

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

Country: Croatia

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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

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.

The main sources is a survey conducted by CBS since 1970s on an yearly basis, namely the capital expenditure survey (INV-P). It covers almost all the GFCF made by legal entities. Beside the INV-p questionnaire as main source for dwellings, other CBS surveys on construction are used as well as administrative databases (FINA) in order to accomplish full coverage. This category includes residential buildings and premises. Sources do not differ across industries, 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.

Currently we have series on dwellings starting from 1995. Estimation of historical data is currently in progress. For such data, we have used Statistical Yearbooks of former Yugoslavia. However, since the investments (use side) were recorded at the aggregated level, we have used indicators from the completed construction works (supply side). For now, we have prepared data from year 1947 but plan is to be extended up to 1920.

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)?

Only costs of ownership transfer of non-produced assets (land) are recorded under a separate heading in the investment questionnaire and as such they are part of Acquisitions less disposals of valuables, not 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.

We currently use PPI for construction for all institutional sectors.

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.

Data available at the level of total economy. GFCF series broken down by industry and/or institutional sector is currently under development. More information can be found in GNI Inventory, chapter 5, available at Eurostat.

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 sources is a survey conducted by CBS since 1970s on an yearly basis, namely the capital expenditure survey (INV-P). It covers almost all the GFCF made by legal entities. Beside the INV-p questionnaire as a main source, other CBS surveys on construction are used, as well administrative databases (FINA) which are available to the CBS in order to accomplish a full coverage.

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.

Currently we have series starting from 1995. Estimation of historical data is currently in progress. For such data, we have used Statistical Yearbooks of former Yugoslavia. However, since the investments (use side) were recorded at the aggregated level, we have used indicators from the completed construction works (supply side). For now, we have prepared data from year 1947 but the plan is to extend them back to 1920.

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)?

Only costs of ownership transfer of non-produced assets (land) is recorded under a separate heading in the investment questioner and as such they are part of Acquisitions less disposals of valuables, not 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.

We currently use PPI for construction for all institutional sectors. No difference between sectors/industries.

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.

Data available on level of total economy. We do not have detailed asset breakdown for these category GFCF series broken down by industry and/or institutional sector is currently under development. More information can be found in GNI Inventory, chapter 5, available at Eurostat.

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 sources is a survey conducted by CBS since 1970s on an yearly basis, namely the capital expenditure survey (INV-P). It covers almost all the GFCF made by legal entities. Beside the INV-p questionnaire as a main source, other CBS surveys on construction are used, as well administrative databases (FINA) which are available to the CBS in order to accomplish full coverage.

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.

Currently we have series starting from 1995. Estimation of historical data is currently in progress. For such data, we have used Statistical Yearbooks of former Yugoslavia. However, since the investments (use side) were recorded at the aggregated level, we have used indicators from the completed construction works (supply side). For now, we have prepared data from year 1947 but the plan is to extend them back to 1920.

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)?

Only costs of ownership transfer of non-produced assets (land) is recorded under a separate heading in the investment questioner and as such they are part of Acquisitions less disposals of valuables, not 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.

We currently use PPI for construction for all institutional sectors.

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)?

Tables 0302 and 2200 are still under ongoing development and thus they are still not disseminated but, yes, land improvements will be included in other buildings and structures

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.

Capital expenditure survey (INV-P). Data sources do not differ across industries, 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?

Only costs of ownership transfer of non-produced assets (land) is recorded under a separate heading in the investment questioner and as such they are part of Acquisitions less disposals of valuables, not GFCF.

N1131. Transport equipment

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

The main sources is a survey conducted by CBS since 1970s on an yearly basis, namely the capital expenditure survey (INV-P). It covers almost all the GFCF made by legal entities. Beside the INV-p questionnaire as a main source, other CBS surveys on transport are used, as well administrative databases which are available to the CBS in order to accomplish full coverage.

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.

Data available at the level of total economy. We distinguish 3 main categories: personal vehicles, transport vehicles and equipment, and other transport vehicles. GFCF series broken down by industry and/or institutional sector is currently under development. More information can be found in GNI Inventory- chapter 5, available at Eurostat.

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.

Currently we have series starting from 1995. No differences across assets within this category, industries and institutional 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.

