the January statistical release.

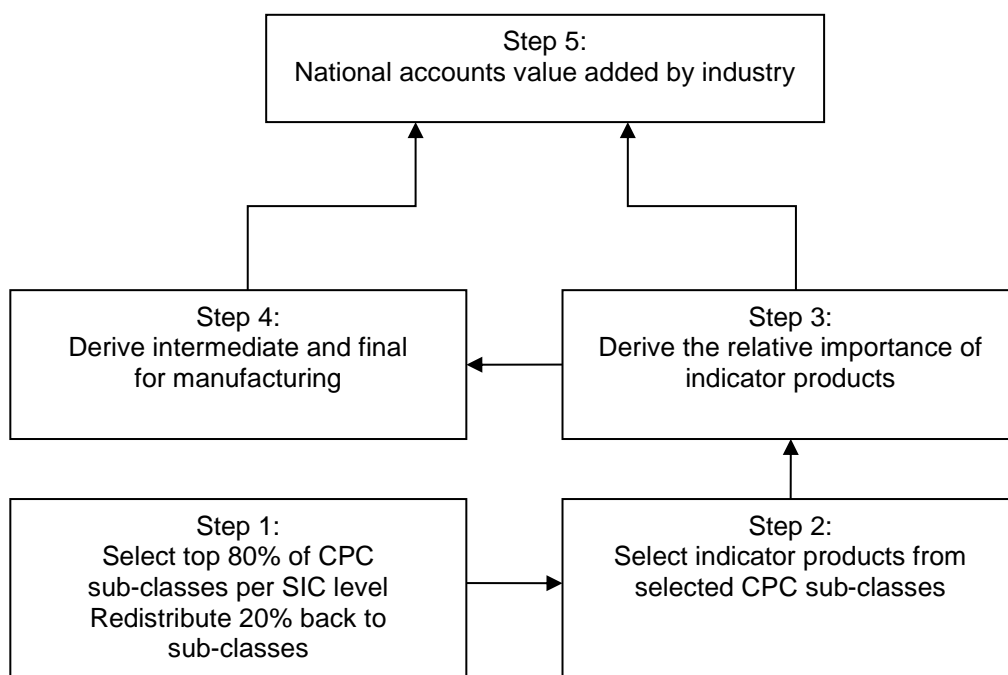
In addition to the update of the higher-level weights, product proportions within the PPI are investigated (from external and official sources) during the year, so that appropriate annual changes may be made at the indicator product or sub-class level – this applies to the PPI for mining, the PPI for agriculture, forestry and fishing, and the PPI for electricity and water.

Every three to four years, when the latest manufacturing LSS results become available, all the lower-level manufacturing weights are updated. To coincide with this, all the PPI product baskets are reviewed as well.

The PPI Manual (page 93) explains that some industries and products will be relatively insignificant in terms of their share of total production. For instance, an industry that represents less than 0,1% of production within its industry table could be excluded from the sample. In such cases, the output for the industry that is excluded should be distributed across those that were selected, or it should be assigned to a closely related industry. It may also be possible to make meaningful combinations of smaller industries producing related products that meet the inclusion criteria. This ensures that the output of the non-sampled industries or products is included somewhere in the weighting structure.

Figure 1 illustrates the process followed in the derivation of the South African PPI weights.

**Figure 1 – Derivation of the PPI weights**



**Table 5 – Comparison between 2023 and 2024 PPI final manufacturing weights (percentage)**

	<b>2023 weight</b>	<b>2024 weight</b>	<b>Difference</b>
Food products, beverages and tobacco products	27,39	29,16	1,77
Textiles, clothing and footwear	5,95	5,11	-0,84
Paper and printed products	8,79	8,42	-0,37
Coke, petroleum, chemical, rubber and plastic products	22,70	24,26	1,56
Non-metallic mineral products	2,92	2,69	-0,23
Metals, machinery, equipment and computing equipment	14,90	14,44	-0,46
Electrical machinery and communication and metering equipment	3,37	3,45	0,08
Transport equipment	9,87	8,52	-1,35
Furniture and other manufacturing	4,11	3,94	-0,17

### **3.4 Weight reference period**

More and more countries are introducing chained indices in which the weights are updated on an annual basis. In such cases, the weight reference period, the price base period, and the index reference period can be different (IMF, 2004: 93).

The PPI Manual (page 95) explains that when multitier weights (i.e. one set of weights for industry level and above, another set of weights at product level and below) have been set up, weights at higher levels could be updated periodically from industry data, while weights at lower levels would be updated as and when new information becomes available. This implies that the lower-level product sub-weights will not necessarily refer to the same period as the higher-level weights.

The PPI reference period for the new weights is 2020, based on the latest available SUTs.

### **3.5 Index reference period**

Re-referencing (or rebasing) the indices is important to limit the impact of historical inflation on current readings. It is good practice to re-reference the indices when updating weights, revising the basket, or introducing significant methodological or classification changes. All indices were re-referenced to 100 in December 2023. Re-referencing simply changes the level of the indices, and does not affect the rates of change previously published.

## 4. Basket of goods

### 4.1 Introduction

The basket is a list of specific products which determines the sample for price collection in the PPI.

The national accounts value-added estimates as well as Stats SA industry surveys and external industry information all provide guidance on the selection of indicator products to be included in the PPI basket.

### 4.2 Selection criteria for the basket of goods

The objective of the basket selection process is to ensure that those products which represent the largest share of production within a group are included in the index.

Activities with a high relative importance in the national accounts at the 3-digit and 4-digit SIC group level are included in the PPI.

Indicator products within each industry group are selected based on their sales values in relation to total sales in a group. For a product to be included in the basket, it should fall into the top 80 cumulative percentage of its group.

Finally, products that represent less than 0,1% of the total weight of their industry table are excluded.

Before dropping, combining, or preserving indicator products, further consideration is given to factors such as the similarity of another existing product, observations on the ground by the PPI data collection team, the existence of enough relevant producers, basket stability, industry association feedback, and user requirements.

During the latest basket review implemented in January 2024, the overall number of products in the basket dropped to 277, from 278 previously. Sixteen products entered the basket and fifteen were removed. Two products were combined into one product, another three were combined into one product, and one was split into two products. These changes are listed in Tables 6 and 7. The details of the baskets are provided in Annexure B.

**Table 6 – Number of products in the previous and current PPI baskets**

Industry table	Previous basket (2021 to 2023)	Current basket (since 2024)
Agriculture, forestry, and fishing	27	30
Mining	20	21
Intermediate manufacturing	36	33
Final manufacturing	192	190
Water and electricity	3	3

**Table 7 – New and dropped products in the basket review of January 2024**

Industry table	New products	Dropped products
Agriculture, forestry, and fishing	Pumpkins	
	Carrots	
	Cabbage and red cabbage	
Mining	Zinc	Andalusite
	Limestone	
Intermediate manufacturing		Silver in powder form
Final manufacturing	Offals of mammals	Soups and broths, powdered
	Offals of poultry	Linen
	Russians and viennas	Loose car seat covers
	Pig feeds	Stationery goods of plastic
	Uncooked pasta	Cloth, grill, netting and fencing, of iron or steel wire
	Prepared dishes	Ball or roller bearings
	Psycholeptics and psycholaneptics	Filtering or purifying machinery and apparatus (except for air or engines)
	Antacid	Industrial ventilating fans and blowers
	Motor vehicle parts and components of plastic	Geysers
	Automotive HVAC	Computers
	Solar panels and parts thereof	Communication equipment
		Bodies for motor vehicles and parts thereof
		Parts of machinery for mining, quarrying and construction

The other changes regarding the final manufacturing basket were the following:

- anti-inflammatories and non-narcotic analgesics were combined into analgesics; and
- fertilisers were split into ammonia nitrate fertilisers, and other fertilisers.

The other changes regarding the intermediate manufacturing basket were that ethylene polymers and copolymers (PET), PVC and HDPE compound, and polyester resin were combined under plastic in primary form.



## **5. Sampling**

### **5.1 Introduction**

There are two types of sampling in the PPI: sampling of businesses and sampling of products to be priced.

### **5.2 Selection of businesses (respondents)**

Records from industry large sample surveys as well as the Stats SA statistical business register form the basis for the PPI sampling frame. Other frame sources include industry association information, where this data is cross-referenced with that of industry surveys to sample the businesses with the highest turnover to represent the selected industries and products. The top 80% of businesses within an industry that produce a certain product are selected.

### **5.3 Selection of a sampled product from the respondent**

Stats SA's PPI data collectors select sample products during interviews with relevant representatives of businesses. Ideally, the data collector samples the volume sellers, in other words the products with the highest volumes and/or turnover. In this process, item and transaction characteristics are important as they are both relevant to the price of a product.

The item characteristics include, for example (Maitland-Smith, 2000: 9):

- type of product;
- brand name or model number; and
- main price-determining characteristics, e.g. size, weight, power.

The transaction characteristics include, for example (Maitland-Smith, 2000: 10):

- type of buyer: exporter, wholesaler, retailer, manufacturer, government;
- type of contract: single/multiple deliveries, orders, one year, agreed volume;
- unit of measure per unit: metre, kilogram, etc.;
- delivery basis: free on board, sale with/without delivery to customer;
- type of price: average, list, free on board, net of discount; and
- type of discount: seasonal, volume, cash, competitive, trade.

