An Phríomh-Oifig Staidrimh
Central Statistics Office

Standard Report on Methods and Quality for Meat Supply Balance

This documentation applies to the reporting period:

2012 – present

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1 Overview

The objective of a supply balance is to reconcile the total supplies of a product with the various uses of that product, including changes in stock levels. Supply balance sheets are compiled using harmonised concepts agreed between European Union member states.

2 General Information

2.1 Statistical Category

The results are mainly compiled from administrative data and expert estimates.

2.2 Area of Activity

Agricultural Production.

2.3 Organisational Unit Responsible, Persons to Contact

Agricultural Accounts/Production section:

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2.4 Objectives and Purpose; History

The objective is to produce statistics relating to the supply and use of beef & veal, sheep, pig and poultry meat in the country.

2.5 Periodicity

The Meat Supply Balance is produced and published annually.

2.6 Client

The release is produced at the request of our main national users.

2.7 Users

- Department of Agriculture, Food & Marine (DAFM)
- Bord Bia
- Teagasc

2.8 Legal basis

No legal basis exists; the release is based on administrative data.

3 Statistical Concepts, Methods

3.1 Subject of the Statistics

The subject of the statistics is the supply and use of beef & veal, sheep, pig and poultry meat in the country.

3.2 Units of Observation/Collection Units/Units of Presentation

The release is based on administrative data and expert estimates.

3.3 Data Sources

The figures for livestock slaughtering come from meat establishments approved by the Department of Agriculture, Food and the Marine (DAFM) and slaughterhouses and meat plants approved by Local Authorities under S.I. 432 of 2009.
Poultry slaughtering figures are derived from data supplied by DAFM.
Data on the import and export of meat and meat products are derived from the CSO's external trade statistics. The raw tonnage of internationally traded meat and meat products is

converted to its carcass weight equivalent using a set of conversion factors agreed with European and national industry experts.

Estimates for domestic uses of beef & veal and sheep meat are provided by Bord Bia. These include human consumption both in households (retail) and services establishments such as restaurants and bars. It is assumed that the amount of meat used for other purposes, such as animal feed, and losses are negligible.

3.4 Reporting Unit/Respondents

The release is based on administrative data and expert estimates.

3.5 Type of Survey/Process

No survey is conducted specifically for the purpose of producing this release.

3.6 Characteristics of the Sample/Process

3.6.1 Population and Sampling Frame

Livestock slaughtering data covers all approved slaughterhouses and meat establishments in the country.
External trade data covers all export and import transactions of meat and meat products.

3.6.2 Sampling Design

Not applicable.

3.7 Survey Technique/Data Transfer

The slaughtering data is identical to that used for the Livestock Slaughterings release and does not need to be transferred or collected.
External trade data is available directly from the CSO's Trade division.

Estimates for domestic uses of meat are requested from and provided by Bord Bia via e-mail.

3.8 Questionnaire (including explanations)

No questionnaire is necessary as no survey is conducted specifically for the purpose of producing this release.

3.9 Participation in the Survey

Not relevant as no survey is conducted specifically for the purpose of producing the release.

3.10 Characteristics of the Survey/Process and its Results

Not relevant as no survey is conducted specifically for the purpose of producing the release.

3.11 Classifications used

The Combined Nomenclature (CN) of the European Union is used to classify external trade data into the following categories: beef & veal, sheep meat, pig meat and poultry meat and to exclude other types of meat (e.g. primates, reptiles and sea mammals) and offal.

3.12 Regional Breakdown of Results

Not produced.

4 Production of the Statistics, Data Processing, Quality Assurance

4.1 Data Capture

Slaughtering data is identical to that used for the Livestock Slaughterings release and does not need to be transferred or collected.
External trade data is directly available from the CSO's Trade division.

Estimates of domestic uses of beef & veal and sheep meat are requested from and provided by Bord Bia via e-mail.

Further processing and calculations occur in Microsoft Excel spreadsheets.

4.2 Coding

The Combined Nomenclature (CN) of the European Union is used to classify external trade data into the following categories: beef & veal, sheep meat, pig meat and poultry meat and to exclude other types of meat (e.g. primates, reptiles and sea mammals) and offal.

4.3 Data Editing

No editing is performed on slaughtering data as it has already been published.
External trade data may be queried with the Trade division in case of irregularities and this may lead to some amendments to the data.
Comments, where necessary, are entered into cells of the Excel spreadsheet detailing any communication with data provider, reasons for deviations and/or any required revisions.

4.4 Imputation (for Non-Response or Incomplete Data Sets)

No imputation techniques are employed.

4.5 Grossing and Weighting

Neither grossing nor weighting methods are required to arrive at the final estimate.

4.6 Computation of Outputs, Estimation Methods Used

The total supply of meat consists of the meat available from livestock slaughterings and imports. This supply may be used for exports, domestic uses or held in stock for future use. Only exports of meat and meat products need to be accounted for as animals exported live do not constitute part of the supply. Imports of live animals are also not accounted for separately as the imported live animals are slaughtered in the country and accounted for on the supply side as meat.

Supply and use must balance each other, i.e. the following equation must hold in any given year

Slaughtering + Imports of meat = Exports of meat + Domestic uses + Change in stocks

To ensure that the above equation always holds, one item in each product balance is always calculated as a balancing residual. The balancing item depends on the type of meat. For beef & veal and sheep, the balancing item is exports, while for pig meat and poultry, the balancing item is domestic uses.

The figures for livestock slaughterings include those carried out at both meat establishments approved by DAFM and slaughterhouses and meat plants approved by Local Authorities under S.I. 432 of 2009. Poultry slaughterings are derived from data received from DAFM.

