

## Prices and Discount Comparators

### 1. Price comparator

The price comparator is intended primarily for young farmers. It allows a realistic assessment of their market position in an unequal environment of oligopolistic supply and an oligopsonistic structure of buyers. The aim of this tool is to compare the prices achieved with other farmers at international or national level.

The price comparator works with data from the European Commission. This is market data on national and European agriculture provided by the European Commission's Agriculture and Rural Development department (Agri-food Data Portal, <https://agridata.ec.europa.eu/>).

The price comparator is available at the following link: <https://visyfarm.pef.czu.cz/en/output-4>.

The comparator was developed within the VISYFARM project (Viability of small farms managed by young farmers under new "farm-to-fork" strategy, No 2020-1-CZ01-KA203-078495).

#### How to work with databases

The price comparator is designed to be as user-friendly as possible. Several basic fields are available to the user.

Market Sector	Category	Product Code
Member State	Pig Class	Farming Method
Price Type	Product	Product Name
Marketing Year	Variety	Market Name
Stage Name	Unit of measure	Vyberte období

These fields can then be clicked using the down arrow to specify your selection. However, the first thing to do is to define the **sector (Market Sector)**.

Market Sector 

**The comparator allows you to filter between the items listed below:**

Sector (**MARKET SECTOR**):

- Beef, specifically live animals, carcasses
- Pig meat, namely piglets, cuts, carcasses
- Poultry
- Raw milk
- Dairy
- Cereals
- Oilseeds
- Fruit and vegetables
- Eggs

**CATEGORIES** are selected after the selection of the Market Sector. It refers to the analysis of the market for beef, pork (cut). These categories will be defined as part of the analysis of each market.

**PRODUCT CODE** is selected in the case of the beef sector (carcasses). This category will be defined in the framework of the analysis of beef.

**MEMBER STATE** is a filter used to select the countries that the user wants to evaluate. These are the member countries of the European Union.

**PIG CLASS** is selected only for the pig meat market, specifically for piglets and carcasses.

**FARMING METHOD** can be defined for the egg market. A more detailed specification will be given in the analysis of the egg market.

**PRICE TYPE** is to be selected for minced meat (pork). The price types will be defined for the analysis of this market.

**PRODUCT** is selected for the raw milk and dairy products sector and for fruit and vegetables. These products will be defined for the analysis of each sector.

**PRODUCT NAME** is selected for poultry and cereal analysis. These product names will be defined for the analysis of each sector.

**MARKETING YEAR** can be defined for the analysis of oilseeds. A more detailed specification will be given for the oilseeds market analysis.

**VARIETY** shall be specified for the fruit and vegetables sector. A more detailed specification will be given for the fruit and vegetables market analysis.

**MARKET NAME** shall be selected for the analysis of the cereals market (for malting barley, maize, feed wheat, feed barley and durum wheat). However, it is not necessary to

select/define this item. If the user defines prices for a specific market, there will be a limitation also in relation to Member States.

**STAGE NAME** is selected for cereals. These stage names will be defined in the analysis of this market. It is probably not necessary to select this.

**UNIT OF MEASURE** is selected automatically, no need to select. However, to work with the database, this box needs to be unchecked to see what units the price is in. Everything is given in EUR per unit.

**Select period** - it is possible to select the time series (from when to when we want to display prices).

## Analysis of markets

### Market sector Beef (live animals)

These are weekly prices for different categories and grades of live animals in each Member State and across the Union. The time range is chosen by the user, with some series being shown from 1991 onwards.

For the analysis of the beef sector (live animals), the categories are selected: male calves dairy type, male calves beef.

Furthermore, a filter is used to select the Member State(s) and the period for which we want to display the prices. No other items are selected. Units are in EUR/head.

### Market sector Beef (carcasses)

Weekly prices of different categories and qualities of beef live animals per Member State and for the whole of the Union. User selects time range, with some series as from 1991.