## 6. Data collection and processing (includes editing and data quality evaluation)

### 6.1 Introduction

Stats SA staff based at head office are responsible for conducting the PPI survey. They use email, internet and telephone calls to collect price data. The process followed in the compilation of the PPI is illustrated in Figure 2.

**Figure 2 – PPI process flows**



### 6.2 Collection period and frequency

When collecting prices for a particular period, there are two basic choices of collection period: point-in-time and period prices.

Point-in-time prices relate to the price of a product on a particular date in the month, whereas period prices record the price across the month and so are average prices for the month. The pros and cons of each method are summarised in Table 8 (IMF, 2004: 121).

The South African PPI uses mostly the point-in-time approach, and prices are collected on a monthly basis. The majority of prices are collected for the first seven days of the month (to ensure consistency in the final index, the price observation should compare like with like for each period). Period prices are used for electricity, agriculture and mining products.

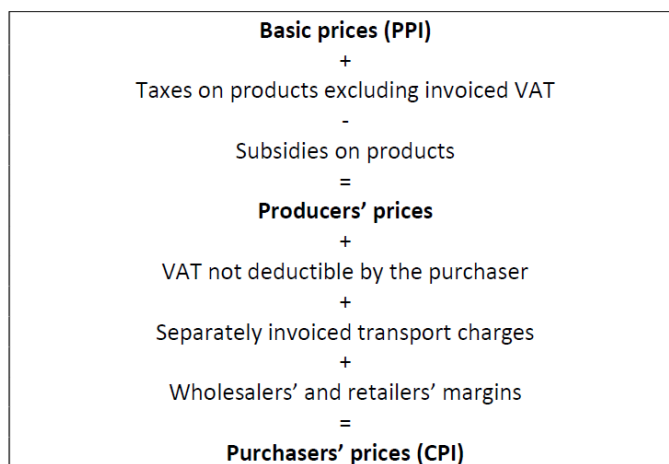
**Table 8 – Collection period and frequency**

Method	Pros	Cons
Point-in-time prices	<ul style="list-style-type: none"> <li>Consistency in month-to-month changes in price</li> </ul>	<ul style="list-style-type: none"> <li>A transaction may not have taken place on the specified date</li> <li>More susceptible to short-term external influences (for example, extreme weather conditions, labour stoppages) that could affect the price on the particular day of price collection</li> <li>Omits short-term price changes between collection dates</li> </ul>
Period prices	<ul style="list-style-type: none"> <li>Yields a smoother time series</li> <li>Less susceptible to timing of price changes</li> </ul>	<ul style="list-style-type: none"> <li>The index may be less timely when compared with point-in-time estimates, since the average cannot be calculated until the end of the period</li> </ul>

**6.3 Type of prices collected**

The PPI measures changes in the prices received by domestic producers for their outputs. These prices are commonly referred to as transaction prices and include all discounts or rebates given.

**Figure 3 – Difference between basic prices, producers’ prices and purchasers’ prices**



Source: System of National Accounts (2008: 103)

Figure 3 illustrates the differences between types of prices. The PPI aims to measure transactions in basic prices (Eurostat, 2012: 9). However, in practice it is often impossible to remove taxes other than VAT or subsidies.

**6.4 Editing**

Once the completed questionnaires are received from the companies, they are quality controlled to ensure that all fields were completed, and that each questionnaire was completed accurately. Thereafter, the questionnaire is captured and the data validated and edited if required. Editing detects if there are any errors in the data, and if so they are investigated and corrected.

The main objective of editing is to ensure that clean data are prepared for analysis. There are three stages in PPI editing:

- validation: check if the correct codes were allocated during capturing and allocate missing unit codes;
- logical edits: ensure that the current and previous months' data do not have contradictory values, e.g. compare current month brand name with the previous month; and
- range edits: identify whether the item value falls inside a determined acceptable range.

## **6.5 Product maintenance**

The aim of product maintenance is to ensure there are enough prices for each indicator product. This process involves the substitution of items that are no longer produced. Companies that are permanently closed are replaced.

## **6.6 Listing of indicator products and method**

Annexure B provides a summary of all indicator products and details regarding their collection.

## **7. Imputation in the PPI**

### **7.1 Introduction**

Although the PPI is published every month, certain price observations are not available in each period. This may be due to the seasonal nature of the product, the fact that prices change only periodically (such as administrative prices, tariffs and fees), or that the product was temporarily not available for sale. In all of these cases, an imputation method should be used, whether at an aggregated level or a more disaggregated level. Failure to impute for missing prices may lead to a bias in the index.

### **7.2 Imputation methods**

Stats SA uses two methods to impute movement in an index when there are no price observations available.

First, an average price change is calculated for all observed varieties within the relevant indicator product that are matched to the previous month to calculate a change for an elementary index that has no data. For example, if the PPI collects data for 10 types of shirt and one of those is temporarily unavailable, the average price change is calculated using the remaining nine. There is an assumption that the missing price would have moved in the same way as the average of the prices of the other items in the elementary index.

Second, the change in the index of a higher-level aggregate is used to impute an elementary index when no prices were recorded for this indicator product. For example, the change in the aggregate index for fruit would be applied to the index for grapes.

## 8. PPI compilation

### 8.1 Index compilation

The compilation of the PPI is based on prices in the current and previous survey periods. The survey periods are equal to a month. In the first stage of calculation the ratio of the previous and current month is calculated for each matched sampled product. An elementary index is then calculated using the Jevons index number formula. The Jevons index is defined as the unweighted geometric mean of the price ratios, which is identical to the ratio of the unweighted geometric mean prices. The formula is given as:

$$I_J^{0:t} = \prod \left( \frac{p_i^t}{p_i^0} \right)^{1/n} = \frac{\prod (p_i^t)^{1/n}}{\prod (p_i^0)^{1/n}}$$

The average price ratios are chained together monthly through successive multiplication with the previous month's index. As a result the Jevons index is transitive, which means that the chained monthly indices are identical to the corresponding direct indices.

The second stage of calculating the PPI does not involve individual prices or quantities. Instead, a higher-level index is calculated as a Young index in which the elementary price indices are averaged using a set of predetermined weights. The formula can be written as follows:

$$I^{0:t} = \sum w_i^b I_i^{0:t}, \sum w_i^b = 1$$

where

$I^{0:t}$  denotes the overall PPI, or any high-level index, from period 0 to  $t$ ;

$w_i^b$  is the weight attached to each of the elementary price indices; and

$I_i^{0:t}$  is the corresponding elementary price index.

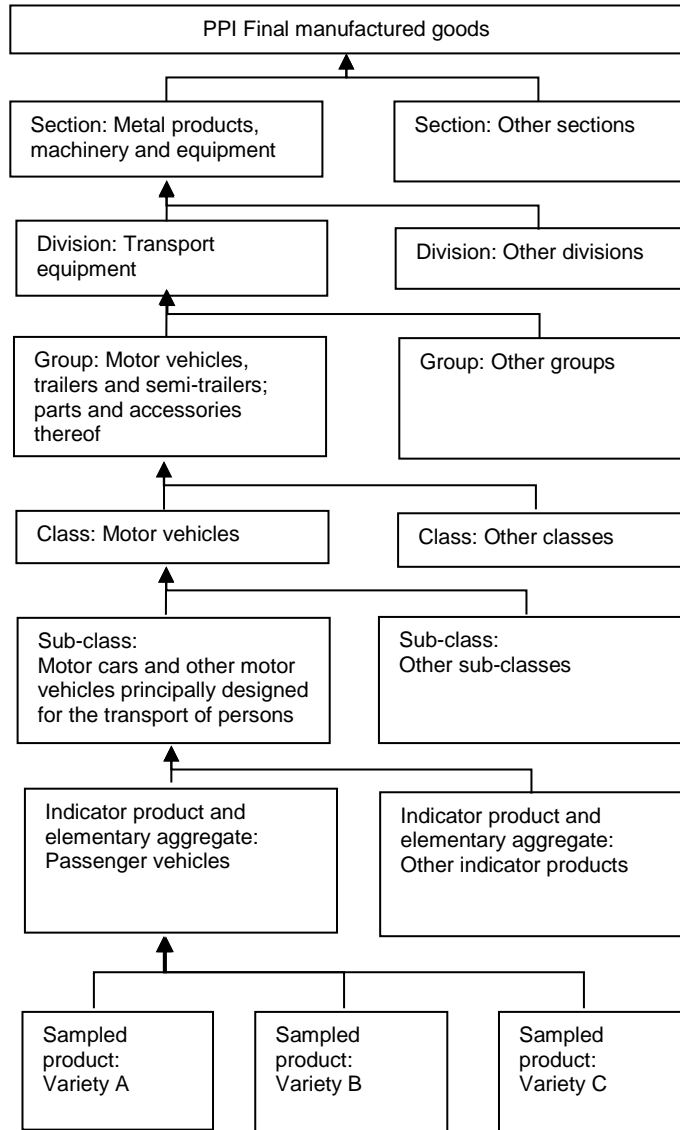
The elementary indices are identified by the subscript  $i$ , whereas the higher-level index carries no subscript. The weights are derived in period  $b$ , which in practice precedes period 0, the index reference period.