The figures for imports and exports of meat and meat products are derived from the CSO's external trade statistics. The raw tonnage of internationally traded meat and meat products is converted to its carcass weight equivalent using a set of conversion factors agreed with European and national industry experts.

Variation in stocks is the net difference between the movement of products into and out of stock during the year. The variation in the stock of meat and meat products is usually very small compared to other items of the balance and, for this release, is assumed to be negligible.

Estimates for domestic uses of beef & veal and sheep are provided by Bord Bia. These include mainly human consumption both in households (retail) and services establishments such as restaurants and bars. It is assumed that the amount of meat used for other purposes, such as animal feed, and losses are negligible.

The estimates of per capita human consumption are derived by dividing the total domestic uses by the population estimate produced annually by the CSO. No account is taken of meat consumed while on overseas and cross-border trips.

The release also includes estimates for gross indigenous production and self-sufficiency. Gross indigenous production (GIP) is calculated as livestock slaughterings plus exports of live animals less imports of live animals, with all three items converted to their carcass weight equivalent.

GIP = Livestock slaughtering + Live exports – Live imports

The average carcass weights used for these conversions are provided by DAFM (finished animals) and industry experts (calves and young cattle).
The numbers of live animals traded in and out of the country are provided by DAFM.

Self-sufficiency is defined as gross indigenous production expressed as a percentage of domestic uses. Self-sufficiency in excess of 100% for any of the products means that the country is a net exporter of the given product.

4.7 Other Quality Assurance Techniques Used

Large deviations in estimates of per-capita consumption and self-sufficiency from previous periods or expected values are queried with the data provider and, if necessary, the data is corrected. Otherwise, a note is taken of the explanation given by the original data provider for the change.

5 Quality

5.1 Relevance

The main users of this information include: Teagasc, DAFM, Bord Bia and the public.

5.2 Accuracy and Reliability

5.2.1. Sampling Effect & Representativity

Not applicable.

5.2.2. Non-Sampling Effects

5.2.2.1 Quality of the Data Sources used

All livestock slaughterings carried out in both DAFM and Local Authority approved plants are recorded by DAFM. Therefore, one can expect the slaughtering data provided to be comprehensive and reliable.

Estimates of external trade in meat and meat products are based on data collected by the CSO's Trade division. For a description of the methodology and data sources used by Trade division, see the document at the following link:

https://www.cso.ie/en/methods/internationaltradeingoods/

Estimates of beef & veal and sheep meat consumption in the country are produced by Bord Bia. Bord Bia have an expert knowledge of the market.

5.2.2.2 Register Coverage

Not applicable.

5.2.2.3 Non-response (Unit and Item)

Not applicable, since no survey is conducted.

5.2.2.4 Measurement Errors

To produce the Meat Supply Balance the CSO relies largely on administrative data from DAFM and data on external trade collected at the border. The CSO therefore has no control over possible measurement errors.

5.2.2.5 Processing Errors

All work goes through an extensive checking process after completion, ensuring verification of each step of the computation right back to the original source data.
All amendments/changes are commented on in the relevant Excel spreadsheet. The source of the data is also listed here, and a paper copy of the data is kept on file to facilitate checking and verification of each stage of the process.

5.2.2.6 Model-related Effects

The release is based on administrative data and therefore there are no model-related effects.

5.3 Timeliness and Punctuality

5.3.1 Provisional Results

Preliminary results are not compiled.

5.3.2 Final Results

The final results are prepared and published by the CSO within 12 months from the end of the reference period.

5.4 Coherence

As the CSO is the only producer of an Irish meat supply balance, coherence is not an issue for this release.

5.5 Comparability

Supply balance sheets were produced by the CSO since the year 2000 at the request (gentlemen's agreement) of Eurostat. Eurostat made supply balance sheets a negative priority in 2011 and as a result, production stopped.

At the request of national users, in 2015 the CSO resumed publication of the Meat Supply Balance release with results for the reference years 2012 to 2014. The new release uses a slightly different methodology from the past: other meat is now excluded from the total and the balancing item for sheep meat is now exports rather than variation in stocks and domestic uses. Therefore, the results of the old and new series may not be directly comparable.

5.6 Accessibility and Clarity

5.6.1 Assistance to Users, Special Analyses

The release is available on the CSO website, in web format.
The databank is updated on the morning of the release to ensure the entire series is available through the PxStat Open Data Portal on the CSO website:

https://data.cso.ie/product/sb

To facilitate users who may require additional information, the release includes contact names, email addresses and telephone numbers together with the postal addresses of the Cork and Dublin offices and a unique reference number for the release.
The background notes aid understanding by providing an explanation of the main terms used in the table.

5.6.2 Revisions

When preparing the estimates for the current year's release (year T), routine revisions are made to the estimates for the two previous years also (i.e. years T-1 and T-2). These revisions

to previously published estimates tend to be minor and do not impact significantly on the overall results.
Only in exceptional circumstances are non-routine revisions made to any years prior to those (i.e. years T-3 or earlier) and this non-routine revised data will be published on the PxStat Open Data Portal on the CSO website.
For further information on our revisions policy, please refer to the 'Treatment of Revisions' section on the CSO website:

https://www.cso.ie/en/methods/quality/treatmentofrevisions/

5.6.3 Publications

5.6.3.1 Releases, Regular Publications

The most recent release is available on the CSO website:

https://www.cso.ie/en/statistics/agriculture/meatsupplybalance/

5.6.3.2 Statistical Reports

None.

5.6.3.3 Internet

Our releases are available on the CSO website:

https://www.cso.ie/en/statistics/agriculture/

5.6.4 Confidentiality

There are no confidentiality constraints/issues with the data in this release.
All the information is aggregated to industry level.

6 Additional documentation and publications

None.