When analysing the beef market (carcasses) it is possible to choose from several categories:

**Heifers** (carcasses of other female animals aged from 12 months, Regulation 2017/1184, Art. 7(f)).

For heifers, the product code can be selected as E U2, E U3, E U4, E R2, E R3, E R4, E O2, E O3, E O4. Union scales for the classification of carcasses referred to in article 10, Regulation EU no. 1308/2013. First letter, E defines category, carcasses of other female animals aged from 12 month. Other letter, U, R, O defines the conformation class, the number defines class of fat cover.

The Regulation defines conformation, defined as development of carcass profiles, in particular the essential parts (round, back, shoulder).

Conformation class	Description
S Superior	All profiles extremely convex; exceptional muscle development (double muscled carcass type)
E Excellent	All profiles convex to super-convex; exceptional muscle development
U Very good	Profiles on the whole convex, very good muscle development
R Good	Profiles on the whole straight; good muscle development
O Fair	Profiles straight to concave; average muscle development
P Poor	All profiles concave to very concave; poor muscle development

Fat over is defined as amount of fat on the outside of the carcass and in the thoracic cavity.

Class of fat cover	Description
1 low	None up to low fat cover
2 slight	Slight fat cover, flesh visible almost everywhere
3 average	Flesh with the exception of the round and shoulder, almost everywhere covered with fat, slight deposits of fat in the thoracic cavity
4 high	Flesh covered with fat, but on the round and shoulder still partly visible, some distinctive fat deposits in the thoracic cavity
5 very high	Entire carcass covered with fat; heavy deposits in the thoracic cavity

**Cows** (carcasses of female animals that have calved, Regulation 2017/1184, art. 7(e)).  
1308/2013.

For cows it is possible to select the product code D R3, D R4, D O2, D O3, D O4, D P2, D P3. These are the Union classification grades for carcasses under Article 10 of Regulation (EU), No 1308/2013. The first letter D defines the category, i.e. carcasses of female animals that have calved, the next letter, R, O, P, defines the conformation class, the number defines the class of fat cover class. These classes are listed above.

**Young cattle** (Carcasses of animal aged from eight months to less than 12 months, Regulation 2017/1184, art.7(a)).

For young cattle the following product codes can be selected: Z U2, Z U3, Z R2, Z R3, Z O2, Z O3. These are the Union classification grades for carcasses in accordance with Article 10 of Regulation (EU) No 1308/2013. First letter Z defines the category, i.e. carcasses aged between

8 and 12 months, the next letter, U, R, O, defines the conformation class, the number defines the fatness class. These classes are listed above.

**Bulls** (Carcasses of uncastrated male animals aged from 24 months., reg. 2017/1184, art. 7(c)). For bulls the product code is not selected, it is code B R3. These are the Union classification grades for carcasses in accordance with Article 10 of EU Regulation No 1308/2013. First letter B defines the category, i.e. carcasses of uncastrated male animals aged from 24 months, the next letter, R, defines the conformation class and the number defines the fat cover class. These classes are listed above.

**Calves slaughtered < 8M** (calves slaughtered before the age of 8 months. Reg. 2017/1184, art. 10).

All units (unit of measure) are uniform, prices are given in EUR/100 kg. You also need to select the period and the country (Member State).

## Market sector Pigmeat (carcasses)

Weekly average prices in classes S and E per Member State and for the whole of the Union, an overview going back to 1991.

No category or product code is selected in the pork market analysis, but pig classes are selected. These classes are S, R, E, average S+E.

The pig classes came from Union scale for the classification of pig lasses according to the regulation, art. 10, EU no. 1308/2013. Carcasses shall be divided into classes according to their estimated lean-meat content and classified accordingly:

Classes	Lean meat as percentage of carcass weight
S	60 or more
E	55 or more but less than 60
U	50 or more but less than 55

<sup>(1)</sup> Regulation (EC) No 853/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific hygiene rules for food of animal origin (OJ L 139, 30.4.2004, p. 55).

<sup>(2)</sup> Regulation (EC) No 854/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific rules for the organisation of official controls on products of animal origin intended for human consumption (OJ L 139, 30.4.2004, p. 206).