Note the following distinction between the weights and index reference periods:

- weights reference period: the period covered by the production statistics used to calculate the weights; usually, the weights reference period is a year; and
- index reference period: the period in which the index is set to 100 (also referred to as the base period).

8.2 Example of the aggregation of the PPI

Figure 4 – Graphical example of PPI aggregation



The following numerical example shows the calculations applicable to “instant coffee”.

Table 9 – Calculating the price relative and geometric mean

Product code	Instant coffee						
239120001							
Unique number	Respondent	Quantity	Unit	Previous price	Current price	Price relative	Geometric mean
xxxxxxx	Company A	1 tin	750g	61,99	61,99	1,00000	
yyyyyyy	Company B	1 tin	250g	16,99	15,99	0,94114	
zzzzzzz	Company C	1 pouch	120g	19,99	21,99	1,10005	
wwwww	Company D	1 tin	250g	18,79	18,79	1,00000	
						$(1 \times 0,94114 \times 1,10005 \times 1)^{1/4} = 1,00871$	

**Table 10 – Creating the index**

CPC product code	Description	New index	Weight in PPI	Weighted index
239120001	Instant coffee	140,4	0,17	23,9
239130001	Tea	130,2	0,24	31,2
239910002	Infant food and formula	145,4	0,21	30,5
239920001	Soups and broths, powdered	123,7	0,11	13,6
239950001	Tomato sauce	135,6	0,16	21,7
239950002	Mayonnaise	148,7	0,26	38,7
239950003	Spices and condiments	137,8	0,45	62,0
239990001	Non-dairy creamers	141,5	0,24	34,0
239990003	Nutritional, dietary and formulated food supplements	139,4	0,51	71,1
239	Other food		2,35	139,0 *
SIC code	Description	New index	Weight in PPI	Weighted index
3041	Bakery products	140,7	3,04	427,7
3042	Sugar	140,2	1,37	192,1
3043	Other food	139,0	2,35	326,7
304	Other food products		6,76	140,0
SIC code	Description	New index	Weight in PPI	Weighted index
301	Meat, fish, fruit, vegetables, oils and fats	150,3	4,16	625,2
302	Dairy products	140,4	1,76	247,1
303	Grain mill products, starches and starch products, animal feeds	139,6	2,08	290,4
304	Other food products	140,0	6,76	946,4
305	Beverages	142,3	8,37	1 191,1
306	Tobacco	149,2	2,16	322,3
30	Food products, beverages and tobacco products		25,29	143,2
SIC code	Description	New index	Weight in PPI	Weighted index
30	Food products, beverages and tobacco products	143,2	25,29	3 621,5
31	Textiles, clothing and footwear	152,2	5,95	905,6
32	Paper and printed products	165,4	8,79	1 453,9
33	Coke, petroleum, chemical, rubber and plastic products	174,9	22,7	3 970,2
34	Non-metallic mineral products	86,0	2,92	251,1
35	Metals, machinery, equipment and computing equipment	122,8	17,0	2 087,6
36/37	Electrical machinery and communication and metering equipment	138,2	3,37	465,7
38	Transport equipment	146,1	9,87	1 442,0
39	Furniture and other manufacturing	115,1	4,11	473,1
3	Final manufactured goods (Headline PPI)		100	146,7

\*  $(23,9 + 31,2 + 30,5 + 13,6 + 21,7 + 38,7 + 62,0 + 34,0 + 71,1) / 2,35 = 139,0$ .

**Table 11 – Headline PPI rate**

	Index (previous year, same month)	Index (previous month)	Index (current month)	Monthly percentage change	Annual percentage change (inflation rate)
Headline PPI rate	137,5	145,8	146,7	0,6 (= $146,7 \div 145,8 \times 100 - 100$ )	6,7 (= $146,7 \div 137,5 \times 100 - 100$ )



### 8.3 Changes in weights – linking the old and new index series

PPI high-level weights and certain lower-level weights are updated annually. The introduction of new weights can be complex because it provides opportunities for introducing new items, samples, data sources, compilation practices, elementary aggregates, higher-level indices, and classifications, as well as a chance to remove components of the index that have become obsolete. These tasks are often undertaken simultaneously at the time of reweighting to avoid frequent disruption and any resulting inconvenience to users of the indices.

New weights are introduced with effect from each January. It is important to ensure that the new weights do not distort the month-on-month movements of the indices between December and January. There are two cases to consider, namely reweighting with or without re-referencing (rebasing) the index.

#### 8.3.1 Reweighting with re-referencing

When the PPI is re-referenced, all indices are reset to 100 in the latest available December. When the indices for January are computed, there is no risk that the new weights will distort the month-on-month changes between December and January, since all of December's indices must equal 100 regardless of which set of weights is applied to December.

#### 8.3.2 Reweighting without re-referencing

When new weights are introduced without re-referencing the indices, the index with new weights (starting in January) must be linked to the index with old weights (ending in December). If there is no linking, the month-on-month percentage changes between December and January would reflect both price changes and weight changes. Linking ensures that the month-on-month index changes between December and January are driven by price changes only, based on the new weights.

The new index (i.e. index with new weights) must be linked to the old index (i.e. index with old weights) by means of a linking factor (LF).

$$LF = \text{Dec index}_{\text{old weights}} / \text{Dec index}_{\text{new weights}}$$

$$\text{Linked index} = \text{new index} \times LF$$

For example, consider the compilation of the higher-level indices in Table 12. The index value for live animals of 119,0 in January 2023 (based on new weights) cannot be compared directly with the index value of 119,7 (119,66 in Table 12) in December 2022 (based on old weights) – precisely because of the change in weights. We need to adjust for the change in weights using a linking factor. The LF in this case is 0,9978 (= 119,66 / 119,92). The linked index value for January 2023 is 118,7 (= 119,0 x 0,9978). January's linked value of 118,7 can be compared with December's value of 119,7, giving a month-on-month price change of -0,8%.

February and subsequent months are treated the same way as January, i.e. the indices are calculated using the new weights and then multiplied by the constant linking factors to derive consistent, linked series.

Note that linking results in non-additivity of the new, linked index. In other words, if components are multiplied by their weights and aggregated to higher levels, the results may not be the same as those published. The divergence depends on the extent of differences between old and new weights. The greater the differences, the greater the degree of non-additivity. In the example in Table 12, the published total index for January 2023 would be 115,1. Adding the contributions of the components gives 115,3 (before linking); multiplying 115,3 by its linking factor of 0,9985 gives us the linked value for publishing, namely 115,1, which is the correct value to compare with 116,6 in December 2022.

**Table 12 – Linking the new index to the old index after reweighting**

	Weight 2023	Weight 2024	Jan 2023	Nov 2023	Old index Dec 2023	New index Dec 2023	Jan 2024
<b>EXAMPLE</b>							
<b>Elementary price indices</b>							
Cattle	10,04	10,75	115,5	107,1	111,8		
Pigs	1,95	2,11	122,7	124,3	117,8		
Poultry	12,34	12,26	159,3	188,1	184,5		
Sheep	2,20	2,07	100,7	96,0	96,2		
Eggs	2,77	2,61	117,0	189,7	184,6		
Raw milk	4,95	5,01	131,3	143,0	143,5		
Wool	1,23	1,35	107,6	99,5	100,8		
<b>Elementary price indices rebased</b>							
Cattle			103,3	95,8	100,0	100,0	100,0
Pigs			104,2	105,5	100,0	100,0	89,0
Poultry			86,4	101,9	100,0	100,0	89,0
Sheep			104,7	99,7	100,0	100,0	101,2
Eggs			63,4	102,7	100,0	100,0	89,0
Raw milk			91,5	99,6	100,0	100,0	101,4
Wool			106,7	98,7	100,0	100,0	101,2
<b>Higher-level indices rebased</b>							
	Old				New		
Live animals = cattle+pigs +poultry+sheep	26,53	27,19	93,2	100,2	100,0	100,0	94,3
Milk and eggs = eggs+raw milk	7,72	7,62	79,7	100,9	100,0	100,0	97,2
Other animal products	1,23	1,35	106,7	98,7	100,0	100,0	101,2
Total	35,48	36,16	90,4	100,3	100,0	100,0	95,2
<b>Chaining of higher-level indices to Dec 2023=100</b>							
							<b>Ratios</b>
Live animals = cattle+pigs +poultry+sheep							0,943
Milk and eggs = eggs+raw milk							0,972
Other animal products							1,012
Total							0,952
<b>Chaining of higher-level indices to Dec 2023=100</b>							
Live animals = cattle+pigs +poultry+sheep	26,53	27,19	93,2	100,2	100,0	100,0	94,3
Milk and eggs = eggs+raw milk	7,72	7,62	79,7	100,9	100,0	100,0	97,2
Other animal products	1,23	1,35	106,7	98,7	100,0	100,0	101,2
Total	35,48	36,16	90,4	100,3	100,0	100,0	95,2