PPI for motor vehicles and other transport vehicles. No difference between sectors/industries.

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?

The main sources is a survey conducted by CBS since 1970s on a yearly basis, namely the capital expenditure survey (INV-P). It covers almost all the GFCF made by legal entities. Beside the INV-p questionnaire as a main source, other CBS surveys on ICT equipment are used, as well administrative databases which are available to the CBS in order to accomplish full coverage. Data available on level of total economy. GFCF series broken down by industry and/or institutional sector is currently under development. No detailed asset breakdown for this category. More information can be found in GNI Inventory, chapter 5, available at Eurostat.

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.

Currently we have series starting from 1995. No differences across assets within this category, industries and institutional 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.

PPI for computer manufacturing and PPI for electrical equipment. No difference between sectors/industries.

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?

The main sources is a survey conducted by CBS since 1970s on an yearly basis, namely the capital expenditure survey (INV-P). It covers almost all the GFCF made by legal entities. Beside the INV-p questionnaire as a main source, other CBS surveys are used, as well administrative databases which are available to the CBS in order to accomplish full coverage. Series on detailed assets within these categories is available for some categories - electrical equipment, medical equipment, furniture. Data available on level of total economy. GFCF series broken down by industry and/or institutional sector is currently under development. More information can be found in GNI Inventory- chapter 5, available at Eurostat.

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.

Currently we have series starting from 1995. No differences across assets within this category, industries and institutional sectors.

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.

PPI for general capital goods and machinery and equipment. The indices currently do not differ across sectors/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 sources is a survey conducted by CBS since 1970s on an yearly basis, namely the capital expenditure survey (INV-P). It covers almost all the GFCF made by legal entities. Beside the INV-p questionnaire as a main source, other CBS data from agriculture statistics is used to accomplish full coverage. Specific GFCF series for perennial plantations and herd. Currently, no detail categories as mentioned in the question.

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.

Currently we have series starting from 1995. No differences across assets within this category, industries and institutional sectors.

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.

Prices in agriculture (crop and livestock output producer prices). The prices do not differ across sectors/industries.

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.

No detailed R&D asset breakdown.

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.

The main data sources for R&D estimates in Croatia are annual reports collected from legal entities dealing with research and development in the Croatia in the reference year. We use Frascati Intramural expenditure approach. More information can be found in the GNI Inventory, chapter 5. Estimation methods do not differ across different R&D assets (if a breakdown is available), industries and/or institutional sectors.

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.

Currently we have series starting from 1995. No differences across assets within this category, industries and institutional sectors.

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 detail asset type, only mineral exploration and evaluation.

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 main sources is a survey conducted by CBS since 1970s on an yearly basis, namely the capital expenditure survey (INV-P). It covers almost all the GFCF made by legal entities. Beside the INV-p questionnaire as main source, as well administrative databases (FINA) which are available to the CBS in order to accomplish full coverage. No differences in estimation methods across categories, industries, sectors. More information can be found in the GNI Inventory, chapter 5.

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.

Currently we have series starting from 1995. No differences across assets within this category, industries and institutional sectors.

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.

PPI mining and exploration.

Computer software and databases (N1173)

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

Yes, we produce separate estimates for own account software, acquired software, and databases.

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.

The main sources is a survey conducted by CBS since 1970s on an yearly basis, namely the capital expenditure survey (INV-P). It covers almost all the GFCF made by legal entities. Beside the INV-p questionnaire as main source, as well administrative databases (FINA) which are available to the CBS in order to accomplish full coverage. No differences in estimation methods across categories, industries, sectors. More information can be found in the GNI Inventory, chapter 5.

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.

Currently we have series starting from 1995. No differences across assets within this category, industries and institutional sectors.

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.

No detailed asset type breakdown.

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.

The main sources is a survey conducted by CBS since 1970s on an yearly basis, namely the capital expenditure survey (INV-P). It covers almost all the GFCF made by legal entities. Beside the INV-p questionnaire as a main source, as well administrative databases (FINA) which are available to the CBS in order to accomplish full coverage. No differences in estimation methods across categories, industries, sectors. More information can be found in the GNI Inventory, chapter 5.

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.

Currently we have series starting from 1995. No differences across assets within this category, industries and institutional sectors.