Classes	Lean meat as percentage of carcass weight
R	45 or more but less than 50
O	40 or more but less than 45
P	less than 40

Furthermore, when analysing this sector, the user has to select the country/countries (Member state) for which he/she wants to display prices and also the period. Prices are in EUR/100 kg.

### **Market sector Pigrateat (piglets)**

This is a time series of average piglet prices by Member State and for the whole Union. The database allows a comparison of weekly average prices since 1991. The source data are submitted by the Member States via the ISAMM system.

When analyzing the pork (piglet) market, neither the category nor the product code is selected. A single pig class is defined, i.e. piglets.

Furthermore, when analysing this sector, the user has to select the country/countries (Member state) for which he/she wants to display prices and also the period. The prices are in EUR/head.

### **Market sector Pigrateat (cuts)**

Time series of average pigmeat cuts prices per Member State and for the whole of the Union. This is a time series of average prices of pigmeat cuts by Member State and for the whole Union. The database allows a comparison of weekly average prices with the same weeks of the previous year. The source data is provided by the Member States, most recently through the ISAMM system.

For the analysis of the pork market (cut), the category is selected, i.e., minced meat, loin, ham, belly, shoulder.

**Minced meat** - the price type is selected, i.e. selling price, retail buying price, non-retail buying price. The prices are displayed in EUR/100 kg, then the period for which the user wants to display the prices is selected.

**Loin** – this category has only one price type, i.e. selling price. The prices are displayed in EUR/100 kg, then the period for which the user wants to display the prices is selected.

**Ham** – this category has only one price type, i.e. selling price. The prices are displayed in EUR/100 kg, then the period for which the user wants to display the prices is selected.

**Belly** – this category has only one price type, i.e. selling price. The prices are displayed in EUR/100 kg, then the period for which the user wants to display the prices is selected.

**Shoulder** – this category has only one price type, i.e. selling price. The prices are displayed in EUR/100 kg, then the period for which the user wants to display the prices is selected.

### **Market sector Raw milk**

These are monthly raw milk prices in each Member State and weighted averages across the Union. Prices can be displayed over a longer period or as a year-on-year comparison. The source of the most recent data is the Member States' notifications through the ISAMM system.

When analysing the raw milk market, a product is selected. It is possible to analyse the prices of raw milk or organic raw milk. The prices are displayed in monthly intervals in EUR/100 kg, and the period for which the user wants to display the prices is selected.

### **Market sector Dairy**

These are weekly prices for representative dairy products in each Member State and weighted averages across the Union. Prices can be monitored over a longer period or on a year-on-year basis. The source of the most recent data is the Member States' notifications through the ISAMM system.

For the dairy market analysis, two product options are offered, i.e. drinking milk or butter. The prices are displayed in EUR/100 kg and the period for which the user wants to display the prices is selected.

### **Market sector Poultry**

Time series of average poultry prices by Member State and European Union. The database shows prices since 1991. The source data are provided by the Member States, most recently through the ISAMM system.

When analysing the poultry market, the Product Name should be selected, i.e. Whole broiler (65%), legs, breast fillet.

Prices are shown in EUR/100 kg.

### **Market sector Cereals**

Prices of different cereals on several important EU markets at different stages of the value chain (free entry, exit from silos, etc.). The database allows for weekly price comparisons, with longer time series, some going back to 2009.

Cereal prices can be displayed for several products name: malting barley, maize, feed wheat, feed barley, durum wheat.

**Malting barley** – the user can select the Market name. In the case of malting barley, there are Zachodni, Vilnius, Navarra, National average, Naantali, Creil. It is not necessary to specify the market name, it is sufficient if the user selects the Member state. If the user selects both the country and the market name, only the Member States selected within the market names will be displayed.

Prices are displayed in EUR/tonne.



**Maize** – the user can select the market name: Zagreb Depsilo, Zachodni, Wien, Slaski, Serres, Rotterdam, Pleven, Oltenia, national average, Ljubljana, Lisboa, Leon, Constanta, Budapest, Brussel, Bratislava, Bordeaux, Bologna. The name of the market does not need to be specified; it is sufficient if the user selects the Member state. If the user selects both the country and the market name, only the member countries selected under the market names will be displayed.