**Annexure A – Manufacturing CPCs**

<b>CPC group</b>	<b>CPC group description</b>	<b>Intermediate/Final</b>
<b>CPC 2</b>	<b>Food products; beverages and tobacco; textiles, apparel and leather products</b>	
CPC 211	Meat and meat products	Final
CPC 212	Prepared and preserved fish, crustaceans, molluscs and other aquatic invertebrates	Final
CPC 213	Prepared and preserved vegetables, pulses and potatoes	Final
CPC 214	Prepared and preserved fruit and nuts	Final
CPC 216	Vegetable oils	Final
CPC 217	Margarine and similar preparations	Final
CPC 219	Oil-cake and other residues resulting from the extraction of vegetable fats or oils; flours and meals of oil seeds or oleaginous fruits, except those of mustard; vegetable waxes, except triglycerides; degreas; residues resulting from the treatment of fatty substances or animal or vegetable waxes	Final
CPC 221	Processed liquid milk and cream	Final
CPC 222	Other dairy products	Final
CPC 231	Grain mill products	Final
CPC 233	Preparations used in animal feeding	Final
CPC 234	Bakery products	Final
CPC 235	Sugar	Final
CPC 236	Cocoa, chocolate and sugar confectionery	Final
CPC 237	Macaroni, noodles, couscous and similar farinaceous products	Final
CPC 239	Food products n.e.c.	Final
CPC 241	Ethyl alcohol; spirits, liqueurs and other spirituous beverages	Final
CPC 242	Wines	Final
CPC 243	Malt liquors and malt	Final
CPC 244	Soft drinks; bottled mineral waters	Final
CPC 250	Tobacco products	Final
CPC 272	Carpets and other textile floor coverings	Final
CPC 282	Wearing apparel, except fur apparel	Final
CPC 291	Tanned or dressed leather; composition leather	Intermediate
CPC 293	Footwear, with outer soles and uppers of rubber or plastics, or with uppers of leather or textile materials, other than sports footwear, footwear incorporating a protective metal toe-cap and miscellaneous special footwear	Final
<b>CPC 3</b>	<b>Other transportable goods, except metal products, machinery and equipment</b>	
CPC 311	Wood, sawn or chipped lengthwise, sliced or peeled, of a thickness exceeding 6mm; railway or tramway sleepers (cross-ties) of wood not impregnated	Intermediate
CPC 312	Wood continuously shaped along any of its edges or faces; wood wool; wood flour; wood in chips or particles	Intermediate
CPC 313	Wood in the rough, including those treated with paint, stains, creosote or other preservatives; railway or tramway sleepers (cross-ties) of wood, impregnated	Intermediate
CPC 314	Boards and panels	Intermediate
CPC 316	Builders' joinery and carpentry of wood (including cellular wood panels, assembled parquet panels, shingles and shakes)	Intermediate
CPC 317	Packing cases, boxes, crates, drums and similar packings, of wood; cable-drums of wood; pallets, box pallets and other load boards, of wood; casks, barrels, vats, tubs and other coopers' products and parts thereof, of wood (including staves)	Final
CPC 321	Pulp, paper and paperboard	Final
CPC 322	Books, in print	Final
CPC 323	Newspapers and periodicals, daily, in print	Final
CPC 324	Newspapers and periodicals, other than daily, in print	Final
CPC 326	Stamps, cheque forms, banknotes, stock certificates, brochures and leaflets, advertising material and other printed matter	Final
CPC 327	Registers, account books, notebooks, letter pads, diaries and similar articles, blotting-pads, binders, file covers, forms and other articles of stationery, of paper or paperboard	Final
CPC 331	Coke and semi-coke of coal, of lignite or of peat; retort carbon	Final

<b>CPC group</b>	<b>CPC group description</b>	<b>Intermediate/Final</b>
CPC 333	Petroleum oils and oils obtained from bituminous materials, other than crude; preparations n.e.c. containing by weight 70% or more of these oils, such oils being the basic constituents of the preparations	Final
CPC 334	Petroleum gases and other gaseous hydrocarbons, except natural gas	Final
CPC 335	Petroleum jelly; paraffin wax, micro-crystalline petroleum wax, slack wax, ozokerite, lignite wax, peat wax, other mineral waxes, and similar products; petroleum coke, petroleum bitumen and other residues of petroleum oils or of oils obtained from bituminous materials	Final
CPC 341	Basic organic chemicals	Intermediate
CPC 342	Basic inorganic chemicals n.e.c.	Intermediate
CPC 343	Tanning or dyeing extracts; tannins and their derivatives; colouring matter n.e.c.	Intermediate
CPC 346	Fertilisers and pesticides	Final
CPC 347	Plastics in primary forms	Intermediate
CPC 351	Paints and varnishes and related products; artists' colours; ink	Final
CPC 352	Pharmaceutical products	Final
CPC 353	Soap, cleaning preparations, perfumes and toilet preparations	Final
CPC 354	Chemical products n.e.c.	Final
CPC 361	Rubber tyres and tubes	Final
CPC 362	Other rubber products	Intermediate
CPC 363	Semi-manufactures of plastics	Intermediate
CPC 364	Packaging products of plastics	Intermediate
CPC 369	Other plastic products	Final
CPC 371	Glass and glass products	Intermediate
CPC 372	Non-structural ceramic ware	Final
CPC 373	Refractory products and structural non-refractory clay products	Final
CPC 374	Plaster, lime and cement	Final
CPC 375	Articles of concrete, cement and plaster	Final
CPC 379	Other non-metallic mineral products n.e.c.	Final
CPC 381	Furniture	Final
CPC 382	Jewellery and related articles	Final
CPC 389	Other manufactured articles n.e.c.	Final
CPC 393	Metal waste or scraps	Intermediate
CPC 399	Other wastes and scraps	Intermediate
<b>CPC 4</b>	<b>Metal products, machinery and equipment</b>	
CPC 411	Basic iron and steel	Intermediate
CPC 412	Products of iron or steel	Intermediate
CPC 413	Basic precious metals and metals clad with precious metals	Intermediate
CPC 414	Copper, nickel, aluminium, alumina, lead, zinc and tin, unwrought	Intermediate
CPC 415	Semi-finished products of copper, nickel, aluminium, lead, zinc and tin or their alloys	Intermediate
CPC 416	Other non-ferrous metals and articles thereof (including waste and scrap of some metals); cermets and articles thereof	Intermediate
CPC 421	Structural metal products and parts thereof	Final
CPC 422	Tanks, reservoirs and containers of iron, steel or aluminium	Final
CPC 429	Other fabricated metal products	Final
CPC 431	Engines and turbines and parts thereof	Final
CPC 432	Pumps, compressors, hydraulic and pneumatic power engines, and valves, and parts thereof	Final
CPC 433	Bearings, gears, gearing and driving elements, and parts thereof	Final
CPC 435	Lifting and handling equipment and parts thereof	Final
CPC 439	Other general-purpose machinery and parts thereof	Final
CPC 441	Agricultural or forestry machinery and parts thereof	Final
CPC 442	Machine-tools and parts and accessories thereof	Final
CPC 444	Machinery for mining, quarrying and construction, and parts thereof	Final
CPC 445	Machinery for food, beverage and tobacco processing, and parts thereof	Final
CPC 447	Weapons and ammunition and parts thereof	Final

<b>CPC group</b>	<b>CPC group description</b>	<b>Intermediate/Final</b>
CPC 448	Domestic appliances and parts thereof	Final
CPC 449	Other special-purpose machinery and parts thereof	Final
CPC 461	Electric motors, generators and transformers, and parts thereof	Final
CPC 462	Electricity distribution and control apparatus, and parts thereof	Final
CPC 463	Insulated wire and cable; optical fibre cables	Final
CPC 464	Accumulators, primary cells and primary batteries, and parts thereof	Final
CPC 471	Electronic valves and tubes; electronic components; parts thereof	Final
CPC 473	Radio broadcast and television receivers; apparatus for sound and video recording and reproducing; microphones, loudspeakers, amplifiers, etc.	Final
CPC 482	Instruments and appliances for measuring, checking, testing, navigating and other purposes, except optical instruments; industrial process control equipment; parts and accessories thereof	Final
CPC 491	Motor vehicles, trailers and semi-trailers; parts and accessories thereof	Final
CPC 492	Bodies (coachwork) for motor vehicles; trailers and semi-trailers; parts and accessories thereof	Final
CPC 495	Railway and tramway locomotives and rolling stock, and parts thereof	Final
CPC 496	Aircraft and spacecraft, and parts thereof	Final

**Annexure B – Basket and weights of products in the PPI and price collection methodology (as at January 2024)****B1 – Agriculture, forestry and fishing**

