

Joint Eurostat/OECD 2019 questionnaire on the methodology underlying capital stocks data in national accounts

Country: Ireland

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Information regarding Gross Fixed Capital Formation (GFCF) compilation

This information sheet presents metadata provided by the country for publication by Eurostat. It informs on the methods and sources used to compile GFCF under the [European System of Accounts 2010 \(ESA 2010\)](#). While the questionnaire has a common structure, the level of detail of replies differs from one country to another and, therefore, only available country replies are shown here.

For easier cross-country comparison, users of GFCF data are invited to consult the tabular presentation of metadata on estimation of capital stocks by asset type, industry and institutional sector:

[Capital Stock Metadata in Tabular Format](#)

N111. Dwellings

Question 1. What is/are the main source/s to estimate GFCF in dwellings in your country, and which are the products or assets included under this asset category? Please specify if sources differ across industries and/or institutional sectors.

Main source to estimate GFCF in Dwellings is the CSO New Dwellings Completions release <https://www.cso.ie/en/statistics/construction/newdwellingcompletions/>. This does not differ across industries or sectors.

Question 2. What is the length of the GFCF series for dwellings? If long GFCF series are available (previous to 1995), how do you estimate historical data? Please, describe additional sources and/or methods, and specify if these differ across industries and institutional sectors.

The GFCF series for Dwellings is from 1950 on. Stock in the year 1949 was taken from the ESRI's (Economic and Social Research Institute) estimate. Data prior to 1995 is estimated using historical National accounts data for GFCF in Dwellings. This does not differ across industries or sectors.

Question 3. Are costs of ownership transfer included in GFCF? How do you define them and treat them in the estimation of capital stocks of dwellings (e.g. treated equally to GFCF, or specific average service life/depreciation profile for these costs)?

Costs of ownership are included in GFCF. Costs of ownership are assumed to depreciate within the year that they are included in GFCF.

Question 4. What price indices do you use to deflate GFCF in dwellings, and how do you construct these indices? How do you account for quality improvements? Do you use specific price indices for

detailed asset categories? Do these price indices differ across industries / institutional sectors? If they are available, please provide links to and/or relevant documents and metadata on their construction.

Price index for deflating GFCF in dwellings is constructed using a Net Sales Price index (Net of Land Cost) and an Average Size index. In this way size is accounted for as a measure of improvement.

N1121. Buildings other than dwellings

Question 1. Do you have specific GFCF series for detailed asset categories (e.g. office buildings, industrial buildings, public buildings, etc.)? Are your GFCF series broken down by industry and/or institutional sector? If your answer is yes to any of these questions, please describe and provide the link to available data and relevant documents.

The GFCF series for buildings has asset categories with different service lives depending on type of building and industry. This is how the GFCF series is used to generate the capital stock but we do not publish either the GFCF or the capital stock using these asset categories.

Question 2. What is/are the main source/s to estimate GFCF in buildings other than dwellings in your country? Please specify if sources differ across industries and/or institutional sectors.

The main source to estimate GFCF in buildings other than dwellings is the CSO Production in Building and Construction release. There are also sources that we have such as annual reports from utilities companies, transport companies etc.

Question 3. What is the length of the GFCF series? If long GFCF series are available (previous to 1995), how do you estimate historical data? Please, describe additional sources and/or methods, and specify if these differs across assets within this asset category, industries and institutional sectors.

The GFCF series for Buildings other than dwellings is from 1950 on. Stock in the year 1949 was taken from the ESRI's (Economic and Social Research Institute) estimate. Data prior to 1995 is estimated using historical National accounts GFCF data. This methodology does not differ across industries or sectors.

Question 4. Are costs of ownership transfer of buildings other than dwellings included in this GFCF series? How do you define them and treat them in the estimation of net capital stocks of buildings other than dwellings (e.g. treated equally to GFCF, or specific average service life/depreciation profile for these costs)?

Costs of ownership are included in GFCF. Costs of ownership are assumed to depreciate within the year that they are included in GFCF.

Question 5. What price indices do you use to deflate GFCF in buildings other than dwellings, and how do you construct these indices? How do you account for quality improvements? Do you use specific price indices for detailed asset categories? Do these price indices differ across industries/institutional sectors? If they are available, please provide links to and/or relevant documents and metadata on their construction.

Main Price index that is used is the SCSi (Society of Chartered Surveyors Ireland) Tender Price index.

N1122. Other structures

Question 1. Do you have specific GFCF series for detailed asset categories (e.g. roads, railways, bridges, etc.)? Are your GFCF series broken down by industry and/or institutional sector? If your answer is yes to any of these questions, please describe and provide the link to available data and relevant documents.

We do have a specific series for Roads. The GFCF series are broken down by industry but not institutional sector.

