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

Country: Czech Republic

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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.

The value of gross fixed capital stock of dwellings was estimated for year end 2011 on the basis of Census data (numbers of houses and flats, square meters, quality structure). Dwellings are divided into flats in apartment houses and family houses. The reason is the different average service life applied: the service life of flats is presumed to be 80 years, while for family homes it is 90 years.

Sources for GFCF: Source (S.11) - questionnaire P 5-01 (Annual statistical survey in business units)

Sources (S.12) - questionnaires Pen 5-01 (Annual statistical survey of financial institutions), Poj 5a-01(Annual statistical survey of Insurance and Reinsurance Companies), Poj 5b-01 (Annual statistical survey of pension funds), P 5-01

Sources (S.13) - PAP (Auxiliary Analytical Overview - Ministry of Finance), questionnaire VI 1-01 (Annual survey of State government, regional/local government, semi-budgetary units and similar institutions)

Source (S.14) - questionnaire Stav 7-99 (Notification of completion of a building or flat). It covers not only construction of new dwellings, but also reconstruction and renovation/modernisation of the existing housing stock. This source enters into GFCF as adjustment N03B - Individual Housing Construction according to GNI.

Source (S.15, S.13) - questionnaire NI 1-01 (Annual statistical survey for non-profit institutions)

Adjustment for notional units (all sectors except S.13) - sources:

1) State Cadastre Information System - number of dwellings and area of land by kind owned by private non-resident persons.

2) Czech National Bank - mortgage loans granted by Czech banks to foreigners.

3) Czech Statistical Office -price statistics - average price of dwellings by kind of building and the average prices of land by kind.

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.

GFCF series from 1993. Data on opening stock and investment in the period 1950 – 2011 were taken over from original calculation, by sector.

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)?

TOTAL costs of ownership transfer, included in GFCF:

 - Real estate acquisition/transfer tax

 - Other costs of ownership transfer.

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 indices are taken over from balanced supply and use tables. GFCF is deflated detailed SUT (3 digit level of CPA) using PPI and price indices for imports.

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.

No specific GFCF series for this asset category. We have compiled GFCF broken down by industry and by institutional sector. See:

http://apl.czso.cz/pll/rocenka/rocenkavyber.nfa_t?mylang=EN or
http://apl.czso.cz/pll/rocenka/rocenkavyber.nfa_s?mylang=EN.

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.

Source (S.11) - questionnaire P 5-01 (Annual statistical survey in business units).

Sources (S.12) - questionnaires Pen 5-01 (Annual statistical survey of financial institutions), Poj 5a-01 (Annual statistical survey of Insurance and Reinsurance Companies), Poj 5b-01 (Annual statistical survey of pension funds), P 5-01.

Sources (S.13) - PAP (Auxiliary Analytical Overview - Ministry of Finance), questionnaire VI 1-01 (Annual survey of State government, regional/local government, semi-budgetary units and similar institutions).

Source (S.14) - DPFO (Income tax returns of individuals).

Source (S.15, S.13) - questionnaire NI 1-01 (Annual Statistical Survey for non-profit institutions).

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.

GFCF series from 1993, historical data modeled by extrapolation.

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)?

TOTAL costs of ownership transfer, included in GFCF: + Real estate acquisition/transfer tax + Other costs of ownership transfer.

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.

Price indices are taken over from balanced supply and use tables. GFCF is deflated detailed SUT (3 digit level of CPA) using PPI and price indices for imports.

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.

No specific GFCF series for this asset category. We have compiled GFCF broken down by industry and by institutional sector. See:

http://apl.czso.cz/pll/rocenka/rocenkavyber.nfa_t?mylang=EN or

http://apl.czso.cz/pll/rocenka/rocenkavyber.nfa_s?mylang=EN.

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.

Source (S.11) - questionnaire P 5-01 (Annual statistical survey in business units).

Sources (S.12) - questionnaires Pen 5-01 (Annual statistical survey of financial institutions), Poj 5a-01 (Annual statistical survey of Insurance and Reinsurance Companies), Poj 5b-01 (Annual statistical survey of pension funds), P 5-01.

Sources (S.13) - PAP (Auxiliary Analytical Overview - Ministry of Finance), questionnaire VI 1-01 (Annual survey of State government, regional/local government, semi-budgetary units and similar institutions).

Source (S.14) - DPFO (Income tax returns of individuals).

Source (S.15, S.13) - questionnaire NI 1-01 (Annual Statistical Survey for non-profit institutions).

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.

GFCF series from 1993, historical data modeled by extrapolation.

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)?

Total costs of ownership transfer, included in GFCF:

 - Real estate acquisition/transfer tax

 - Other costs of ownership transfer.

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.