SIC code	SIC description	Indicator product	Source	Frequency	Type of price	Weight (%)
<b>1</b>	<b>Agriculture, forestry and fishing</b>					<b>100,00</b>
<b>11</b>	<b>Agriculture</b>					
<b>111</b>	<b>Growing of crops</b>					
1111		Wheat	Markets	Monthly	Weighted average price	2,91
1111		Maize	Markets	Monthly	Weighted average price	15,55
1111		Cabbage and red cabbage	Markets	Monthly	Average price	0,15
1111		Soybeans	Markets	Monthly	Weighted average price	4,62
1111		Sunflower seed	Markets	Monthly	Weighted average price	2,09
1111		Sugar cane	Sugar Cane Growers Association	Monthly (one month lag)	Average price	2,70
1112		Tomatoes	Markets	Monthly	Average price	1,24
1112		Pumpkins	Markets	Monthly	Average price	0,31
1112		Carrots	Markets	Monthly	Average price	0,31
1112		Onions	Markets	Monthly	Average price	1,02
1112		Potatoes	Markets	Monthly	Average price	4,13
1113		Bananas	Markets	Monthly	Average price	0,81
1113		Lemons	Markets	Monthly	Average price/ Cost, insurance, freight	1,54
1113		Oranges	Markets	Monthly	Average price/ Cost, insurance, freight	3,43
1113		Grapes	Markets	Monthly	Average price/ Ex-works price	5,44
1113		Apples	Markets	Monthly	Average price/ Ex-works price	3,14
1113		Pears	Markets	Monthly	Average price/ Ex-works price	1,30
<b>112</b>	<b>Farming of animals</b>					
1121		Cattle	Auctions	Monthly	Average price	10,75
1121		Sheep	Auctions	Monthly	Average price	2,07
1121		Raw milk	Processors of milk/ Farmers/ Association	Monthly	Ex-factory price/ Ex-farm price	5,01
1121		Wool	Auctions/ Companies	Monthly	Weighted average price	1,35
1122		Pigs	Auctions	Monthly	Average price	2,11
1122		Poultry	Association	Monthly	Average price	12,26
1122		Eggs	Association/ Companies	Monthly	Average price	2,61

SIC code	SIC description	Indicator product	Source	Frequency	Type of price	Weight (%)
<b>12</b>	<b>Forestry and logging</b>					
<b>122</b>	<b>Logging</b>					
1220		Sawn and planted timber - softwood	Companies	Monthly	List price/ Roadside price	3,98
1220		Sawn and planted timber - hardwood	Companies	Monthly	Ex-factory price/ Roadside price	0,57
<b>13</b>	<b>Fishing</b>					
<b>131</b>	<b>Ocean and coastal fishing</b>					
1310		Hake	Fishing producers/ companies	Monthly	Ex-works price	3,59
1310		Small pelagic (e.g. anchovies and pilchards)	Fishing producers/ companies	Monthly	Beach price/ Ex-vessel price	1,95
1310		Rock lobster	Fishing producers/ companies	Monthly	Beach price	0,92
1310		Squid	Fishing producers/ companies	Monthly	Beach price/ Cost, insurance, freight	2,14

**B2 – Mining and quarrying**

SIC code	SIC description	Indicator product	Source	Frequency	Type of price	Weight (%)
<b>2</b>	<b>Mining and quarrying</b>					<b>100,00</b>
<b>21</b>	<b>Mining of coal</b>					
<b>210</b>	<b>Mining of coal</b>					
2100		Coal	Mining producers/ companies	Monthly	Contract price/ Average price/ Free carrier/ Free on board/ List price	20,19
<b>22</b>	<b>Extraction of crude petroleum and natural gas</b>					
<b>221</b>	<b>Extraction of crude petroleum and natural gas</b>					
2210		Natural gas	Companies	Monthly	Average price	0,28
2210		Natural gas condensate	Companies	Monthly	Average price	1,24
<b>23</b>	<b>Mining of gold</b>					
<b>230</b>	<b>Mining of gold</b>					
2300		Gold	Mining producers/ companies	Monthly	Average net selling price/ Average price	13,65
<b>24</b>	<b>Mining of metal ores, except gold</b>					
<b>241</b>	<b>Mining of iron ore</b>					
2410		Haematite	Mining producers/ companies	Monthly	Ex-mine price/ Free on board/ Free on rail	12,83

SIC code	SIC description	Indicator product	Source	Frequency	Type of price	Weight (%)
<b>242</b>	<b>Mining of non-ferrous metal ores, except gold</b>					
2421		Chromite	Mining producers/ companies	Monthly	Ex-bin price	3,47
2422		Metallic copper	Mining producers/ companies	Monthly	Average LME price/ Weighted average price	0,58
2423		Metallurgical manganese	Mining producers/ companies	Monthly	Average price/ Free carrier/ Free on board	5,79
2424		Platinum	Companies/ Platinum refiners/ London Metal Exchange	Monthly	Average price	6,53
2424		Rhodium	Mining producers/ companies	Monthly	Weighted average price	14,34
2424		Palladium	Mining producers/ companies	Monthly	Average price/ Weighted average price	7,75
2429		Nickel	Mining producers/ companies	Monthly	Weighted average price	3,46
2429		Zircon	Mining producers/ companies	Monthly	Contract price	2,45
2429		Zinc	Mining producers/ companies	Monthly	Average price	2,53
<b>25</b>	<b>Other mining and quarrying</b>					
<b>251</b>	<b>Stone quarrying, clay and sand-pits</b>					
2511		Granite	Mining producers/ companies	Monthly	Average price/ Free alongside ship	0,08
2512		Limestone	Mining producers/ companies	Monthly	Average price	0,53
2519		Aggregate stones	Mining producers/ companies	Monthly	Ex-bin price	1,72
2519		Sand	Mining producers/ companies	Monthly	Average price	0,21
2520		Gem diamonds	Mining producers/ companies	Monthly	Average net selling price/ Weighted average price	0,86
2520		Industrial diamonds	Mining producers/ companies	Monthly	Average net selling price	1,09
2531		Phosphate concentrate	Mining producers/ companies	Monthly	Free carrier	0,42

**B3 – Electricity and water**

SIC code	SIC description	Indicator product	Source	Frequency	Type of price	Weight (%)
<b>4</b>	<b>Electricity and water</b>					<b>100,00</b>
<b>41</b>	<b>Electricity</b>					
<b>411</b>	<b>Production, collection and distribution of electricity</b>					
4111		Electricity	Eskom	Monthly	Average price	83,98
<b>42</b>	<b>Collection, purification and distribution of water</b>					
<b>420</b>	<b>Collection, purification and distribution of water</b>					
4200		Processed water	Water boards	Monthly	Distributor price	11,58
4200		Raw water	Department of Water and Sanitation	Monthly	Average price	4,44



**B4 – Manufacturing (Intermediate)**

SIC code	SIC description	Indicator product	Source	Frequency	Type of price	Weight (%)
<b>3</b>	<b>Manufacturing (Intermediate)</b>					<b>100,00</b>
<b>31</b>	<b>Manufacture of textiles, clothing and leather goods</b>					
<b>316</b>	<b>Tanning and dressing of leather</b>					
3161		Bovine tanned or dressed leather	Producers/ companies	Monthly	Cost, insurance, freight/ Ex-factory price	2,37
<b>32</b>	<b>Manufacture of wood, cork, straw, paper, printing, media</b>					
<b>321</b>	<b>Sawmilling and planing of wood</b>					
3210		Untreated logs and structural timber	Producers/ companies	Monthly	Cost, insurance, freight/ Delivered at place/ Delivered customer price/ Ex-factory price/ Ex-works price/ Ex-yard price/ Free on board/ Free on rail	4,14
3210		Wood in chips or particles	Producers/ companies	Monthly	Delivered price/ Ex-factory price/ Free on rail	0,83
3210		Treated logs and structural timber	Producers/ companies	Monthly	Ex-factory price/ Ex-works price	1,20
<b>322</b>	<b>Manufacture of products of wood, cork, straw and plaiting materials</b>					
3221		Boards of wood	Producers/ companies	Monthly	Net selling price	3,72
3222		Builders' carpentry of wood	Producers/ companies	Monthly	Net selling price	2,53
<b>323</b>	<b>Manufacture of paper and paper products</b>					
3231		Wood pulp*	Producers/ companies	Monthly	Net selling price	4,63
<b>33</b>	<b>Manufacture of coke, refined petroleum products, nuclear, chemicals, rubber, plastic</b>					
<b>334</b>	<b>Manufacture of basic chemicals</b>					
3341		Basic organic chemicals	Producers/ companies	Monthly	Ex-works price	12,68
3341		Basic inorganic chemicals	Producers/ companies	Monthly	Ex-works price/ List price	5,31
3341		Tanning extracts	Producers/ companies	Monthly	Average net selling price	0,18
3343		Plastic in primary form*	Producers/ companies	Monthly	List price/ Average price/ Ex-factory price	2,54
<b>337</b>	<b>Manufacture of rubber products</b>					
3379		Conveyor belts or belting	Producers/ companies	Monthly	Ex-factory price/ Ex-works price	1,57