Question 2. What is/are the main source/s to estimate GFCF in other structures in your country? Please specify if sources differ across industries and/or institutional sectors.

The main source to estimate GFCF in buildings other than dwellings is the CSO Production in Building and Construction release: <https://www.cso.ie/en/statistics/construction/productioninbuildingandconstructionindex>. The National Transport Authority is main source of data for Roads.

Question 3. What is the length of this GFCF series? If long GFCF series are available (previous to 1995), how do you estimate historical data? Please, describe additional sources and/or methods, and specify if these differs across assets within this asset category, industries and institutional sectors.

The GFCF series for Other Structures is from 1950 on. Stock in the year 1949 was taken from the ESRI's (Economic and Social Research Institute) estimate. Data prior to 1995 is estimated using historical National accounts GFCF data. This methodology does not differ across industries or sectors.

Question 4. Are costs of ownership transfer of other structures included in this GFCF series? How do you define them and treat them in the estimation of net capital stocks of other structures (e.g. treated equally to GFCF, or specific average service life/depreciation profile for these costs)?

Costs of ownership are included in GFCF. Costs of ownership are assumed to depreciate within the year that they are included in GFCF.

Question 5. What price indices do you use to deflate GFCF in other structures, and how do you construct these indices? How do you account for quality improvements? Do you use specific price indices for detailed asset categories? Do these price indices differ across industries / institutional sectors? If they are available, please provide links to and/or relevant documents and metadata on their construction.

Main Price index that is used is the SCSi (Society of Chartered Surveyors Ireland) Tender Price index.

N1123. Land improvements

Question 1. Does GFCF in other buildings and structures (N112) reported in questionnaires 0102 (GDP identity from the expenditure side), 0302 (Capital formation) and 2200 (Cross-classification of gross fixed capital formation (GFCF) by industry and by asset (transactions)) include land improvements (N1123)?

Land improvements are included.

Question 2. What is/are the main source/s to estimate the value of GFCF in land improvements in your country? Please specify if sources differ across industries and/or institutional sectors.

The main source of land improvements data is the Teagasc National Farm Survey. This does not differ across industries or sectors.

Question 3. Are costs of ownership transfer of land included in land improvements (N1123) and hence in the aggregate asset category other buildings and structures (N112) that you report in the national accounts questionnaires 0102, 0302 and 2200?

Transfer costs are included in N112 but we do not separately identify N1123.

Question 4. What price indices do you use to deflate GFCF in land improvements, and how do you construct these indices? Do you use specific price indices for detailed asset categories? Do these price indices differ across industries / institutional sectors? If they are available, please provide links to and/or relevant documents and metadata on their construction.

As mentioned above Transfer costs are included in N112 but we do not separately identify N1123. Main Price index that is used is the SCSi (Society of Chartered Surveyors Ireland) Tender Price index.

N1131. Transport equipment

Question 1. What is/are the main source/s to estimate GFCF in transport equipment in your country?

Motor Vehicles data is taken from Vehicle Registration Tax (VRT) files (Administrative Tax source). Data on planes, is taken from trade. Other transport equipment is taken from direct sources (such as CIE, Ireland's national public transport provider).

Question 2. Do you have specific GFCF series for detailed asset categories (e.g. motor vehicles, ships, railway locomotives, aircrafts, etc.)? Are your GFCF series broken down by industry and/or institutional sector? If your answer is yes to any of these questions, please describe and provide the link to available data and relevant documents.

We do have specific GFCF series for different asset categories. They are broken down by industry but not institutional sector.

Question 3. What is the length of these GFCF series? If long GFCF series are available (previous to 1995), how do you estimate historical data? Please, describe additional sources and/or methods, and specify if these differ across assets within this category, industries and institutional sectors.

The GFCF series for Aircraft is from 1955 on. Motor Vehicles is from 1965 on. Rolling Stock is from 1925 on and Ships is from 1935 on. Data prior to 1995 is estimated using historical National accounts data and historical data from enterprises such as CIE, Ireland's national public transport provider. This does not differ across industries or sectors.

Question 4. What price indices do you use to deflate GFCF in transport equipment, and how do you construct these indices? How do you account for quality improvements? Do you use specific price indices for detailed asset categories? Do these price indices differ across industries/institutional sectors? If they are available, please provide links to and/or relevant documents and metadata on their construction.

Wholesale Price Indices (WPI) are used to deflate GFCF in transport equipment.

ICT equipment (N1132): computer hardware (N11321) + telecommunications equipment (N11322)

Question 1. What is/are the main source/s to estimate GFCF in computer hardware (N11321) and telecommunications equipment (N11322) in your country? Do you have specific GFCF series for detailed assets within these categories (e.g. data processing machines, peripheral equipment, storage units, etc.) in different industries and/or institutional sectors?