Price indices are taken over from balanced supply and use tables. GFCF is deflated detailed SUT (3 digit level of CPA) using PPI and price indices for imports.

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)?

Yes, it is 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.

Source (S.11, S.13) - questionnaire P 5-01 (Annual statistical survey in business units).

Source (S.13) - PAP (Auxiliary Analytical Overview - Ministry of Finance).

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?

Yes, it is included.

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.

Price indices are taken over from balanced supply and use tables. GFCF is deflated detailed SUT (3 digit level of CPA) using PPI and price indices for imports.

N1131. Transport equipment

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

Source (S.11) - questionnaire P 5-01 (Annual statistical survey in business units).

Sources (S.12) - questionnaires Pen 5-01 (Annual statistical survey of financial institutions), Poj 5a-01 (Annual statistical survey of Insurance and Reinsurance Companies), Poj 5b-01 (Annual statistical survey of pension funds), P 5-01.

Sources (S.13) - PAP (Auxiliary Analytical Overview - Ministry of Finance), questionnaire VI 1-01 (Annual survey of State government, regional/local government, semi-budgetary units and similar institutions).

Source (S.14) - DPFO (Income tax returns of individuals).

Source (S.15, S.13) - questionnaire NI 1-01 (Annual Statistical Survey for non-profit institutions).

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.

No specific GFCF series for this asset category. We have compiled GFCF broken down by industry and by institutional sector. See:

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.

GFCF series from 1993, historical data modeled by extrapolation.

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.

Price indices are taken over from balanced supply and use tables. GFCF is deflated detailed SUT (3 digit level of CPA) using PPI and price indices for imports.

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?

There is only AN.1132 Information and Communication Technology (ICT) item (not divided by AN.11321 and AN.11322) in GFCF. No data sources are used to calculate AN.1132, it is estimated by adjustment: The amount of ICT for individual sectors/subsectors is based on available information from relevant statistical surveys (P 5-01 Annual statistical survey in business units, Pen 5a-01 Annual survey of banking financial institutions, Poj 5a-01 Annual statistical survey of Insurance Companies and Pension funds, VI 1-01 Annual Survey of state organisation units, municipalities, subsidised organisations and similar government institutions, NI 1-01 Annual survey of non-profit institutions, housing cooperatives and selected institutions) section A052 Specification of acquired and disposed of tangible fixed assets without land and without mineral deposits. In this section, among other things, is specified acquisition of fixed assets by codes CZ-CPA. Based on the data from this section, the share of above mentioned CZ-CPA to the total amount of other machinery and equipment, and for each subsector separately, is determined. This amount is deducted from the item of non-financial assets AN.1139, Other Machinery and Equipment, and the same amount is added to item AN.1132 Information and Communication Technology (ICT). ICT is earmarked from other machinery and equipment only in the context acquisition of new fixed assets. For an acquisition and sales of existing fixed assets was accepted assumption that businesses and other institutions do not buy, do not sell of existing ICT.

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.

GFCF series from 1993, historical data modeled by extrapolation.

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.

Price indices are taken over from balanced supply and use tables. GFCF is deflated detailed SUT (3 digit level of CPA) using PPI and price indices for imports.

Other machinery and equipment and weapons systems (N11O): 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?

AN.1139:

Source (S.11) - questionnaire P 5-01 (Annual statistical survey in business units).

Sources (S.12) - questionnaires Pen 5-01 (Annual statistical survey of financial institutions), Poj 5a-01 (Annual statistical survey of Insurance and Reinsurance Companies), Poj 5b-01 (Annual statistical survey of pension funds), P 5-01.

Sources (S.13) - PAP (Auxiliary Analytical Overview - Ministry of Finance), questionnaire VI 1-01 (Annual survey of State government, regional/local government, semi-budgetary units and similar institutions).

Source (S.14) - DPFO (Income tax returns of individuals).

Source (S.15, S.13) - questionnaire NI 1-01 (Annual Statistical Survey for non-profit institutions)

AN.114:

Enters into GFCF as adjustment C12B - Capitalisation of weapons systems. The asset is classified in the subsector of central government S.1311, NACE 842.

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.

GFCF series from 1993, historical data modeled by extrapolation.

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.

Price indices are taken over from balanced supply and use tables. GFCF is deflated detailed SUT (3 digit level of CPA) using PPI and price indices for imports.

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?

Source (S.11) - questionnaire P 5-01 (Annual statistical survey in business units).

Sources (S.12) - financial institutions are estimated to have no biological resources, all assets from questionnaires are moved into adjustment E04B - Estimate of acquisition less disposals of valuables.

Sources (S.13) - PAP (Auxiliary Analytical Overview - Ministry of Finance).