SIC code	SIC description	Indicator product	Source	Frequency	Type of price	Weight (%)
<b>338</b>	<b>Manufacture of plastic products</b>					
3380		Plastic bags	Producers/ companies	Monthly	Delivered price/ Ex-factory price/ Wholesale price	1,20
3380		Plastic containers	Producers/ companies	Monthly	Contract price/ Ex-factory price/ List price	2,80
<b>34</b>	<b>Manufacture of other non-metallic mineral products</b>					
<b>341</b>	<b>Manufacture of glass and glass products</b>					
3411		Safety glass	Producers/ companies	Monthly	Contract price	1,20
3411		Fibre glass	Producers/ companies	Monthly	Average net selling price	0,33
3411		Glass containers	Producers/ companies	Monthly	Average net selling price	1,55
<b>35</b>	<b>Manufacture of basic or fabricated metals, machinery, equipment, computing equipment</b>					
<b>351</b>	<b>Manufacture of basic iron and steel</b>					
3510		Ferro-manganese	Producers/ companies	Monthly	Contract price	0,19
3510		Ferro-chromium alloy	Producers/ companies	Monthly	Cost and freight/ Weighted average price	3,66
3510		Flat rolled non-alloy steel products	Producers/ companies	Monthly	Ex-factory price	5,65
3510		Flat rolled stainless steel products	Producers/ companies	Monthly	Delivered price	3,66
3510		Bars and rods of iron or steel	Producers/ companies	Monthly	Ex-factory price	3,97
3510		Angles, shapes, sections and similar products of iron or steel	Producers/ companies	Monthly	Ex-factory price	0,92
3510		Wire of iron or non-alloy steel	Producers/ companies	Monthly	Ex-factory price	1,64
<b>352</b>	<b>Manufacture of basic precious and non-ferrous metals</b>					
3520		Unwrought or semi-manufactured gold	Producers/ companies	Monthly	Average price/ Weighted average price	13,11
3520		Unwrought or semi-manufactured platinum	Producers/ companies	Monthly	Weighted average price	4,68
3520		Unwrought aluminium	Producers/ companies	Monthly	Average net selling price	0,49
3520		Tubes, pipes and tube or pipe fittings, of copper	Producers/ companies	Monthly	Average net selling price	0,76
3520		Manganese metal (electrolytic manganese)	Producers/ companies	Monthly	Average net selling price	4,74
<b>353</b>	<b>Casting of metals</b>					
3531		Semi-finished products and ingots of iron and steel*	Producers/ companies	Monthly	Ex-factory price	0,27
3532		Aluminium products	Producers/ companies	Monthly	Base price	1,79

SIC code	SIC description	Indicator product	Source	Frequency	Type of price	Weight (%)
<b>395</b>	<b>Recycling n.e.c.</b>					
3951		Metal waste and scrap	Producers/ companies	Monthly	Ex-factory price	3,74
3952		Recycling of non-metal waste and scrap	Producers/ companies	Monthly	Average price	1,95

\* These products' grouping in the PPI statistical release does not correspond exactly to the one shown in this table.

### B5 – Manufacturing (Final)

SIC code	SIC description	Indicator product	Source	Frequency	Type of price	Weight (%)
<b>3</b>	<b>Manufacturing (Final)</b>					<b>100,00</b>
<b>30</b>	<b>Manufacture of food products, beverages and tobacco products</b>					
<b>301</b>	<b>Production, processing and preserving of meat, fish, fruit, vegetables, oils and fats</b>					
3011		Beef carcasses	Producers/ companies	Monthly	Delivered price/ Ex-factory price	0,63
3011		Pork carcasses	Producers/ companies	Monthly	Average price/ Ex-works price	0,14
3011		Lamb carcasses	Producers/ companies	Monthly	Average price	0,10
3011		Chicken - Fresh or chilled	Producers/ companies	Monthly	Average price	0,10
3011		Frozen chicken	Producers/ companies	Monthly	Average price	0,60
3011		Offals of mammals	Producers/ companies	Monthly	Average price	0,09
3011		Offals of poultry	Producers/ companies	Monthly	Average price	0,04
3011		Polony	Producers/ companies	Monthly	Average net selling price	0,03
3011		Meat burgers	Producers/ companies	Monthly	Ex-factory price	0,07
3011		Russians and viennas	Producers/ companies	Monthly	Ex-factory price	0,11
3012		Fresh and chilled fish	Producers/ companies	Monthly	Delivered price/ Ex-works price	0,10
3012		Frozen fish	Producers/ companies	Monthly	List price	0,12
3012		Tinned fish	Producers/ companies	Monthly	Ex-factory price/ Selling price	0,23
3013		Frozen potato fries	Producers/ companies	Monthly	Ex-factory price/ Selling price	0,16
3013		Chips	Producers/ companies	Monthly	Average price/ List price	0,58
3013		Canned baked beans	Producers/ companies	Monthly	Ex-factory price	0,18
3013		Fruit juice	Producers/ companies	Monthly	Average price/ Ex-factory price/ List price	0,56
3013		Canned fruits	Producers/ companies	Monthly	Ex-factory price	0,08
3013		Fruit concentrates	Producers/ companies	Monthly	Average free on board price/ Average price/ Ex-factory price	0,13
3014		Vegetable oil	Producers/ companies	Monthly	Ex-factory price	0,46
3014		Margarine	Producers/ companies	Monthly	Ex-factory price	0,09
3014		Oilseed cake	Producers/ companies	Monthly	Average net selling price	0,06

SIC code	SIC description	Indicator product	Source	Frequency	Type of price	Weight (%)
<b>302</b>	<b>Manufacture of dairy products</b>					
3020		Fresh full-cream milk	Producers/ companies	Monthly	Ex-factory price	0,33
3020		Long life full-cream milk	Producers/ companies	Monthly	Average price	0,68
3020		Yoghurt	Producers/ companies	Monthly	Average price/ Ex-factory price/ Wholesale bulk price	0,43
3020		Cheddar	Producers/ companies	Monthly	Average price/ Ex-factory price	0,31
3020		Ice cream	Producers/ companies	Monthly	Average price/ Ex-factory price/ Free on board	0,18
<b>303</b>	<b>Manufacture of grain mill products, starches and starch products, animal feeds</b>					
3031		Cake flour	Producers/ companies	Monthly	Ex-factory price/ Selling price	0,23
3031		White bread flour	Producers/ companies	Monthly	Ex-factory price	0,18
3031		Brown bread meal	Producers/ companies	Monthly	Ex-factory price	0,06
3031		Maize meal and maizina	Producers/ companies	Monthly	Ex-factory price	0,64
3031		Cereals	Producers/ companies	Monthly	Ex-factory price	0,25
3031		Rice	Producers/ companies	Monthly	Ex-factory price/ Net selling price	0,14
3033		Dairy cattle feeds	Producers/ companies	Monthly	Average net selling price	0,24
3033		Poultry feeds	Producers/ companies	Monthly	Average net selling price	0,70
3033		Pig feeds	Producers/ companies	Monthly	Average price	0,07
<b>304</b>	<b>Manufacture of other food products</b>					
3041		Sweet biscuits	Producers/ companies	Monthly	Average price	0,45
3041		White bread	Producers/ companies	Monthly	Ex-factory price/ Net selling price	1,35
3041		Brown bread	Producers/ companies	Monthly	Ex-factory price/ Net selling price	1,15
3042		Raw cane sugar	Producers/ companies	Monthly	Spot price	0,61
3042		Refined sugar	Producers/ companies	Monthly	Ex-factory price/ List price/ Net selling price/ Spot price	0,91
3043		Chocolate slabs and bars	Producers/ companies	Monthly	Ex-factory price	0,79
3043		Sweets	Producers/ companies	Monthly	Ex-factory price	0,34
3044		Uncooked pasta	Producers/ companies	Monthly	Ex-factory price	0,16
3049		Nuts and nut products	Producers/ companies	Monthly	Ex-factory price/ List price	0,57
3049		Instant coffee	Producers/ companies	Monthly	Ex-factory price	0,18
3049		Tea	Producers/ companies	Monthly	Cost, insurance, freight/ Ex-works price/ Free on board	0,25
3049		Infant food and formula	Producers/ companies	Monthly	Ex-factory price	0,23
3049		Tomato sauce	Producers/ companies	Monthly	Ex-factory price	0,13
3049		Mayonnaise	Producers/ companies	Monthly	Ex-factory price/ Free on board	0,24
3049		Spices and condiments	Producers/ companies	Monthly	Ex-factory price/ Free on board	0,77