Census of Industrial Production and Annual Services Inquiry. We do not have have detailed asset breakdown.

Question 2. What is the length of GFCF in computer hardware and telecommunications equipment? If long GFCF series are available (previous to 1995), how do you estimate historical data? Please, describe additional sources and/or methods, and specify if these differ across detailed assets within these asset categories, industries and/or institutional sectors.

The GFCF series for computer hardware is from 1969 on and for telecomm is from 1964 on. Data prior to 1995 is estimated using historical National accounts data. This does not differ across industries or sectors.

Question 3. What price indices do you use to deflate GFCF in computer hardware and telecommunications equipment, and how do you construct these indices? How do you account for quality improvements? Do you use specific price indices for detailed asset categories? Do these price indices differ across industries / institutional sectors? If they are available, please provide links to and/or relevant documents and metadata on their construction.

Wholesale Price Indices (WPI) are used to deflate GFCF in hardware and telecommunications equipment.

Other machinery and equipment and weapons systems (N110): Other machinery and equipment (N1139) + weapons systems (N114)

Question 1. What is/are the main source/s to estimate GFCF in other machinery and equipment and weapons systems in your country? Do you have specific GFCF series for detailed assets within these categories (e.g. electrical equipment, weapons, etc.) in different industries and/or institutional sectors?

Commodity Flow (Trade and Prodcom - industrial production by sector) is the source used for Other machinery and Equipment.

Question 2. What is the length of GFCF in other machinery and equipment and weapons systems? If long GFCF series are available (previous to 1995), how do you estimate historical data? Please, describe additional sources and/or methods, and specify if these differ across assets within each asset category, industries and/or institutional sectors.

There are different GFCF series used within other machinery and equipment. The longest GFCF series is from 1921 on. This series includes Machinery and Equipment for sectors D and E (Electricity, Gas, Steam and air conditioning supply, and Water supply, Sewerage, waste management and remediation activities). Data prior to 1995 is estimated using historical National accounts data.

Question 3. What price indices do you use to deflate GFCF in other machinery and equipment and weapons systems, and how do you construct these indices? How do you account for quality improvements? Do you use specific price indices for detailed asset categories? Do these price indices differ across industries / institutional sectors? If they are available, please provide links to and/or relevant documents and metadata on their construction.

Wholesale Price Indices (WPI) are used to deflate GFCF in other machinery and equipment and weapon systems. Price indices are different for different asset categories and differ across industries.

Cultivated biological resources (N115)

Question 1. What is/are the main source/s to estimate GFCF in cultivated biological resources in your country? Do you have specific GFCF series for detailed assets within these categories (e.g. orchards, crops, dairy cattle, etc.) in different industries and/or institutional sectors?

The main source is the National Apple Orchard Census (<https://www.agriculture.gov.ie/media/migration/farmingsectors/horticulture/horticulturestatistics/NationalAppleOrchardCensus2017101218.pdf>) and data on livestock from the Agriculture Section in the CSO.

Question 2. What is the length of GFCF in cultivated biological resources? If long GFCF series are available (previous to 1995), how do you estimate historical data? Please, describe additional sources and/or methods, and specify if these differ across products within this asset category, industries and/or institutional sectors.

The GFCF series for Orchards is from 1970 on. A long investment series for livestock is not required as the stock is given directly by the Agricultural Section in the CSO and the PIM model is not used to estimate the Capital Stock in this category.

Question 3. What price indices do you use to construct volume measures of cultivated biological resources, and how do you construct these indices? How do you account for quality improvements? Do you use specific price indices for detailed asset categories? Do these price indices differ across industries / institutional sectors? If they are available, please provide links to and/or relevant documents and metadata on their construction.

GFCF in orchards is deflated using COE and hours worked data in the Sector A01 (crop and animal production). Agricultural Section in CSO provide data on number and prices of livestock for a given year so price index is not required.

Research and development (N1171)

Question 1. Do you estimate GFCF in R&D by detailed R&D asset type? If yes, please specify the detailed R&D asset breakdown.

It is broken down by R&D services and IP assets.

Question 2. What is/are the main source/s to estimate GFCF in research and development (R&D)? Please describe briefly the architecture of your estimation method and specify if these differ across different R&D assets (if a breakdown is available), industries and/or institutional sectors.

CSO surveys are the main sources of data. BOP (Balance of Payment, <https://www.cso.ie/en/methods/internationalaccounts/balanceofpaymentsannual/> surveys and the BERD survey (<https://www.cso.ie/en/statistics/multisectoral/businessespenditureonresearchanddevelopment/>) are the main sources.

Question 3. What is the length of GFCF in R&D in your country? If long GFCF series are available (previous to 1995), how do you estimate historical data? Please, describe additional sources and/or methods, and specify if these differ across assets within this category, industries and institutional sectors.