**Feed wheat**– as with previous crops, it is possible to select a Market Name.

**Feed barley** - as with previous crops, it is possible to select a Market Name.

**Durum wheat** - as with previous crops, it is possible to select a Market Name.

### **Market sector Oilseeds**

Weekly oilseed prices by Member State and weighted averages for the Union as a whole. The source of the latest data is the Member States' notifications via the ISAMM system.

When analysing the oilseeds market, only the Member State(s) for which the user wants to view prices is selected. The product is given, it is rapeseed. Prices are displayed in **national currency per tonne**. Furthermore, the user can select the marketing year. If the user selects the marketing year, there is no need to select the period from to. However, if we select a period other than the selected marketing year, the selected marketing year takes priority and will not take into account the selected period from to. Another option is to select only the period from to, which will allow us to display any selected time frame.

### **Market sector Eggs**

Time series of average egg prices by farming method, by Member State and for the European Union. Prices are given from 1996 onwards. Source data are provided by Member States, most recently through the ISAMM system.

For the analysis of the egg market, the farming method, i.e. organic, free range, cage, barn.

In addition, the marketing year or period can be selected under the same assumptions as for the oilseed market analysis.

Prices are shown in EUR/100 kg.

### **Market sector Fruits and vegetables**

In this analysis the product is selected, i.e. tomatoes, peppers, onions, apples.

The Variety is also selected. In the case of tomatoes, these are tomates roundes (round tomatoes), tomates cerises (cherry tomatoes), Tomates Grappes (vine/truss tomatoes).

For apples there are several varieties to choose from: Champion, red delicious, jonagold, idared, granny smith, golden delicious, gala, fuji, elstar, cox's orange pippin, braeburn, boskoop.

The prices are in EUR/100 kg, it is also possible to define the time frame of the displayed prices, i.e. the period.

## 2. Price comparator (animated)

Another tab of the price comparator allows you to view animated charts. These are animated bar charts that visualize changes in price trends over time. They provide a comprehensive data view in a concise and easy to understand chart.

## 3. Discount comparator

The last tab of the price comparator focuses on the comparison of farmers' prices in the countries participating in the international VISYFARM project. These are the Czech Republic, Slovakia, Poland, Lithuania and Hungary.

The price comparator is the output of a questionnaire survey. The aim of the questionnaire survey was to evaluate the farmers' position on the market, to quantify more precisely how they are able to influence the price of inputs. The price comparator includes a broad sample of farms (more than 500).

### How to work with databases

The findings from the farmers were compiled into an electronic tool. Farmers or other users can enter their characteristics into the selection (see defined below). The information (amount of discount) that farmers have in terms of input prices is displayed.

The user has several basic fields to specify his results.

Country	Gender	Age
Size (ha)	Member of cooperative	Member of association

These fields can then be clicked using the down arrow to specify your selection.

The user first selects the country/countries for which he/she wants to view the results. These are the Czech Republic (CZ), Slovakia (SK), Hungary (HUN), Poland (PL) and Lithuania (LTU).

The results can be further specified by selecting:

- GENDER - male or female farmer
- AGE - results can be filtered for farmers younger than 20 years or up to over 70 years.
- SIZE ha - from 0 ha to farms larger than 300 ha.
- Member of cooperative
- Member of association

After defining the selections, the categories of input discounts that the farmer can achieve for fertilizers, pesticides, Seeds and planting material, Fodder, machines will be displayed.

The number represents the discount categories (or the averages of the surveyed data)

2. no discount provided.
3. discount less than 10%.
4. discount between 10 and 20%.
5. discount between 21 and 30%.
6. discount between 31 and 40%.
7. discount more than 40 %.

When values are not rounded (e.g., to 2, 3, 4), it indicates that the result is an average derived from respondents who meet the specified conditions. For instance, if the result is 2.83, it implies that the majority of respondents fall into the discount category 3 (less than 10%).

Fertilizers 2,7	Pesticides 2,5	Seeds and planting material 2,83	Fooder 1,99	Machines 2,58	Count of responses 501
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