Source (S.14) - DPFO (Income tax returns of individuals).

Source (S.15, S.13) - questionnaire NI 1-01 (Annual Statistical Survey for non-profit institutions).

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.

GFCF series from 1993, historical data modeled by extrapolation.

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.

Price indices are taken over from balanced supply and use tables. GFCF is deflated detailed SUT (3 digit level of CPA) using PPI and price indices for imports.

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 type.

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.

Source (all sectors) - VTR 5-01 (Annual statistical questionnaire on research and development). All data enter into GFCF as adjustment E07A - Capitalisation of research and development expenditures.

Output of R&D, method of calculation:

Ord./Formula/Item

1. + Frascati Manual Intramural expenditures on R&D (from VTR 5-01)

2. - Payments for licenses to use intellectual products (principally R&D assets, such as patents) that should be recorded as GFCF

3. - Expenditure on own-account production of software (from VTR 5-01)

4. - Capital expenditures (from VTR 5-01)

5. + Other taxes on production not included in Frascati Manual data

6. - Other subsidies on production

7. + Extramural purchases of R&D that should be recorded as intermediate consumption. Applies only to R&D industry (from VTR 5-01)

8. Sum line 1. to line 7. Current expenditures

9. + line 10 Estimate of consumption of fixed capital plus a return to capital (for non-market producers only consumption of fixed capital):

10. + Option 2: As cost of capital services measured with a PIM

11. +/- Adjustment for exhaustiveness

12. +/- Other adjustments

13. Sum line 8. + line 9. +/- line 11. +/- line 12. OUTPUT of R&D.

Gross fixed capital formation – R&D, method calculation:

Ord./Formula/Item

1. + OUTPUT of R&D

2. + Imports of R&D

3. + Trade margins

4. + Taxes on products

5. - Subsidies on products

6. - Extramural purchases of R&D that should be recorded as intermediate consumption. Applies only to R&D industry

7. - Exports of R&D

8. Sum line 1. + line 2. + line 3. + line 4. - line 5. - line 6. - line 7. GROSS FIXED CAPITAL FORMATION R&D.

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.

GFCF series from 1993, historical data estimated based on data from yearbooks.

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 are taken over from balanced supply and use tables. GFCF is deflated detailed SUT (3 digit level of CPA) using PPI and price indices for imports.

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 detailed asset type.

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.

Source (S.11, S.13) - questionnaire P 5-01 (Annual statistical survey in business units). All data enter into GFCF as adjustment on Mineral exploration.

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.

GFCF series from 1993, historical data modeled by extrapolation.

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.

Price indices are taken over from balanced supply and use tables. GFCF is deflated detailed SUT (3 digit level of CPA) using PPI and price indices for imports.

Computer software and databases (N1173)

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

This asset is according to ESA 2010 split up to AN.11731 Computer software and AN.11732 Databases. These assets enter into GFCF as adjustments:

Capitalisation of software produced on own-account (AN.11731)

Capitalisation of small tools over/to CZK 20 000 (AN.11731)

Databases and other specific types of fixed assets (AN.11732).

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.

Source (S.11) - questionnaire P 5-01 (Annual statistical survey in business units).

Sources (S.12) - questionnaires Pen 5-01 (Annual statistical survey of financial institutions), Poj 5a-01 (Annual statistical survey of Insurance and Reinsurance Companies), Poj 5b-01 (Annual statistical survey of pension funds), P 5-01.

Sources (S.13) - PAP (Auxiliary Analytical Overview - Ministry of Finance), questionnaire VI 1-01 (Annual survey of State government, regional/local government, semi-budgetary units and similar institutions).

Source (S.14) - DPFO (Income tax returns of individuals).

Source (S.15, S.13) - questionnaire NI 1-01 (Annual Statistical Survey for non-profit institutions).

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.

GFCF series from 1993, historical data modeled by extrapolation.

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 are taken over from balanced supply and use tables. GFCF is deflated detailed SUT (3 digit level of CPA) using PPI and price indices for imports.

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.

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 item AN.1174 Entertainment, literary or artistic originals is not primarily determined from statistical surveys, but rather from extrapolation - Entertainment, literary or artistic originals. All GFCF items concern long-term assets and it is not different for entertainment, literary or artistic originals, hence the minimum one-year service useful life holds for AN.1174. Another condition is that every original be a final product protected by a copyright. Entertainment, literary or artistic originals include primarily films, sound recordings, radio and television programmes, musical performances, books, textbooks and other prints.

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.

GFCF series from 1993, historical data modeled by extrapolation.

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.

Price indices are taken over from balanced supply and use tables. GFCF is deflated detailed SUT (3 digit level of CPA) using PPI and price indices for imports.