There are different GFCF series used within other R&D. The longest GFCF series is from 1975 on. This series relates to domestic R&D. Data prior to 1995 is estimated using historical National accounts data.

Question 4. What price indices do you use to deflate GFCF in R&D and how do you construct these price indices? How do you account for quality improvements? Do you use specific price indices for detailed asset categories? Do these price indices differ across industries / institutional sectors? If they are available, please provide links to and/or relevant documents and metadata on their construction.

Price indices used for domestic R&D services are based on data on Wages using EHECs (Earnings, Hours, and Employment Costs Survey) data. The indices used for IP assets are Wholesale Price Indices (WPI) for the relevant industry.

Mineral exploration and evaluation (N1172)

Question 1. Do you estimate GFCF in mineral exploration and evaluation by detailed asset type? If yes, please specify the detailed asset breakdown.

No.

Question 2. What is/are the main source/s to estimate GFCF in mineral exploration and evaluation? Please describe briefly the architecture of your estimation method and specify if these differ across detailed assets within this asset category, industries and/or institutional sectors.

The CSO survey Annual Offshore Oil and Gas Exploration
<https://www.cso.ie/en/methods/nationalaccounts/annualoffshoreoilandgasexplorationsurveycapform/>.

Question 3. What is the length of GFCF in mineral exploration and evaluation? If long GFCF series are available (previous to 1995), how do you estimate historical data? Please, describe additional sources and/or methods, and specify if these differ across assets within this category, industries and institutional sectors.

The GFCF series for mineral exploration and evaluation is from 1975 on. Data prior to 1995 is estimated using historical National accounts data.

Question 4. What price indices do you use to deflate GFCF in mineral exploration and evaluation and how do you construct these price indices? How do you account for quality improvements? Do you use specific price indices for detailed asset categories? Do these price indices differ across industries/institutional sectors? If they are available, please provide links to and/or relevant documents and metadata on their construction.

Building Price index is used as a proxy for GFCF in mineral exploration and evaluation.

Computer software and databases (N1173)

Question 1. Do you produce separate estimates of computer software? Tick all boxes that apply:

We do not produce separate estimates of computer software however in estimating a total figure we do estimate own account software and purchased software.

Question 2. What is/are the main source/s to estimate GFCF in computer software and databases? Please describe briefly the architecture of your estimation method and specify if these differ across types of software (see previous question), industries and/or institutional sectors.

Purchased Software is from Annual Services Inquiry (ASI) , Census of Industrial Production (CIP) and ICT (Information and Communications Technology) survey. Own account Software is estimated using Census data on jobs associated with Software Engineering. Different industries are covered by the ASI, CIP and ICT surveys. This does not differ across sectors.

Question 3. What is the length of this GFCF series? If long GFCF series are available (previous to 1995), how do you estimate historical data? Please, describe additional sources and/or methods, and specify if this differ across assets within this category, industries and institutional sectors.

The GFCF series for software is from 1975 on. Data prior to 1995 is estimated using historical National accounts data.

Question 4. What price indices do you use to deflate GFCF in computer software and databases and how do you construct these price indices? How do you account for quality improvements? Do you use specific price indices for detailed asset categories? Do these price indices differ across industries / institutional sectors? If they are available, please provide links to and/or relevant documents and metadata on their construction.

Price indices used for Software are based on data on Wages in the Software sector using EHECs (Earnings, Hours, and Employment Costs Survey) data.

Entertainment, literary and artistic originals (N1174)

Question 1. Do you estimate GFCF in entertainment, literary and artistic by detailed asset type? If yes, please specify the detailed asset breakdown.

We do not produce separate estimates, however in estimating a total figure we do estimate TV and Film, Musical Works, and Literary Originals.

Question 2. What is/are the main source/s to estimate GFCF in entertainment, literary and artistic originals? Please describe briefly the architecture of your estimation method and specify if these differ across detailed products within this asset category, industries and institutional sectors.

We have industry sources for each of the categories mentioned in question 1 above.

Question 3. What is the length of GFCF in entertainment, literary and artistic originals? If long GFCF series are available (previous to 1995), how do you estimate historical data? Please, describe additional sources and/or methods, and specify if this differ across assets within this category, industries and institutional sectors.

The GFCF series for entertainment, literary and artistic originals is from 1975 on. Data prior to 1995 is estimated using historical National accounts data.

Question 4. What price indices do you use to deflate GFCF in entertainment, literary and artistic originals and how do you construct these price indices? How do you account for quality improvements? Do you use specific price indices for detailed asset categories? Do these price indices differ across industries / institutional sectors? If they are available, please provide links to and/or relevant documents and metadata on their construction.

The same deflator is used for each of the asset categories mentioned above. A CPI is used.