SIC code	SIC description	Indicator product	Source	Frequency	Type of price	Weight (%)
3049		Prepared dishes	Producers/ companies	Monthly	Ex-factory price	0,28
3049		Non-dairy creamers	Producers/ companies	Monthly	Ex-factory price	0,27
3049		Nutritional, dietary and formulated food supplements	Producers/ companies	Monthly	Ex-works price/ Wholesale price	0,11
<b>305</b>	<b>Manufacture of beverages</b>					
3051		Spirits	Producers/ companies	Monthly	Delivered price	1,00
3051		White wine	Producers/ companies	Monthly	Delivered price	0,24
3051		Red wine	Producers/ companies	Monthly	Delivered price	0,43
3051		Spirit coolers	Producers/ companies	Monthly	Delivered price/ Free on board	0,81
3052		Beer	Producers/ companies	Monthly	Ex-factory price/ List price	3,45
3053		Soft drinks	Producers/ companies	Monthly	Wholesale price	3,14
<b>306</b>	<b>Manufacture of tobacco products</b>					
3060		Cigarettes	Producers/ companies	Monthly	Ex-factory price/ Ex-works price	2,20
<b>31</b>	<b>Manufacture of textiles, clothing and leather goods</b>					
<b>312</b>	<b>Manufacture of other textiles</b>					
3122		Carpets (excl. mats and rugs)	Producers/ companies	Monthly	Net selling price/ Wholesale price	1,50
<b>313</b>	<b>Manufacture of knitted and crocheted fabrics and articles</b>					
3130		Sportswear	Producers/ companies	Monthly	Ex-factory price	0,11
<b>314</b>	<b>Manufacture of wearing apparel, except fur apparel</b>					
3140		Women's clothing	Producers/ companies	Monthly	Ex-factory price/ Net selling price	1,98
3140		Men's clothing	Producers/ companies	Monthly	Ex-factory price/ Selling price	0,65
3140		Protective wear	Producers/ companies	Monthly	Net selling price	0,45
<b>317</b>	<b>Manufacture of footwear</b>					
3170		Footwear	Producers/ companies	Monthly	Ex-factory price/ Selling price	0,42
<b>32</b>	<b>Manufacture of wood, cork, straw, paper, printing, media</b>					
<b>323</b>	<b>Manufacture of paper and paper products</b>					
3231		Paper for printing	Producers/ companies	Monthly	Net invoice price	0,26
3231		Packing and wrapping paper in rolls or sheets	Producers/ companies	Monthly	Ex-factory price	0,49
3232		Sacks and bags of paper	Producers/ companies	Monthly	Average price	0,21
3232		Cardboard boxes	Producers/ companies	Monthly	List price	2,01
3239		Disposable nappies for babies	Producers/ companies	Monthly	Ex-works price	0,58
3239		Toilet paper, tissues, napkins and other household articles of paper	Producers/ companies	Monthly	Net selling price	0,70
3239		Labels/tags/stickers of paper	Producers/ companies	Monthly	Average price	0,56

SIC code	SIC description	Indicator product	Source	Frequency	Type of price	Weight (%)
<b>324</b>	<b>Publishing</b>					
3241		Books	Producers/ companies	Monthly	Ex-factory price/ Ex-works price	2,19
<b>325</b>	<b>Printing and activities related to printing</b>					
3251		Newspapers	Producers/ companies	Monthly	Average net selling price/ Net selling price	0,11
3251		Magazines	Producers/ companies	Monthly	Ex-factory price/ Net selling price	0,19
3251		Trade advertising material and other printed material	Producers/ companies	Monthly	Average net selling price	0,77
3251		Printed stationery	Producers/ companies	Monthly	Average price	0,34
<b>33</b>	<b>Manufacture of coke, refined petroleum products, nuclear, chemicals, rubber, plastic</b>					
<b>331</b>	<b>Manufacture of coke oven products</b>					
3310		Charcoal	Producers/ companies	Monthly	Net invoice price	0,20
3310		Pre-mixed asphalt	Producers/ companies	Monthly	Ex-works price	0,05
3310		Bituminous mixtures	Producers/ companies	Monthly	Ex-factory price/ Ex-works price	0,07
<b>332</b>	<b>Petroleum refineries/synthesisers</b>					
3321/2/3		Petrol	Producers/ companies	Monthly	Base price/ Wholesale price	4,84
3321/2/3		Jet fuel	Producers/ companies	Monthly	Average price/ Base price	0,36
3321/2/3		Diesel	Producers/ companies	Monthly	Base price/ Wholesale price	4,65
3321/2/3		Engine oils	Producers/ companies	Monthly	Weighted average	0,40
3321/2/3		LPG gasses	Producers/ companies	Monthly	Gate price	0,44
3321/2/3		Petro-chemicals and feedstocks	Producers/ companies	Monthly	Base price	2,22
3321/2/3		Lubricating preparations	Producers/ companies	Monthly	Weighted average	0,09
<b>334</b>	<b>Manufacture of basic chemicals</b>					
3342		Ammonia nitrate fertilisers	Producers/ companies	Monthly	List price/ Net selling price	0,18
3342		Other fertilisers	Producers/ companies	Monthly	List price/ Net selling price	0,06
<b>335</b>	<b>Manufacture of other chemical products</b>					
3351		Insecticides	Producers/ companies	Monthly	Ex-factory price	0,12
3352		Paints	Producers/ companies	Monthly	Ex-factory price/ List price/ Net selling price	1,14
3353		Vitamins and antibiotics	Producers/ companies	Monthly	Manufacturing price	0,25
3353		Cold and flu preparations	Producers/ companies	Monthly	Manufacturing price	0,65
3353		Antiviral and retroviral drugs	Producers/ companies	Monthly	Manufacturing price	0,20
3353		Analgesics	Producers/ companies	Monthly	Manufacturing price	0,51
3353		Psycholeptics and psycholanaleptics	Producers/ companies	Monthly	Manufacturing price	0,56
3353		Antacid	Producers/ companies	Monthly	Manufacturing price	0,56

SIC code	SIC description	Indicator product	Source	Frequency	Type of price	Weight (%)
3354		Toilet soap	Producers/ companies	Monthly	Free on board/ Net selling price	0,56
3354		Non-soap based detergents, laundry bars and tablets	Producers/ companies	Monthly	Ex-factory price/ Free on board/ List price/ Net selling price	0,35
3354		Washing powder	Producers/ companies	Monthly	Ex-factory price/ Free on board	0,89
3354		Lotions and creams	Producers/ companies	Monthly	Cost price/ Ex-factory price/ Free on board	0,88
3354		Perfumes and deodorants	Producers/ companies	Monthly	Cost price/ Ex-factory price/ Free on board	0,12
<b>335</b>	<b>Manufacture of other chemical products</b>					
3359		Adhesives and sealants	Producers/ companies	Monthly	Ex-factory price	0,09
3359		Prepared explosives	Producers/ companies	Monthly	Average price	0,21
3359		Water and pool treatment chemicals	Producers/ companies	Monthly	Average price	0,02
3359		Chemical catalyst	Producers/ companies	Monthly	Inter-company selling price	0,57
3359		Mining chemicals	Producers/ companies	Monthly	Average net selling price	0,38
<b>337</b>	<b>Manufacture of rubber products</b>					
3371		Tyres	Producers/ companies	Monthly	Average net selling price/ Ex-factory price	0,92
<b>338</b>	<b>Manufacture of plastic products</b>					
3380		Vinyl chloride polymers (PVC) and copolymers	Producers/ companies	Monthly	Average net selling price	0,29
3380		Plastic pipes, tubes and fittings	Producers/ companies	Monthly	List price	0,12
3380		Plastic films for packaging purposes	Producers/ companies	Monthly	Delivered price	0,57
3380		Vinyl sheeting or flooring	Producers/ companies	Monthly	List price	0,02
3380		Industrial mouldings of plastic	Producers/ companies	Monthly	Ex-works price	0,43
3380		Motor vehicle parts and components of plastic	Producers/ companies	Monthly	Ex-factory price	0,29
<b>34</b>	<b>Manufacture of other non-metallic mineral products</b>					
<b>342</b>	<b>Manufacture of non-metallic mineral products n.e.c.</b>					
3421		Non-structural ceramic ware	Producers/ companies	Monthly	Average net selling price	0,08
3422		Refractory bricks and shapes	Producers/ companies	Monthly	Ex-factory price	0,15
3423		Clay bricks	Producers/ companies	Monthly	Ex-yard price/ Net selling price	0,15
3423		Ceramic tiles	Producers/ companies	Monthly	Ex-factory price	0,31
3424		Cement	Producers/ companies	Monthly	Ex-factory price	0,78
3425		Ready-mix concrete	Producers/ companies	Monthly	Ex-bin price/ Ex-factory price	0,56
3425		Ceiling boards	Producers/ companies	Monthly	Average price	0,00
3425		Roof tiles	Producers/ companies	Monthly	Average price/ List price	0,16

SIC code	SIC description	Indicator product	Source	Frequency	Type of price	Weight (%)
3425		Cement or concrete bricks	Producers/ companies	Monthly	Average net selling price/ Ex-factory price	0,25
3425		Concrete pipes	Producers/ companies	Monthly	Average net selling price	0,03
3425		Prefabricated cement and concrete components	Producers/ companies	Monthly	Average net selling price/ Gate price	0,22
<b>354</b>	<b>Manufacture of structural metal products</b>					
3541		Metal door and window frames	Producers/ companies	Monthly	Average net selling price	0,39
3541		Roof sheeting	Producers/ companies	Monthly	Ex-factory price	0,54
3541		Reinforcing metal work	Producers/ companies	Monthly	Average net selling price/ Net delivered price	0,65
3541		Equipment for scaffolding, shuttering and propping	Producers/ companies	Monthly	List price	0,08
3541		Welded angles, shapes and sections for use in manufactured structures	Producers/ companies	Monthly	Ex-factory price	0,08
3541		Steel pipes	Producers/ companies	Monthly	Average price/ List price	0,32
3542		Reservoirs, tanks, vats and similar containers of iron, steel or aluminium	Producers/ companies	Monthly	Ex-factory price	0,10
<b>355</b>	<b>Manufacture of other fabricated metal products</b>					
3553		Hand tools and parts thereof	Producers/ companies	Monthly	Average net selling price	0,27
3553		Door locks, hinges and clasping mechanisms	Producers/ companies	Monthly	Ex-factory price/ Ex-works price	2,11
3559		Cans	Producers/ companies	Monthly	Ex-factory price/ Ex-works price	0,74
3559		Stoppers, lids, caps, discs and other closures	Producers/ companies	Monthly	Average net selling price	0,21
3559		Nails, screws and other metal fasteners	Producers/ companies	Monthly	Average net selling price	0,40
3559		Wire for fencing of iron or steel	Producers/ companies	Monthly	Average price/ Ex-works price/ Net delivered price	0,44
<b>356</b>	<b>Manufacture of general purpose machinery</b>					
3561		Engines for motor vehicles	Producers/ companies	Monthly	Average net selling price	0,26
3562		Pumps	Producers/ companies	Monthly	Average net selling price/ List price	0,50
3562		Taps, cocks and valves	Producers/ companies	Monthly	List price	0,29
3563		Gears and gearing	Producers/ companies	Monthly	Ex-works price	0,22
3565		Lifting and handling equipment and parts thereof	Producers/ companies	Monthly	Ex-factory price/ List price	0,37
3569		Industrial heating and cooling systems	Producers/ companies	Monthly	Ex-works price	0,47



SIC code	SIC description	Indicator product	Source	Frequency	Type of price	Weight (%)
3569		Automotive HVAC	Producers/ companies	Monthly	Ex-works price	0,57
3569		Commercial and industrial refrigerating and freezing equipment	Producers/ companies	Monthly	Ex-factory price/ Ex-works price	0,76
3569		Filters for engines	Producers/ companies	Monthly	Net selling price	0,27
<b>357</b>	<b>Manufacture of special purpose machinery</b>					
3571		Irrigation pipe systems	Producers/ companies	Monthly	List price	0,52
3572		Machine-tools and parts and accessories thereof	Producers/ companies	Monthly	Average net selling price	0,17
3574		Continuous-action elevators, cutters, tunnelling, boring and sinking machinery	Producers/ companies	Monthly	Ex-works price	0,43
3574		Graders and scrapers	Producers/ companies	Monthly	Ex-factory price/ Ex-works price/ List price	0,03
3574		Tamping machines and road rollers	Producers/ companies	Monthly	List price	0,43
3574		Front-end shovel loaders, self-propelled	Producers/ companies	Monthly	Ex-factory price/ List price	0,00
3574		Mechanical shovels, excavators and shovel loaders	Producers/ companies	Monthly	Ex-works price/ List price	0,22
3574		Dumpers designed for off-highway use	Producers/ companies	Monthly	Ex-factory price/ List price	0,13
3574		Machinery for sorting, screening, separating, washing, crushing, grinding, mixing or kneading of construction material	Producers/ companies	Monthly	Average net selling price/ List price	0,97
3575		Machinery for food, beverage and tobacco processing, and parts thereof	Producers/ companies	Monthly	Contract price	0,20
3577		Munitions, ammunition and cartridges	Producers/ companies	Monthly	List price	0,60
3579		Assembling machines and apparatus*	Producers/ companies	Monthly	Contract price	0,27
<b>358</b>	<b>Manufacture of household appliances</b>					
3580		Fridge-freezer	Producers/ companies	Monthly	Average net selling price	0,25
3580		Stoves and ovens	Producers/ companies	Monthly	Ex-works price	0,19
<b>36</b>	<b>Manufacture of electrical machinery and apparatus n.e.c.</b>					
<b>361</b>	<b>Manufacture of electric motors, generators and transformers</b>					
3610		Electric motors	Producers/ companies	Monthly	Ex-works price/ List price	0,05
3610		Generator sets	Producers/ companies	Monthly	Ex-factory price	0,16

SIC code	SIC description	Indicator product	Source	Frequency	Type of price	Weight (%)
3610		Power transformers	Producers/ companies	Monthly	Ex-works price/ List price	0,51
<b>362</b>	<b>Manufacture of electricity distribution and control apparatus</b>					
3620		Electricity distribution and control equipment	Producers/ companies	Monthly	Ex-factory price	0,39
<b>363</b>	<b>Manufacture of insulated wire and cable</b>					
3630		Steel wire armoured (SWA) cable	Producers/ companies	Monthly	Ex-factory price	0,52
<b>364</b>	<b>Manufacture of accumulators, primary cells and primary batteries</b>					
3640		Batteries	Producers/ companies	Monthly	Average price	0,17
<b>366</b>	<b>Manufacture of other electrical equipment n.e.c.</b>					
3660		Automotive wire cables	Producers/ companies	Monthly	Ex-works price	0,43
<b>37</b>	<b>Manufacture of radio, television and communication equipment and apparatus and of medical, precision and optical instruments, watches and clocks</b>					
<b>371</b>	<b>Manufacture of electronic valves and tubes and other electronic components</b>					
3710		Solar panels and parts thereof	Producers/ companies	Monthly	Contract and average prices	0,02
3710		Electronic security systems	Producers/ companies	Monthly	Ex-factory price/ Standard price/ Volume break price	0,05
<b>373</b>	<b>Manufacture of television and radio receivers, sound or video recording or reproducing apparatus and associated goods</b>					
3730		Television and decoders	Producers/ companies	Monthly	Average net selling price	0,11
<b>374</b>	<b>Manufacture of medical appliances and instruments and appliances for measuring, checking, testing, navigating and other purposes, except optical instruments</b>					
3742		Electricity and water supply meters	Producers/ companies	Monthly	List price	1,04
<b>38</b>	<b>Manufacture of transport equipment</b>					
<b>381</b>	<b>Manufacture of vehicles</b>					
3810		Passenger vehicles	Producers/ companies	Monthly	Base price/ Dealer billing/ Dealer price/ Free on board/ Transfer price	1,38
3810		Bakkies and vans not exceeding 3,5 tons	Producers/ companies	Monthly	Base price/ Wholesale price	0,91
3810		Lorries, trucks and vans exceeding 3,5 tons	Producers/ companies	Monthly	Average price/ Base price/ List price	0,14
<b>382</b>	<b>Manufacture of bodies for motor vehicles, manufacture of trailers and semi-trailers</b>					
3820		Draw bar trailers	Producers/ companies	Monthly	Base price	0,19
3820		Tipper, tanker and trailer parts	Producers/ companies	Monthly	Ex-works price	0,61
<b>383</b>	<b>Manufacture of parts and accessories for motor vehicles and their engines</b>					
3830		Catalytic convertors and parts thereof	Producers/ companies	Monthly	Ex-works price/ Net selling price	2,64
3830		Exhaust systems	Producers/ companies	Monthly	Ex-factory price	0,72

SIC code	SIC description	Indicator product	Source	Frequency	Type of price	Weight (%)
3830		Suspension, brakes, clutch, mountings and parts	Producers/ companies	Monthly	Free alongside ship/ Net selling price/ Selling price	0,40
3830		Axles	Producers/ companies	Monthly	Net selling price	0,56
<b>385</b>	<b>Manufacture of railway and tramway locomotives and rolling stock</b>					
3850		Railway locomotives and rolling stock, and parts thereof	Producers/ companies	Monthly	Ex-works price	0,42
<b>385</b>	<b>Manufacture of aircraft and spacecraft</b>					
3850		Parts of aircraft	Producers/ companies	Monthly	Average net selling price	0,55
<b>39</b>	<b>Manufacture of furniture, recycling and manufacturing n.e.c.</b>					
<b>391</b>	<b>Manufacture of furniture</b>					
3910		Furniture	Producers/ companies	Monthly	Ex-factory price/ Manufacturing price	0,90
3910		Base sets and mattresses	Producers/ companies	Monthly	Average net selling price	0,57
<b>392</b>	<b>Manufacture n.e.c.</b>					
3921		Precious and semi-precious stones	Producers/ companies	Monthly	Ex-works price	0,20
3921		Gold coins and jewellery	Producers/ companies	Monthly	Average net selling price	0,73
3929		Number plates and signs	Producers/ companies	Monthly	Ex-works price/ Free on board	1,54

\* These products' grouping in the PPI statistical release does not correspond exactly to the one shown in this table.

**List of references**

1. Eurostat. 2012. Handbook on industrial producer price indices (PPI). Source: <https://ec.europa.eu/eurostat/documents/3859598/5923093/KS-RA-12-020-EN.PDF.pdf/8953c29e-b62c-409a-93f2-a51a482523db?t=1414781877000>
2. International Monetary Fund (IMF). 2004. Producer Price Index Manual. Source: <https://www.imf.org/external/pubs/ft/ppi/2010/manual/ppi.pdf>
3. Maitland-Smith, F. 2000. OECD Workshop on Economic Indicators. Producer Price Indices.
4. OECD. 2006. Glossary of Statistical Terms. Source: <http://stats.oecd.org/glossary>
5. Statistics South Africa. 1993. Standard Industrial Classification (SIC) Fifth edition. Source: [https://www.statssa.gov.za/additional\\_services/sic/contents.htm](https://www.statssa.gov.za/additional_services/sic/contents.htm)
6. United Nations Statistical Division. 2008. System of National Accounts 2008. Source: <https://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf>
7. United Nations Statistical Division. 2015. Central Product Classification (CPC) version 2.1. Source: <https://unstats.un.org/unsd/classifications/unsdclassifications/cpcv21.pdf>